

REVISED

# RESETTLEMENT ACTION PLAN

Mumbai- Ahmedabad High Speed Railway Project

August, 2021

*Revised by:*  
National High-Speed Rail Corporation Limited (NHSRCL)





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## LIST OF ABBREVIATION

|          |   |
|----------|---|
| BKC      | Bandra Kurla Complex  |
| BPL      | Below Poverty line  |
| CoI      | Corridor of Impact  |
| CBO      | Community Based Organisations   |
| CSO      | Community Supervisory Organisations   |
| CPM      | Chief Project Manager   |
| CPR      | Common Property Resources   |
| DC       | District Commissioner   |
| DP       | Displaced Person  |
| DiLR     | District Inspector of Land Record   |
| DNH      | Dadra, Nagar & Haveli   |
| EIA      | Environment Impact Assessment   |
| F/S      | Feasibility Study   |
| FAQ      | Frequently Asked Questions  |
| FGD      | Focus Group Discussion  |
| GRC      | Grievance Redressal Committee   |
| HSR      | High Speed railway  |
| IPDP     | Indigenous Peoples Development Plan   |
| IPP      | Indigenous Peoples Plan   |
| JICA     | Japan International Cooperation Agency  |
| LA       | Land Acquisition  |
| LoA      | Letter of Award   |
| MADA     | Modified Area Development Approach  |
| MAHSRP   | Mumbai-Ahmedabad High-Speed Rail Project  |
| MFP      | Minor Forest Produces   |
| MIS      | Management Information System   |
| MMRDA    | Mumbai Metropolitan Regional Development Authority  |
| MOR      | Ministry of Railways  |
| NATM     | New Austrian Tunnelling Method  |
| NOC      | No Objection Certificate  |
| NTH      | Non-Title Holder  |
| NHSRCL   | National High-Speed Rail Corporation Limited  |
| PAH      | Project Affected Household  |
| PAP      | Project Affected Person   |
| PESA     | Panchayat Extension of Scheduled Area   |
| R&R      | Rehabilitation & Resettlement   |
| RAP      | Resettlement Action Plan  |
| RFCTLARR | The Right to Fair Compensation and Transparency in Land Acquisition and Rehabilitation and Resettlement Act |
| RFP      | Request for Proposal  |
| RoW      | Right of Way  |
| SC       | Scheduled Caste   |
| SHM      | Stakeholder Meeting   |
| SIA      | Social Impact Assessment  |

|      |                               |
|------|-------------------------------|
| SIMP | Social Impact Management Plan |
| SPV  | Special Purpose Vehicle       |
| ST   | Scheduled Tribe               |
| TBM  | Tunnel Boring Machine         |
| TOR  | Terms of Reference            |
| TSP  | Tribal Sub-Plan               |
| TDR  | Transfer of Development Right |
| TH   | Title Holder                  |
| UT   | Union Territory               |
| VGAP | Vulnerable Group Action Plan  |



## EXECUTIVE SUMMARY

### The Project

Mumbai-Ahmedabad High Speed Rail (MA-HSR) project is a government approved high speed rail project connecting the cities of Mumbai and Ahmedabad, implemented by National High-Speed Rail Corporation Limited (NHSRCL). The route of MA-HSR will be passing through two states, Maharashtra and Gujarat and one Union Territory (UT), Dadra and Nagar Haveli, of the Union of India. The total length of the proposed corridor is 508.17 km with 155.72 km in Maharashtra, 348.15 km in Gujarat and 4.3 km in Dadra and Nagar Haveli (DNH).

The Resettlement Action Plan (RAP) for the MA-HSR project contains the magnitude of land acquisition impacts, and the mitigation of impacts. The report also includes the baseline socio-economic characteristics of the Project Affected Households (PAHs) & Project Affected Person (PAPs), the Resettlement and Rehabilitation (R&R) policy provisions & entitlements, outcome of the consultations held with the communities, implementation and monitoring mechanisms. It also contains budget for the implementing the R&R provisions.

The objective of the RAP is to assess the adverse impacts of the project on people, their properties, livelihood, common property resources and develop mitigation measures to assist the project affected persons (PAPs) in getting their entitlements to enable them in improving their socio-economic standards and income earning capacity.

### Land Acquisition & Resettlement Impacts

The alignment will pass through three districts (Mumbai, Thane, and Palghar) in Maharashtra and eight districts (Valsad, Navsari, Surat, Bharuch, Vadodara, Anand, Kheda and Ahmedabad) in Gujarat and DNH. The land acquisition will be involved in 297 villages.

A total of 1396 hectares land is proposed to be acquired out of which 1021.20 ha is private land and rest 374.80 ha is government land. A total 9,814 land plots will be affected of which 8,280 are private land plots. Around 50% of private land holders are less than one hectare of land.

It is estimated that approximately 15,341 households (PAHs) including title holder (10,547) and non-title holder (4,794) will be impacted due to the project. In addition to land, 8,877 structures are estimated to be impacted as on 31.08.2021 and around 158 Common Property Resources (CPRs) are also to be impacted due to project activity. Approximately 2,27,016 trees are expected to be impacted due to project both in the forest and non-forest areas.

Approximately 29% of the affected households fall in the vulnerable category which includes where the head of the family is Scheduled Caste, Schedule Tribe, WHH (widow, separated woman, single woman, etc), disabled, Below Poverty Level, and the person above 65 years of age with no immediate family members to support.

The alignment passes through 17 villages Schedule V villages in Navsari, Surat, and Valsad district in Gujarat; 73 villages in Palghar district and few villages of Bhiwandi tehsil of Thane district in Schedule V tribal areas.



## Key Socio-Economic Findings

The census and socio-economic survey reveal that amongst the affected people around 51% are male and 49% female with majority of the PAPs falls in the age group of 19-65. Religious affiliation of majority of the PAPs is Hindu followed by Muslim. Social categories of the PAHs showed that majority belong to the general category, followed by Other Backward Caste (OBC), Schedule Tribe, Schedule Caste and backward class.

About 14% of the PAPs are illiterates and only about 12% are graduate and above. One-third of the affected people is too young to work/ disabled/ student. For remaining, agriculture is the predominant occupation followed by private service and around 3% is unemployed. About 14% of PAHs have income less than INR 5,000 whereas majority (33%) of PAHs have income in the range of INR 5,000-10,000. The primary source of income is agriculture followed by job/ service.

## Resettlement & Rehabilitation (R&R) Policy & Entitlement Framework

This RAP is project specific resettlement plan and has been guided by Japan International Cooperation Agency (JICA) guidelines for Environmental and Social Considerations, April 2010 and World Bank OP.4.12 and 4.10 guidelines with applicable provisions of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR, 2013), and relevant state laws and government notifications.

Due care has been taken to avoid or minimize land acquisition and involuntary resettlement impacts by exploring all viable alternatives and to ensure adequate rehabilitation package and expeditious implementation of rehabilitation process with the active participation of affected families. RAP offers special attention to vulnerable groups.

The entitlement matrix for this project has been developed based on the applicable laws, guidelines, government orders, policies, good practices followed in externally funded projects. Non-titleholders (encroachers and squatters) have been recognized and considered for resettlement and rehabilitation assistance at par with titleholders, except for the choice of annuity or employment. Affected families will be eligible for compensation and R&R assistance or R&R assistance depending upon the nature of ownership rights of lost assets and other aspects. The details of the entitlement matrix for Gujarat & Maharashtra and DNH is provided in Chapter 5 of the RAP report.

An Indigenous People Plan and Village Development Plan addressing the needs of the community has been prepared for Palghar district under the project for the villages with the substantial tribal population to improve the basic facilities and create assets for them. For other Schedule V areas, NHSRCL will coordinate with the tribal development officers of the district and state authorities to include the eligible project affected people as part of various tribal development programmes and ensure that they are benefitted from that.

Further, around 4,450 PAHs whose structures are getting impacted by the project may need relocation. Majority of PAH have opted for cash compensation for Self Relocation over Project based relocation. Thus, the budget detailed below is sufficient for relocation activities as on August' 2021.

Tentative relocation sites have been identified and the cost for development of rehabilitation site will be borne by NHSRCL. These displaced families will be compensated at replacement value.

Income restoration plan has been developed for the project and is not limited to payment of compensation, R&R assistance etc; but also includes skill development training enhancement for income restoration and development of livelihood restoration and income generation opportunities for the project affected persons.

## R&R Budget

The total cost for land acquisition for the project is INR 16,695 crores, of which INR 7,734.25 crores is for the state of Gujarat, INR 7083.77 crores are for the state of Maharashtra & DNH and 1876.98 crores are administration, IRP, RR cost etc..

### R&R Budget Break-up

| SN | Particulars  | Budget (INR Crores) |
|----|--|---------------------|
| 1  | Land Compensation amount including multiplication factor & 100% Solatium | 11,066.11           |
| 2  | Compensation for Structure   | 1,451.30            |
| 3  | R&R Assistance   | 908.24              |
| 4  | Incentive for consent  | 591.30              |
| 5  | Compensation for trees and crop @ 2.5% land cost                         | 236.59              |
| 6  | Balance land and other Misc. cost @ 10% land cost                        | 564.48              |
| 7  | Administrative cost @10% of the total cost                               | 1481.39             |
| 8  | Interest @12% of the total cost  | 167.44              |
| 9  | R&R Site Development Budget  | 127.83              |
| 10 | Livelihood development & IRP budget                                      | 100.32              |
| 11 | <b>Total</b>   | <b>16,695</b>       |

## Stakeholder Consultation

Stakeholder consultation was carried out at district level and tehsil level along with focus group discussion at village level.

First stakeholder consultations were conducted at Tehsil/ Taluka level involving government officials, Mamlatdar, village revenue officials (Talatis), village representatives of Panchayats and PAHs, PAPs and local communities in villages before initiating census and socio-economic survey to share project information, likely impacts, the importance of surveys, and to understand their perception, concerns, and issues. About 36 such consultations were held.

The second stakeholder consultations at District level have been conducted after preparation of draft RAP. The second stakeholder consultations included the representatives from the district authorities, key government departments, PAHs/ PAPs, other stakeholder having interest in the project, Non-Government Organizations (NGOs), and media. The information on the district level consultations (including venue and timings) were communicated through newspaper advertisements to the wide range of stakeholders directly or indirectly involved in the project. About 11 such consultations were held in Maharashtra and Gujarat.

Stakeholders consultation included a presentation in the Gujarati language in Gujarat and DNH and Marathi in Maharashtra to the participants followed by open discussion and clarifications

around queries and concerns raised by event participants. The presentation included project details, alignment details extent of impacts, the category of PAPs, entitlement matrix along with compensation disbursement details, institutional arrangements for RAP including grievance redressal mechanism, roles, and responsibilities of implementation agency, engagement of monitoring and evaluation agency.

The community representatives (CRs) visited each project affected the village multiple times to inform the key opinion leaders about the project activities, affected plots, and likely project impacts. A leaflet comprising of Frequently Asked Questions (FAQs) prepared in local language was handed over in the meeting to participants. Focused group discussion (FGDs) was undertaken with vulnerable communities and key opinion leaders. The key aspect of such discussion covered development needs to prepare time-bound RAP for affected people so that they are not worse off than the present socio-economic condition after the implementation of the project.

The outputs obtained from these meetings/ consultations helped in formulating strategies for minimizing impacts. More such meetings/ consultations are being conducted and planned during R&R implementation stage for awareness and information dissemination. The NHSRCL along with the RAP consultant is responsible holding such consultations during implementation with the help of Community Representatives.

### **Institutional Arrangement**

Managing Director, NHSRCL is overall responsible for successful implementation of the RAP as head of the Organization. Managing Director is supported by Director (Project), Officer on Special Duty (OSD), General Managers (Contract) at Head Office which will have overall responsibility for policy guidance, planning, coordination, internal monitoring and overall reporting of the Project.

NHSRCL has set up Chief Project Manager's Offices (CPM office) to act as Project Management Unit (PMU) at Mumbai, Ahmedabad, Surat and Vadodara. CPMs will be responsible for RAP implementation at the site with support from Dy. CPM, Project Managers (PM), Assistant Project Managers (APMs). One officer (PM/APM) will be made in charge of resettlement and rehabilitation component for every 15-20 villages

RAP consultant has been appointed for carrying out all requisite activities in close coordination with affected persons and concerned agencies including NHSRCL, District administration and other agencies.

NHSRCL will set up a Social & Environment Management Unit (SEMU) at Head Office to look after social and environmental components of the project including monitoring the implementation and progress of RAP in direct coordination with CPMs and RAP consultant.

NHSRCL is working closely with District Administration (Land Acquisition Officer and District Collector) for land acquisition and will remain in close coordination for RAP implementation including relocation sites.

### **Grievance Redressal**

There will be Grievance Redressal Committees (GRC) to hear and redress the grievances, if any, of the PAHs & PAPs at District, Field Head Office and Head Quarter levels, details of which is provided below:

- 1) Level -1 District level committee: Resident Additional Collector/ LAO (Chairman), Dy CPM NHSRCL, Representative of PAP's (Village Sarpunch etc), Elected Public Representative and Assistant Social Development Officer
- 2) Level-2 Regional level committee: CPM (Chairman), GM Contract, DGM/ AGM Finance and Assistant Social Development Officer (to act as Secretary)
- 3) Level-3 Head Office level committee (NHSRCL): Director (Chairman), OSD Member, GM Finance, CPM and Social Development Officer (to act as Secretary)

### **Monitoring & Evaluation**

The internal monitoring of RAP implementation will be the responsibility of GM, SEMU through CPM Office. Internal monitoring will cover the physical and financial progress of RAP implementation including resettlement activities.

External monitoring and evaluation will be carried by a third-party agency which will be hired by the NHSRCL before the start of the RAP implementation. The objectives of external monitoring will be to assess the project's compliance with the stated legal and policy framework including disbursement of due entitlements to PAPs. Quarterly monitoring will verify the progress of the RAP implementation activities, identify issues, concerns, delays and reasons thereof, problems faced in the implementation and recommend corrective measures for implementation. Further, the external agency would conduct evaluation twice during the RAP implementation period.

### **RAP Implementation Schedule**

It is estimated that the RAP implementation will be completed within a period of 16 months. The major activities related to the implementation of the resettlement action plan are related to impacts on land, structures, and CPRs. The project will provide requisite notice two months (for vacating structure) and 3 months (for harvesting standing crops/fruits etc.) or suitable compensation to the project affected persons so that they are able to move or take away their assets without undue hardship before the commencement of construction works.



## **1.0 DESCRIPTION OF THE PROJECT**

### **1.1 Introduction and Project Background**

India has undergone rapid economic growth in recent years and because of which has seen sharp rise in the number of people and goods being transported in the country. As for passenger transport, Ministry of Railways (MoR), Government of India, formulated Indian Railways Vision 2020 in December 2009. This Vision aims to modernize existing conventional lines and enhance traffic capacity as well as develop high-speed railway lines. In December 2009, the Vision 2020 of the MoR envisaged the implementation of at least four high-speed rail projects to provide bullet train services at 250-350 kmph, one each in the northern, western, southern and eastern regions of India. The Expert Group for Modernization of Indian Railways in February 2012 recommended construction of high-speed railway line between Mumbai and Ahmedabad with speed of 350 kmph and undertake detailed studies for six other high-speed rail corridors.

Memorandum of Understanding (MoU) was signed between Japan International Cooperation Agency (JICA) and the MoR on October 2013 for conducting a joint feasibility study for Mumbai - Ahmedabad High Speed Rail (MA-HSR) project. The feasibility study of MA-HSR project was undertaken by High Speed Rail Corporation of India Limited (HSRC), the report for which was submitted in July 2015 and was accepted by the Ministry.

#### **1.1.1 NHSRCL and MA-HSR Project**

Ministry of Railways has formed National High-Speed Rail Corporation Limited (NHSRCL) in February 2016, is a joint sector company of Govt. of India and participating State Governments to implement Mumbai-Ahmedabad High Speed Rail (MA-HSR) project with Japanese financial and technical assistance.

NHSRCL is implementing the project of high speed rail corridor between Ahmedabad and Mumbai.

The total length of the proposed corridor is 508.17 km. The route of MA-HSR will be passing through two states, Maharashtra and Gujarat and one Union Territory (UT), Dadra and Nagar Haveli, of the Union of India. The proposed corridor lies in Western Zone of Indian Railways network. It shall start from Bandra Kurla Complex in Mumbai and will end near Sabarmati Railway Station in Ahmedabad. Out of 508.17km, 155.72 km of the proposed alignment lies in Maharashtra, 348.15 km in Gujarat and 4.3 km in UT of Dadra and Nagar Haveli. The MA-HSR project has proposed 12 stations i.e. Mumbai, Thane, Virar, Boisar, Vapi, Bilimora, Surat, Bharuch, Vadodara, Anand, Ahmedabad and Sabarmati, all near major traffic points. Two maintenance depots are proposed on either end of the corridor, one near Thane and one near Sabarmati Rail Depot. India and Japan have signed a Memorandum of Understanding on December 2015 for the collaboration and assistance in the MA-HSR Project. Japan has agreed to offer an assistance of 50-year loan worth more Rs. 79,000 crores for the high-speed rail project, with a 15-year grace period at the interest rate of 0.1%.

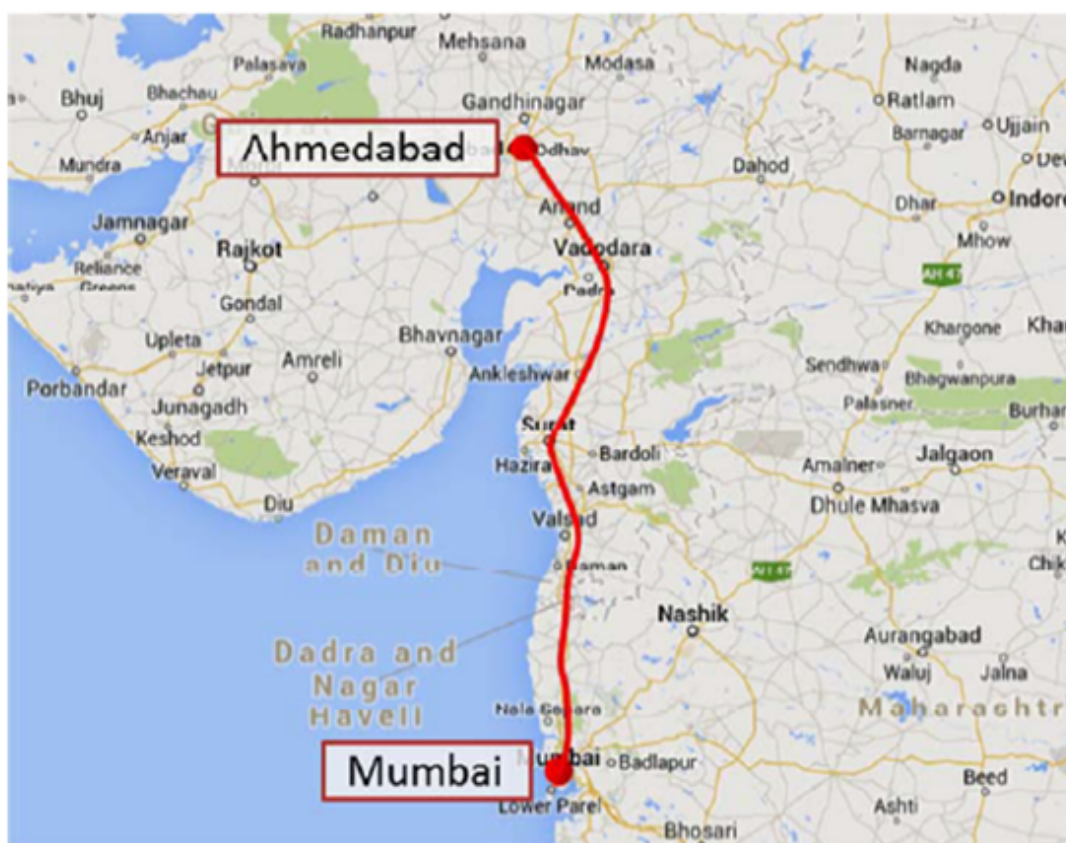
## 1.2 Project Description

Mumbai-Ahmedabad high speed rail corridor is a government approved high speed rail corridor project connecting the cities of Mumbai and Ahmedabad. It will be India's first high-speed railway track.

The MA-HSR project will connect Mumbai, the capital city of the State of Maharashtra and the second most populous metropolitan area in India with Ahmedabad which is a metropolis in the State of Gujarat. The 508.17 km line will run along the Arabian sea coast connecting with Surat and Vadodara enroute which are the second and third largest city in the state of Gujarat. This will be a fully airconditioned high speed rail expecting to travel between the stations at speeds of 320 km/hr which will take nearly two hours (with limited stops) to cover the two cities.

The alignment will pass through 3 districts (Mumbai, Thane, and Palghar) in Maharashtra and 8 districts (Valsad, Navsari, Surat, Bharuch, Vadodara, Anand, Kheda and Ahmedabad) in Gujarat. The proposed alignment also passes through a small section falling in the UT of Dadra and Nagar Haveli. Location map and a key plan showing alignment are shown in Figure 1-1, Figure 1-2, Figure 1-3, and Figure 1-4 respectively.

**Figure 1-1: Location map of alignment**



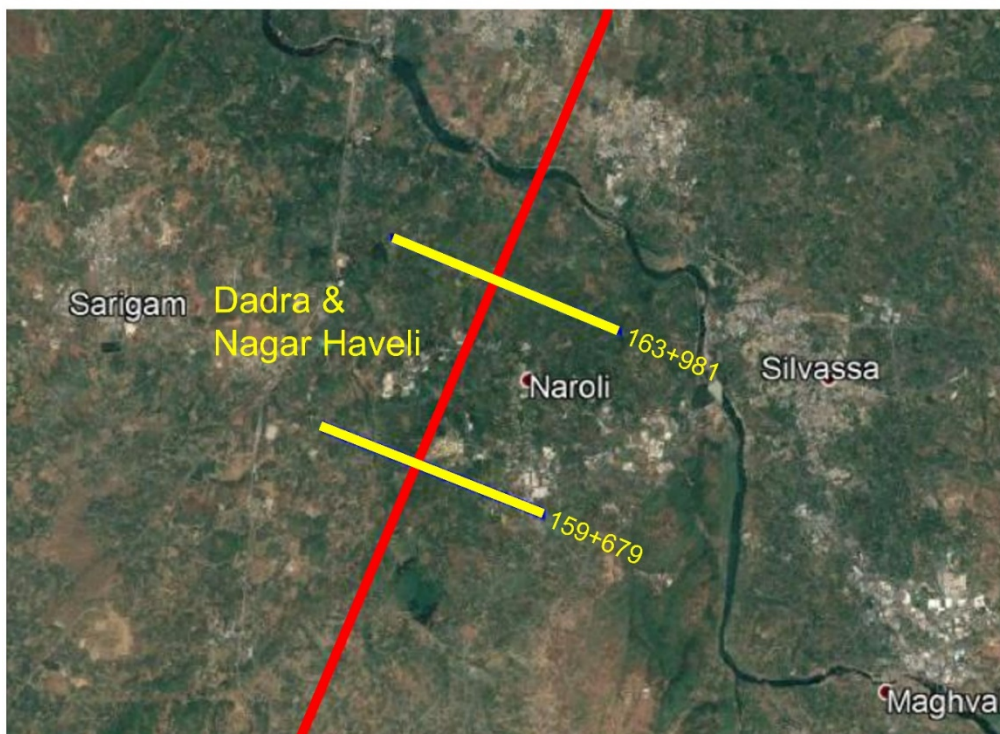
Source: Joint Feasibility Study for Mumbai-Ahmedabad High Speed Railway Corridor, June 2015

**Figure 1-2: Alignment plotted on Satellite image - Maharashtra**



Source: As per KMZ file shared by NHRCL, September 2017

**Figure 1-3: Alignment plotted on Satellite Image – Dadra & Nagar Haveli**



Source: As per KMZ file shared by NHRCL, September 2017



**Figure 1-4: Alignment plotted on Satellite image – Gujarat**

Source: As per KMZ file shared by NHRCL, September 2017

### 1.3 Objective and Purpose of the RAP

This RAP is project specific resettlement plan with the overall objective to assess the adverse impacts of the project on people, their properties, livelihood, common property resources and develop mitigation measures to assist the project affected persons (PAPs) in getting their entitlements (compensation - for affected land, structure and other properties and assets and R&R assistances) to enable them in improving their socio-economic standards and income earning capacity. The RAP is based on the general findings of the census & socio-economic survey, field visits and meetings with various project-affected people in the project area. The specific objectives of the study are as under:

- To minimize displacement and to promote least displacing alternatives
- Assess the extent of loss of properties (land, structure, and others) of individual as well as that of community and loss of livelihood;
- Establish a baseline profile of the population, social structure, employment, sources of income, access to social services and facilities along the alignment.
- To ensure adequate rehabilitation package and implementation of rehabilitation process with active participation
- To provide better living conditions and making concerted effort for providing sustainable income to affected families
- Develop harmonious relationship between acquiring body and affected families

## 1.4 Project Summary

A total of 1434.28 Ha land was proposed to be acquired during RAP Preparation out of which 1022.37 Ha was private land and rest was Government land or forest land. Total number of land parcels proposed to be acquired were 8,878. Survey of around 83% of the land parcel and 87% of PAHs was covered as of 31<sup>st</sup> July 2018. It was estimated that approximately 14,884 households (PAHs) will be impacted due to the project. Approximately 35% of the total affected households were identified as vulnerable. In addition to land, 3,892 structures are estimated to be impacted (3,683 structure surveyed till date) and 37 CPRs were also to be impacted due to project activity.

However, after completion of JMS on the receipt of JMR report and preparation of Micro Plans, the actual land requirement has been determined and it has been observed that, the total of land proposed to be acquired during RAP Preparation i.e. 1434.28 Ha land has been decreased to 1396 Ha. during RAP Implementation out of which 1021.20 Ha is private land and rest is Government land or forest land or Railway Land. Total number of private land parcels proposed to be acquired have increased to 8,280 . Survey of around 99.75% of the land parcel and PAHs was covered as of August 2021. It is estimated that approximately 15,341 households (PAHs) will be impacted due to the project. Approximately 29% of the total affected households are identified as vulnerable. In addition to land, 8,877 structures are estimated to be impacted and 158 CPRs were also to be impacted due to project activity. District wise summary is provided below in Table 1-1.

**Table 1-1: District wise Project Impact – As on August' 2021**

| S.N.         | District  | Area in (Ha)   | Private Land (Ha) | Number of Land Parcel Surveyed | Number of Land Parcel Surveyed during JMS | Percentage of Land Parcel wherein JMS Completed | Actual Data  |             | No of CPR  |
|--------------|-----------|----------------|-------------------|--------------------------------|---|---|--------------|-------------|------------|
|              |           |                |                   |                                |   |   | PAH          | Structures  |            |
| 1            | Ahmedabad | 133.38         | 27.22             | 223                            | 223                                       | 100   | 327          | 425         | 25         |
| 2            | Kheda     | 110.34         | 98.98             | 928                            | 928                                       | 100   | 726          | 358         | 15         |
| 3            | Anand     | 53.41          | 47.39             | 632                            | 632                                       | 100   | 510          | 307         | 5          |
| 4            | Vadodara  | 141.35         | 106.68            | 1063                           | 1063                                      | 100   | 1170         | 921         | 12         |
| 5            | Bharuch   | 139.99         | 127.17            | 1139                           | 1139                                      | 100   | 991          | 177         | 8          |
| 6            | Surat     | 161.93         | 144.04            | 1067                           | 1067                                      | 100   | 972          | 593         | 19         |
| 7            | Navsari   | 93.17          | 81.46             | 819                            | 819                                       | 100   | 827          | 455         | 14         |
| 8            | Valsad    | 122.43         | 107.4             | 1225                           | 1225                                      | 100   | 1393         | 1065        | 16         |
| 9            | Palghar   | 284.78         | 187.55            | 1507                           | 1482                                      | 98.34   | 6998         | 3719        | 36         |
| 10           | Thane     | 142.4          | 81.87             | 1063                           | 1063                                      | 100   | 1230         | 791         | 8          |
| 11           | DNH       | 8              | 7.52              | 143                            | 143                                       | 100   | 197          | 66          | 0          |
| 12           | Mumbai    | 4.82           | 3.92              | 5                              | 5   | 100   | 0            | 0           | 0          |
| <b>Total</b> |           | <b>1396.00</b> | <b>1021.20</b>    | <b>9814</b>                    | <b>9789</b>                               | <b>99.75</b>                                    | <b>15341</b> | <b>8877</b> | <b>158</b> |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021

Note: Palghar district/Palghar Taluka 2 villages (i.e. Kallale & Khanivade) pending for JMS as on August' 2021

Detail break up of Structures by type is provided in Table 2.4

Overall 99.75% of the total land parcels were surveyed for the project. Results of this survey was used for estimation of data on PAH, to ascertain impact and formulate a mitigation plan in the report. Considering more than 15,341 PAH were surveyed, the data is considered statistically. Number and area of structures were identified from Structure Valuation Report and JMS Reports. The actual land requirement and PAH number determined as on August' 2021 is provided in Table 1.1. Estimation based on extrapolation is deemed necessary as otherwise the project impact would be under estimated and this would result in the formulation of inadequate mitigation measures.

The project being linear in nature is not expected to result in large-scale displacement of community. Impact on livelihood is mainly due to the acquisition of private agricultural land and business units along the project corridor. The overall impact of the project on structures and other fixed properties and assets are not significant as compared to the impact of land.

One of the major impacts attributed to the linear project is access restriction. Considering the project is proposed to be constructed on the elevated corridor, it would not impose access restrictions or separate communities during operation. The construction of the project will also be carried out in a phase-wise manner with sufficient access to the communities on both sides of the HSR corridor.

#### **1.4.1 Land requirement for Ancillary facilities**

The MAHSR project comprises of various components like station, tracks, maintenance depots and electrical substations. The land acquisition proposal has already included these requirements in 1396 hectare for the project. In the subsequent sections, the anticipated impacts have been discussed.

#### **Stations and Access Road**

The proposed HSR stations have been planned to keep in view the connectivity to existing roads. In addition, a 4m-wide service road along the viaduct is also planned which will provide additional connectivity. Land requirement for this have been worked out and RAP has been prepared covering such requirement of land. As decided in the meeting of Joint Committee on 21/11/2017 and Working Group meeting on 21st March 2018, Station Area Development Committee for development of Transit infrastructure around Station has been formed. As per the ToR proposed by JICA, Multi Modal integration schemes are being developed in coordination and consultation with Station Area Development Expert Committee (SADEC) team. These proposals will include augmentation of existing transport infrastructure and development schemes around HSR stations in consultation with all concerned stakeholders (i.e. local administration, municipal corporations etc.). Any additional requirement of land will be dealt accordingly.

#### **Electricity Sub-Stations**

Following electrical infrastructure for the entire project has been proposed by General Consultant (i.e. JICC)

- Traction substation (TSS)- 14 numbers
- Distribution substation (DSS) – 16 numbers
- Sectioning post (SP) – 11 numbers
- Sub Sectioning Post (SSP) - 19 numbers
- Auto transformer post – 1 number
- Intermediate Distribution substation (IDSS) - 11 number

The total land requirement of these infrastructures including the land requirement of 7.5 m access road from the nearest state highway or district road for movement of trailer for transportation of heavy transformer to these substations has been worked out and the RAP covers above land requirement also. The details of land requirement are provided in Chapter 2, section 2-1.

### 1.5 Approach & Methodology for preparation of RAP

The approach to conducting surveys for assessing the social impacts and preparation of RAP is based on the alignment approved by the NHSRCL. Land acquisition plan has been prepared as per the approved alignment and as such project impacts would be confined to proposed RoW i.e. land width required for track construction (13.5 m) and construction of a road (4m) all along for maintenance purpose and land parcels where stations and maintenance depots would be constructed.

Land acquisition for the project will be carried as per the provisions of “The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013)”. The Act provides compensation against the land, structures and other improvements and resettlement and rehabilitation entitlements not only to land owners but also affected families whose livelihood is primarily dependent on the land acquired. Encroachers, squatters, tenants, etc. have been covered in the survey and they will be provided rehabilitation and resettlement assistance as per the entitlement matrix.

The methodology covers a review of secondary literature, laws, notifications, government circulars, policies, etc. governing land acquisition, review of Census of India data and socio-economic profile of the project area. A brief description of activities is presented below.

#### Review of Secondary Literature

Available documents related to project and project area has been reviewed to develop understanding about the project including broad technical aspects, the magnitude of impacts, laws governing land acquisition, census report, etc. Specific documents reviewed for the project are as under:

- Feasibility stage RAP prepared by TARU,
- The Right to Fair Compensation and Transparency in Land Acquisition & Rehabilitation and Resettlement Act 2013,
- The Gazette of India, Extraordinary, S.O 425(E), Ministry of Rural Development Notification dated 9th February 2016
- The Right to Fair Compensation and Transparency in Land Acquisition & Rehabilitation and Resettlement (Gujarat Amendment) Act 2016,
- Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 30 Sept 2015, Revenue & Forest Department, Govt. of Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method
- The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra
- Panchayats (Extension to Scheduled Area) Act, 1996;
- JICA Guidelines as well as World Bank OP/BP 4.12 and OP/BP 4.10,
- Census of India, 2011 (Primary Census Abstract and Village amenities directory).

## **Land Acquisition Plan**

Land acquisition plan has been prepared by RITES (a Government of India Enterprise, Ministry of Railways) based on the approved alignment. Revenue maps of all villages and urban areas falling in the Mumbai-Ahmedabad High Speed alignment were collected and digitized. The final alignment was then transferred on revenue maps of villages and cross-checked randomly at the site for accuracy. Latest available ownership documents such as Form 7, Form 12, etc. were collected for each land plot of every revenue village for the compilation of land acquisition plan. Village wise land acquisition plan comprised revenue map of village, alignment marked on village revenue map, summary table of affected land plots (survey no.), land area to be acquired from each land plot, and other relevant documents as per the requirement of Land Acquisition Collector for scrutiny and necessary processing under Section 11 of RFCTLARR Act, 2013. Thus, village wise land plots affected (under acquisition) by the project formed the basis for conducting surveys for titleholders. Names of owners of land plots under acquisition have been obtained from Form 7 (ownership document) for conducting a census and socio-economic survey.

## **Identification of Structures and Other Assets Affected**

Structures and other properties likely to be affected within the Right of Way (17.5 meters for track laying and land parcels for stations, maintenance depots, etc.) have been identified and noted based on satellite imagery and orthophoto provided by the NHSRCL. Any structure (residential, commercial, small business units, etc.) and Common Property Resources (CPRs) falling within the proposed RoW either partially or fully have been considered as likely affected structures. Approximate dimension of structures, present use, construction materials used, etc. have been noted for assessment. Simultaneously, names of owners, possessors of structures, etc associated with the likely affected structures and properties were also noted. The information on likely affected structures and other properties were recorded in a format. Data generated from this survey have been used to assess the magnitude of project impacts.

## **Survey Tools**

Survey tools namely, census survey format, socio-economic survey format, inventory of properties, inventory of tree enumeration, village profile format, etc. were developed and discussed with NHSRCL and JICC for incorporating suggestions and modifications. The format was approved by NHSRCL after due detailed discussion. The survey tools used for the survey are provided as Appendix A.

## **Training of Surveyors**

Training of surveyors and supervisors was conducted before starting the survey. Surveyors were briefed about the salient features of the project, the purpose of conducting surveys, approach to be followed for conducting surveys, how to approach household members who are to be administered questionnaire for the response, data scrutiny, and other aspects. Surveyors were asked to conduct mock interviews with fellow surveyors and followed by sample survey in nearby areas. All these methods were adopted to make the survey full proof.

## **Census and Socio-Economic Survey**

As mentioned above, the land acquisition proposal formed the basis for conducting a census and socio-economic survey. Surveyors were provided a list of land owners of Gata/ Survey No. of the village for conducting the survey. Census survey was conducted with owners and others (encroacher, squatter, tenant) who were available during the survey. Efforts were made by revisiting the villages to conduct a survey with as many affected persons as possible. Affected persons not staying in the concerned village and nearby areas and those whose whereabouts could not be traced have not been covered in the survey. The survey was conducted to generate data to assess the extent of impacts and provide baseline data on socio-economic conditions of the PAPs. The survey formats covered data generation on demography, education, occupation, sources of income, land holding, ownership of dwelling and other properties, consumer durables and consumer assets owned by the households, livestock holding, availability of basic facilities (drinking water, toilet, bathroom, electricity, etc) and their views on the project and option for resettlement and rehabilitation. Census and the socio-economic survey were conducted by engaging a team of surveyors recruited locally. The survey was administered to the head of the household; preferably otherwise an adult member of the household was requested to provide the response.

The socio-economic survey questionnaire was developed keeping in view the aims and objectives and baseline data needed for assessing the socio-economic conditions of project affected persons with specific concern to vulnerable sections of the society (Scheduled Caste, Scheduled Tribe, Women-Headed Household, Disabled, Elderly Persons, etc) for monitoring the status of project affected persons during and after the implementation of project, if any. The socio-economic survey was conducted among 20% of the project affected households of the total households who were administered the census survey.

### **Stakeholders Consultation**

Stakeholder consultation is an integral part of the social impact assessment and RAP preparation. Stakeholder consultation has been conducted in two stages.

#### **Stage 1: First stakeholder consultation**

Stakeholder consultations were conducted at Tehsil/ Taluka level involving Government officials, village revenue officials (Talatis), representatives of Panchayats and Wards, and others. This was followed by consultations with project affected persons and local communities in villages before initiating census and socio-economic survey. Villagers were approached by the community representative beforehand and briefed about the project and objective of conducting the survey. Besides, spot consultations in groups and individual consultations were also held at several places during the field survey work. Stakeholder consultations were held to share project information, likely impacts, the importance of surveys, and to understand their perception, concerns, and issues.

#### **Stage 2: Second stakeholder Consultation**

The second stakeholder consultations at District level have been conducted after preparation of draft RAP. The second stakeholder consultations included the representatives from the district authorities, key government departments, Project affected persons, other stakeholder having interest in the project, Non-government organizations, Media and NHSRCL representatives. The information on the district level consultations (including venue and timings) were

communicated through newspaper advertisements to the wide range of stakeholders directly or indirectly involved in the project.

The presentation for the second stakeholder consultation included project details, alignment details extent of impacts, the category of PAPs, entitlement matrix along with compensation disbursement details, institutional arrangements for RAP including grievance redressal mechanism, roles, and responsibilities of implementation agency, engagement of monitoring and evaluation agency, etc. It was followed by questions and open discussion where queries and questions of participants were answered, and their suggestions noted.

### **Data Analysis and Reporting**

Data collected from the primary survey (census and socio-economic survey) have been entered in an excel sheet for tabulation and analysis. Various tables have been prepared to summarize data for easy understanding.

## **1.6 Land Acquisition Process**

The detailed land acquisition procedure to be followed for Gujarat, Maharashtra, and DNH for the project is provided in the following section

For the state of Gujarat, land acquisition will be carried out as per the provisions of The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act 2013 and Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Gujarat Amendment) Act, 2016. Exemption from conducting Social Impact Assessment (SIA) for the project as per Section 4 of the RFCTLARR Act, 2013 has been obtained under Section 10A of The RFCTLARR (Gujarat Amendment) Act, 2016, which deals with exemption from conducting SIA for an infrastructure project in Gujarat. Other procedures for land acquisition will be as per the RFCTLARR act 2013.

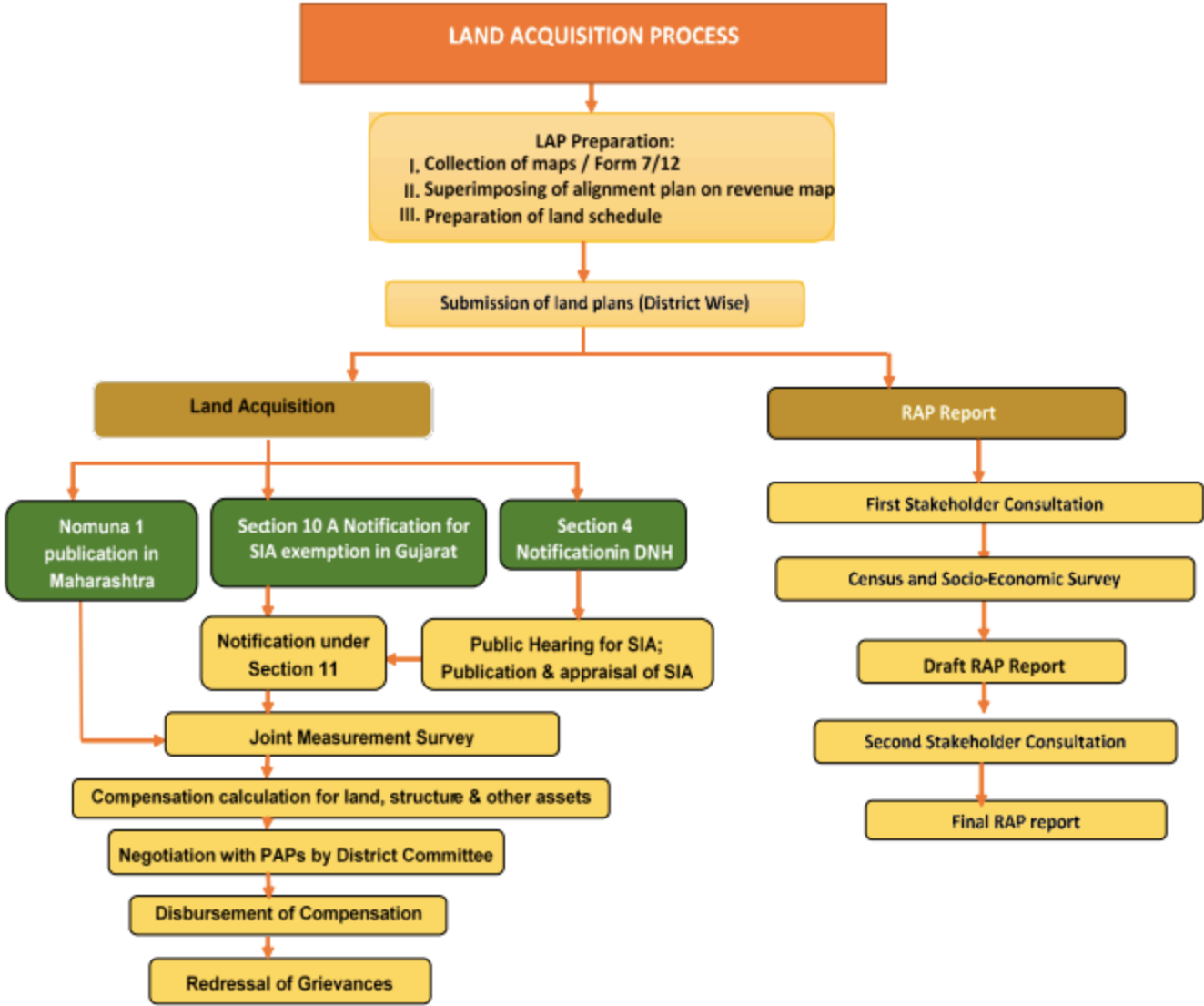
For the state of Maharashtra, acquisition of private land for irrigation and other projects by negotiation through direct purchase method (Govt. of Maharashtra, Revenue & Forest Department, Govt. decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dated 12 May 2015 & Govt. decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dated 30 Sept, 2015) will be followed for acquisition of land for the project.

For DNH, the land acquisition will be done as per RFCTLARR Act 2013.

The detailed land acquisition process for Gujarat, Maharashtra & DNH is highlighted in Figure 1-5.



Figure 1-5: Broad Land Acquisition Process for the Project



## 1.7 Structure of the RAP

The report outlines the details of the project, description of the project location, the magnitude of impacts based on the census, and spells out the necessary implementation procedures for resettlement and rehabilitation of the entire project affected families including the entitlement matrix as well as the legal framework and policies. The Final RAP has the following chapters/sections:

| Chapter    | Title   | Key contents   |
|------------|---|--|
| Chapter 1  | Description of the Project  | Introduction, project background, description, objective and purpose of the project  |
| Chapter 2  | Land Acquisition and Resettlement Impacts                                       | The scope of Land Acquisition, project impacts on TH & NTH, property inventory of losses, safeguard for vulnerable groups  |
| Chapter 3  | Prevailing Demography and Socio-Economic Status of project-affected communities | Methodology for census and socio-economic survey, the demographic profile of the Project Influence Area, socio-economic status of project affected person, the perception of the project, stakeholder's consultation |
| Chapter 4  | Legal and Policy Framework  | Legal frameworks for Land Acquisition and Resettlement & Rehabilitation, purpose and objective   |
| Chapter 5  | Resettlement and Rehabilitation Framework                                       | Eligibility and guidelines for compensation and R&R assistance, resettlement site and relocation of household and other establishments, Community (village) Development Plans, entitlement matrix                    |
| Chapter 6  | Resettlement Site Development for Relocation                                    | Details PAHs to be relocated, an area where resettlement site may be required, candidate sites identified for resettlement, budget   |
| Chapter 7  | Income Restoration Plan   | Training and income restoration programme details, the budget for income restoration   |
| Chapter 8  | Land Acquisition and Resettlement Costs and Fund Allocation                     | Budgeting and financial plan, assessment of values and costs for compensation and rehabilitation, rehabilitation and relocation of CPR, compensation for trees and standing crops                                    |
| Chapter 9  | Institutional Arrangement for RAP   | Institutional arrangement for land acquisition & RAP implementation, competent authorities and other Key organizations, Grievance Redress Mechanism, monitoring and independent evaluation organizations             |
| Chapter 10 | Monitoring and Evaluation   | Internal and external monitoring and reporting schedule  |
| Chapter 11 | RAP Implementation Schedule   | Activity wise implementation schedule  |
| Chapter 12 | Information Disclosure and Stakeholder Consultation                             | Project stakeholders, approach, and methods of Information disclosure and consultation, outcomes of stakeholder consultation   |

## 1.9 Disclosure of the RAP Consultant

### Limitations

The SIA and RAP report is based on a primary survey of persons associated with affected land parcels as per the Land Acquisition Plan (LAP) provided by RITES. Centre line marking of alignment was in progress during the census and socio-economic survey. Survey of some of the land parcels/ structures could not be undertaken due to the absence of PAPs at the time of the census and socio-economic survey and thereafter also could not be contacted during repeat visits.

Further, initially some villagers refused to participate in survey till notification on land acquisition was published in paper and clarity on compensation was provided by NHSRCL/ District administration. Clarity on compensation was provided during various consultations and other stakeholder consultations along with finalization and disclosure of entitlement matrix. After which the project team was able to do a survey in most of the areas and got a broad level consensus from the PAPs.

The initial target was to cover 100 % PAHs in all the areas. However, Some protest was encountered by RAP consultants during the initial phase of the survey and PAPs were reluctant to share their information for Census survey. Project team has made lot of efforts to reach out each to every person affected by the project and details have been provided to them through various stakeholder consultations, village level meetings and individual discussion. Consistent efforts have been undertaken to develop rapport and persuade villagers for conducting surveys. Process of establishing contacts with villagers and pursuing them to allow surveys is being carried out to obtain broad consensus in these villages. After various IEC (Information, education, and communication) activities, repeated consultations and disclosure of Entitlement Matrix, PAPs agreed to provide information and land voluntarily for the project.

There were limitations in capturing the data of farm workers/ tillers during the census survey because this detail were not provided by the owners of the farmland during the census survey.

It is understood that some of the affected land parcels may change after ground verification and completion of Joint measurement survey with land authorities. Any changes will be appropriately handled and efforts will be made to cover all the PAPs and PAHs in the project area during the implementation stage.

## 2.0 LAND ACQUISITION AND RESETTLEMENT IMPACTS

Development projects generate not only positive impact/ benefits but also cause adverse social impacts as well. Various alternatives have been explored from the beginning of the study for finalization of the alignment. One of the prime criteria for selection of final alignment has been least resettlement impacts particularly, impact on residential structures i.e. bypassing habitations/settlements in the project corridor as far as possible. Even then the adverse impacts of the project cannot be avoided fully.

Mumbai-Ahmedabad High Speed Railway Corridor project is likely to bring several positive impacts in the area in terms of connectivity between various urban centers along the alignment, development of ancillary industries, development of planned urban centers, generation of employment, etc, but not without its adverse impacts in terms of land acquisition and involuntary resettlement impacts. The implementation of the project will result in loss of land, dismantling of structures sometimes leading to displacement, loss of livelihood, loss of community resources, etc which are falling within the Right of Way (RoW). The implementation of the proposed project will affect owners, and persons associated with properties and assets and as such appropriate mitigation measures to address such adverse social impacts is a logical necessity. Census and socio-economic survey in the project affected districts was conducted in the month of December 2017 to July 2018 covering 87% of PAH and will be continued during implementation phase to cover all the project affected households. The extent of impacts due to the project in these districts is discussed in the following sections.

### 2.1 Scope of Land Acquisition

Majority of the project alignment traverses through greenfield area and as such major impacts are on fertile agricultural land. As on August' 2021, the project corridor traverses through 297 villages covering a length of 508 km. A total of 1396 ha. land area is required. Private land area required for project is 1021.20 ha, which is 73% of the total land area required. Govt. land area required for the project is 374.80 ha out of which 148.62 ha is under government plots, 127.50 ha belongs to Indian Railways and 98.68 ha is forest land. Government land parcels mainly comprise of land on roads. Government land other than road land are railway land, canal, and gothan, etc. Forest land to be acquired is mainly in the state of Maharashtra (95.85 ha). Land required for the project includes construction of elevated track, road for maintenance of tracks, stations, etc. Private land required for the project will be acquired primarily through consent award and government land will be transferred through inter-governmental process.

A total of 9,814 land plots (Gata/ Survey nos.) will be affected, of which 8280 (84.4%) land plots are private. Land acquisition of private land area of less than equal to 0.1 ha comprise 46% of the total private land plots. Land area required for the project by ownership is presented in Table 2-1.

**Table 2-1: Distribution of land area by Ownership – As on August' 2021**

| District/ UT          | No. of villages | Land plots affected (No.) |             |            |                 |               | Land area (Ha) |               |              |               |                |
|-----------------------|-----------------|---------------------------|-------------|------------|-----------------|---------------|----------------|---------------|--------------|---------------|----------------|
|                       |                 | Pvt.                      | Govt.       | Forest     | IR <sup>1</sup> | Total         | Pvt.           | Govt.         | Forest       | IR            | Total          |
| Ahmedabad             | 16              | 142                       | 32          | 0          | 49              | 223           | 27.22          | 2.04          | 0            | 104.12        | 133.38         |
| Kheda                 | 23              | 801                       | 124         | 0          | 3               | 928           | 98.98          | 10.7          | 0            | 0.66          | 110.34         |
| Anand                 | 11              | 546                       | 85          | 0          | 1               | 632           | 47.39          | 5.96          | 0            | 0.06          | 53.41          |
| Vadodara              | 35              | 907                       | 117         | 0          | 39              | 1063          | 106.68         | 13.86         | 0            | 20.81         | 141.35         |
| Bharuch               | 27              | 1004                      | 134         | 0          | 1               | 1139          | 127.17         | 12.75         | 0            | 0.07          | 139.99         |
| Surat                 | 28              | 919                       | 146         | 0          | 2               | 1067          | 144.04         | 17.78         | 0            | 0.11          | 161.93         |
| Navsari               | 28              | 716                       | 102         | 0          | 1               | 819           | 81.46          | 11.67         | 0            | 0.04          | 93.17          |
| Valsad                | 30              | 1061                      | 154         | 10         | 0               | 1225          | 107.4          | 12.2          | 2.83         | 0             | 122.43         |
| Palghar               | 73              | 1158                      | 256         | 91         | 2               | 1507          | 187.55         | 25.65         | 71.03        | 0.55          | 284.78         |
| Thane                 | 22              | 886                       | 75          | 99         | 3               | 1063          | 81.87          | 34.63         | 24.82        | 1.08          | 142.4          |
| Mumbai Sub            | 2               | 136                       | 7           | 0          | 0               | 143           | 7.52           | 0.48          | 0            | 0             | 8.00           |
| DNH                   | 2               | 4                         | 1           | 0          | 0               | 5             | 3.92           | 0.9           | 0            | 0             | 4.82           |
| <b>Total</b>          | <b>297</b>      | <b>8280</b>               | <b>1233</b> | <b>200</b> | <b>101</b>      | <b>9814</b>   | <b>1021.20</b> | <b>148.62</b> | <b>98.68</b> | <b>127.50</b> | <b>1396.00</b> |
| <b>Percentage (%)</b> |                 | <b>78</b>                 | <b>19</b>   | <b>2</b>   | <b>1</b>        | <b>100.00</b> | <b>71</b>      | <b>13</b>     | <b>6</b>     | <b>10</b>     | <b>100.00</b>  |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021

In addition to the title holders, whose land plots are getting impacted; non-titleholders will also be impacted and hence resulting in involuntary resettlement. This RAP report includes adequate safeguard measures (discussed in entitlement matrix, Income restoration Plan, Resettlement site development) to address and mitigate the involuntary resettlement for both title holders and non-titleholders (details on titleholders and non-titleholders are provided in Table 2-10).

## 2.2 Property Inventory of Losses

### 2.2.1 Land

As per RAP Implementation results as on August' 2021 Land plots affected by area has been classified and presented in Table 2-2. Land plots of less than equal to 0.1 ha (1,000 sqm) under acquisition constitutes 49.84% of the total private land plots affected. However, land plots of more than 0.5 ha (5,000 sqm) under acquisition comprise 21.85% of the total private land plots affected.

**Table 2-2: Number of land plots affected by size category and ownership**

| Classification of land area to be acquired (ha) | Number of land plots affected by ownership |              |            |            |                 |             |
|---|--|--------------|------------|------------|-----------------|-------------|
|   | Govt.                                      | Private      |            | Forest     | Indian Railways | Total       |
|   |  | No.          | %          |            |                 |             |
| Less than equal to 0.1                          | 707  | 4127         | 49.84      |            |                 |             |
| >0.1 to 0.2                                     | 166  | 1434         | 17.32      |            |                 |             |
| >0.2 to 0.5                                     | 164  | 909          | 10.98      |            |                 |             |
| > 0.5 to 0.75                                   | 82   | 192          | 2.32       | 200        | 101             | 9814        |
| > 0.75 to 1                                     | 21   | 136          | 1.65       |            |                 |             |
| > 1 to 2  | 43   | 475          | 5.74       |            |                 |             |
| > 2   | 50   | 1006         | 12.15      |            |                 |             |
| <b>Total</b>                                    | <b>1233</b>                                | <b>8280</b>  | <b>100</b> | <b>200</b> | <b>101</b>      | <b>9814</b> |
| <b>Total %</b>                                  | <b>12.56</b>                               | <b>84.37</b> | <b>1</b>   | <b>2</b>   | <b>1.03</b>     | <b>100</b>  |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto 31.08.2021

<sup>1</sup> Indian Railways

## 2.2.2 Structures

In addition to land, a total of 8,877 structures were identified during RAP implementation as on August' 2021 comprising of houses, shops, cattle sheds, private temples, toilets, kitchens, store rooms, etc. belonging to 15,341 households will also be affected. Details of PAHs losing structures are provided in Table 2-3.

**Table 2-3: Detail of PAHs with Structures- As on August' 2021**

| Particulars       | Details on PAHs with Structure |              |             |             |             |             |             | Total PAH Impacted | Total Structure Impacted |
|-------------------|--------------------------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------------|--------------------------|
|                   | With no Structure              | 1 Structure  | 2 Structure | 3 Structure | 4 Structure | 5 Structure | 6 Structure |                    |                          |
| Ahmedabad         | 66                             | 230          | 12          | 5           | 4           | 4           | 6           | 327                | 425                      |
| Kheda             | 481                            | 177          | 43          | 15          | 6           | 2           | 2           | 726                | 358                      |
| Anand             | 203                            | 157          | 78          | 51          | 16          | 5           | 0           | 510                | 307                      |
| Vadodara          | 249                            | 518          | 204         | 84          | 40          | 10          | 65          | 1170               | 921                      |
| Bharuch           | 861                            | 101          | 22          | 2           | 2           | 0           | 3           | 991                | 177                      |
| Surat             | 678                            | 153          | 67          | 25          | 27          | 9           | 13          | 972                | 593                      |
| Navsari           | 590                            | 137          | 43          | 24          | 17          | 10          | 6           | 827                | 455                      |
| Valsad            | 781                            | 368          | 123         | 75          | 18          | 14          | 14          | 1383               | 1065                     |
| Palghar           | 3979                           | 2652         | 214         | 67          | 32          | 14          | 40          | 6998               | 3719                     |
| Thane             | 801                            | 320          | 51          | 24          | 11          | 5           | 18          | 1230               | 791                      |
| DNH               | 132                            | 64           | 1           | 0           | 0           | 0           | 0           | 197                | 66                       |
| Mumbai            | 0                              | 0            | 0           | 0           | 0           | 0           | 0           | 0                  | 0                        |
| <b>Total</b>      | <b>8821</b>                    | <b>4877</b>  | <b>858</b>  | <b>372</b>  | <b>173</b>  | <b>73</b>   | <b>167</b>  | <b>15341</b>       | <b>8877</b>              |
| <b>Percentage</b> | <b>57.50</b>                   | <b>31.79</b> | <b>5.59</b> | <b>2.42</b> | <b>1.13</b> | <b>0.48</b> | <b>1.09</b> | <b>100.00</b>      |                          |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021

Structures affected in residential category primarily comprise of houses, cattleshed, borewells, boundary wall; structure under commercial category comprise of godown, storage, factory, restaurant, shop, workshop, stall, parking shed, poultry farm, gas plant, dairy farm, marble house, auto garage, company and petrol pump. Overall impact of project on structures and other fixed properties and assets are not significant as compared to impacts on land. Details on the district wise structure impacted is provided in Table 2-4.

Category wise number of structures by type of construction is provided in Table 2-5 . Analysis of the type of construction for the structures to be impacted as on August' 2021 indicate that approximately 31% structures are Pucca, 56% structures are semi pucca, 13% are kutcha. Analysis of the data indicate that the impacted area is approximately 290,322 m<sup>2</sup> of pucca construction, 229,912 m<sup>2</sup> of semi pucca construction and 44,041 m<sup>2</sup> Kutcha construction. The total area of the impacted structures is approximately 564,275 m<sup>2</sup>. These numbers are based on JMS and structure valuation reports.

**Table 2-4: District wise details of Structures Impacted as on August' 2021**

| Name of District  | No of Structure | House        | Boundary wall | Borewell    | Temple      | Farm House  | Bathroom    | Cattle shed | Godown      | Storage     | Auto Garage | Kitchen     | Toilet      | Water tank  | Factory     | Pond        | Restaurant  |
|-------------------|-----------------|--------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Ahmedabad         | 425             | 244          | 29            | 9           | 13          | 1           | 2           | 3           | 1           | 0           | 0           | 1           | 12          | 7           | 0           | 0           | 0           |
| Kheda             | 358             | 121          | 68            | 13          | 14          | 0           | 0           | 9           | 6           | 0           | 0           | 0           | 37          | 61          | 3           | 0           | 1           |
| Anand             | 307             | 75           | 61            | 16          | 12          | 2           | 7           | 19          | 0           | 19          | 0           | 3           | 14          | 53          | 2           | 0           | 0           |
| Vadodara          | 921             | 359          | 141           | 26          | 16          | 0           | 46          | 9           | 2           | 9           | 1           | 0           | 6           | 74          | 1           | 0           | 0           |
| Bharuch           | 177             | 58           | 23            | 9           | 0           | 0           | 4           | 9           | 0           | 0           | 0           | 2           | 10          | 12          | 0           | 0           | 0           |
| Surat             | 593             | 104          | 163           | 68          | 4           | 0           | 14          | 8           | 41          | 34          | 1           | 0           | 23          | 53          | 9           | 0           | 0           |
| Navsari           | 455             | 108          | 121           | 58          | 8           | 1           | 24          | 9           | 1           | 20          | 0           | 1           | 15          | 23          | 0           | 0           | 0           |
| Valsad            | 1065            | 41           | 168           | 71          | 10          | 0           | 49          | 11          | 1           | 0           | 1           | 2           | 119         | 60          | 7           | 0           | 0           |
| Palghar           | 3719            | 2592         | 157           | 203         | 7           | 0           | 42          | 22          | 1           | 1           | 0           | 0           | 152         | 20          | 11          | 2           | 0           |
| Thane             | 791             | 291          | 28            | 0           | 1           | 0           | 1           | 3           | 4           | 0           | 0           | 10          | 38          | 31          | 0           | 0           | 1           |
| DNH               | 66              | 43           | 16            | 2           | 0           | 1           | 0           | 1           | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0           |
| Mumbai            | 0               | 0            | 0             | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| <b>Total</b>      | <b>8877</b>     | <b>4036</b>  | <b>975</b>    | <b>475</b>  | <b>85</b>   | <b>5</b>    | <b>189</b>  | <b>103</b>  | <b>57</b>   | <b>83</b>   | <b>3</b>    | <b>19</b>   | <b>427</b>  | <b>394</b>  | <b>33</b>   | <b>2</b>    | <b>2</b>    |
| <b>Percentage</b> | <b>100</b>      | <b>45.47</b> | <b>10.98</b>  | <b>5.35</b> | <b>0.96</b> | <b>0.06</b> | <b>2.13</b> | <b>1.16</b> | <b>0.64</b> | <b>0.94</b> | <b>0.03</b> | <b>0.21</b> | <b>4.81</b> | <b>4.44</b> | <b>0.37</b> | <b>0.02</b> | <b>0.02</b> |

| Name of District  | Tube well   | Shop        | Lari        | Well        | Workshop    | Stall       | Parking Shed | Poultry Farm | Gas Plant   | Stairs      | Only house fence | School Building | Dairy Firm  | Handpump    | Marble House | Commercial Complex | Company     | Petrol Pump | Others      |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|-------------|------------------|-----------------|-------------|-------------|--------------|--------------------|-------------|-------------|-------------|
| Ahmedabad         | 0           | 8           | 0           | 2           | 0           | 7           | 3            | 0            | 0           | 2           | 0                | 1               | 0           | 0           | 0            | 0                  | 1           | 0           | 79          |
| Kheda             | 0           | 0           | 0           | 1           | 0           | 1           | 0            | 4            | 0           | 2           | 0                | 2               | 0           | 1           | 0            | 1                  | 0           | 0           | 13          |
| Anand             | 0           | 6           | 0           | 1           | 0           | 0           | 0            | 1            | 1           | 1           | 0                | 0               | 0           | 0           | 0            | 0                  | 0           | 0           | 14          |
| Vadodara          | 0           | 58          | 0           | 2           | 0           | 48          | 50           | 0            | 1           | 17          | 0                | 0               | 0           | 8           | 2            | 6                  | 4           | 0           | 35          |
| Bharuch           | 8           | 1           | 0           | 4           | 5           | 0           | 12           | 1            | 0           | 0           | 0                | 19              | 0           | 0           | 0            | 0                  | 0           | 0           | 0           |
| Surat             | 0           | 8           | 0           | 10          | 0           | 0           | 29           | 1            | 0           | 19          | 0                | 0               | 0           | 0           | 0            | 4                  | 0           | 0           | 0           |
| Navsari           | 0           | 2           | 0           | 8           | 0           | 0           | 35           | 1            | 8           | 0           | 2                | 0               | 0           | 5           | 0            | 0                  | 5           | 0           | 0           |
| Valsad            | 0           | 31          | 0           | 11          | 2           | 0           | 74           | 2            | 3           | 8           | 369              | 0               | 0           | 19          | 0            | 6                  | 0           | 0           | 0           |
| Palghar           | 0           | 7           | 0           | 20          | 0           | 0           | 22           | 3            | 1           | 0           | 19               | 8               | 0           | 6           | 0            | 332                | 22          | 0           | 69          |
| Thane             | 0           | 35          | 0           | 5           | 2           | 0           | 29           | 1            | 0           | 1           | 0                | 1               | 0           | 0           | 0            | 221                | 1           | 0           | 87          |
| DNH               | 0           | 0           | 0           | 1           | 0           | 0           | 0            | 0            | 0           | 0           | 0                | 0               | 0           | 0           | 0            | 0                  | 0           | 1           | 0           |
| Mumbai            | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0            | 0           | 0           | 0                | 0               | 0           | 0           | 0            | 0                  | 0           | 0           | 0           |
| <b>Total</b>      | <b>8</b>    | <b>156</b>  | <b>0</b>    | <b>65</b>   | <b>9</b>    | <b>56</b>   | <b>254</b>   | <b>14</b>    | <b>14</b>   | <b>50</b>   | <b>390</b>       | <b>31</b>       | <b>0</b>    | <b>39</b>   | <b>2</b>     | <b>570</b>         | <b>33</b>   | <b>1</b>    | <b>297</b>  |
| <b>Percentage</b> | <b>0.09</b> | <b>1.76</b> | <b>0.00</b> | <b>0.73</b> | <b>0.10</b> | <b>0.63</b> | <b>2.86</b>  | <b>0.16</b>  | <b>0.16</b> | <b>0.56</b> | <b>4.39</b>      | <b>0.35</b>     | <b>0.00</b> | <b>0.44</b> | <b>0.02</b>  | <b>6.42</b>        | <b>0.37</b> | <b>0.01</b> | <b>3.35</b> |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto 31.08.2021

**Table 2-5: District wise details of Structures Impacted as on August' 2021**

| Particulars of structure | Pucca number | Impacted area (m <sup>2</sup> ) | Semi pucca number | Impacted area (m <sup>2</sup> ) | Kutcha Number | Impacted area (m <sup>2</sup> ) | Shanties Number | Impacted area (m <sup>2</sup> ) | Tents Number | Impacted area (m <sup>2</sup> ) | Total Number | Impacted area (m <sup>2</sup> ) |
|--------------------------|--------------|---------------------------------|-------------------|---------------------------------|---------------|---------------------------------|-----------------|---------------------------------|--------------|---------------------------------|--------------|---------------------------------|
| Ahmedabad                | 250          | 28161.64                        | 138               | 3671.26                         | 24            | 647.73                          | 13              | 355.68                          | 0            | 0                               | 425          | 32836.31                        |
| Kheda                    | 153          | 17614.48                        | 182               | 3892                            | 23            | 703.57                          | 0               | 0                               | 0            | 0                               | 358          | 22210.05                        |
| Anand                    | 121          | 13709.79                        | 165               | 3465                            | 21            | 660                             | 0               | 0                               | 0            | 0                               | 307          | 17834.79                        |
| Vadodara                 | 433          | 21263.49                        | 453               | 17219.88                        | 35            | 1330                            | 0               | 0                               | 0            | 0                               | 921          | 39813.37                        |
| Bharuch                  | 29           | 2857                            | 61                | 4137                            | 87            | 1255                            | 0               | 0                               | 0            | 0                               | 177          | 8249                            |
| Surat                    | 86           | 12945.21                        | 507               | 119473.94                       | 0             | 0                               | 0               | 0                               | 0            | 0                               | 593          | 132419.15                       |
| Navsari                  | 59           | 7005.67                         | 378               | 3975.49                         | 18            | 770.89                          | 0               | 0                               | 0            | 0                               | 455          | 11752.05                        |
| Valsad                   | 308          | 30021.79                        | 747               | 9304.02                         | 10            | 758.26                          | 0               | 0                               | 0            | 0                               | 1065         | 40084.07                        |
| Palghar                  | 846          | 71935.94                        | 2181              | 55792.456                       | 691           | 20994.96                        | 0               | 0                               | 1            | 237                             | 3719         | 148960.356                      |
| Thane                    | 468          | 82548.96                        | 142               | 7360.96                         | 144           | 15565.7                         | 0               | 0                               | 37           | 603.29                          | 791          | 106078.91                       |
| DNH                      | 27           | 2257.56                         | 29                | 1620.194                        | 10            | 159.33                          | 0               | 0                               | 0            | 0                               | 66           | 4037.084                        |
| Mumbai                   | 0            | 0                               | 0                 | 0                               | 0             | 0                               | 0               | 0                               | 0            | 0                               | 0            | 0                               |
| <b>Total</b>             | <b>2780</b>  | <b>290321.53</b>                | <b>4983</b>       | <b>229912.20</b>                | <b>1063</b>   | <b>42845.44</b>                 | <b>13</b>       | <b>355.68</b>                   | <b>38</b>    | <b>840.29</b>                   | <b>8877</b>  | <b>564275.14</b>                |
| <b>Percentage</b>        | <b>31.32</b> | <b> </b>                        | <b>56.13</b>      | <b> </b>                        | <b>11.97</b>  | <b> </b>                        | <b>0.15</b>     | <b> </b>                        | <b>0.43</b>  | <b> </b>                        | <b>100</b>   | <b> </b>                        |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021



Details on the number of commercial facilities and the owners and employees associated with the commercial facilities were captured during the JMS and Micro Plan. Table 2.6 provides details on the impacted commercial facilities and employees & owners associated with them identified during RAP Implementation as on August' 2021.

**Table 2-6: Affected commercial facilities and their owners/employees as on August' 2021**

| District     | Actual Data as on 31.08.2021         |                          |
|--------------|--------------------------------------|--------------------------|
|              | No of affected Commercial Structures | No of owners & Employees |
| Ahmedabad    | 9                                    | 9                        |
| Anand        | 16                                   | 16                       |
| Bharuch      | 3                                    | 3                        |
| Kheda        | 19                                   | 19                       |
| Surat        | 4                                    | 4                        |
| Navsari      | 3                                    | 3                        |
| Valsad       | 6                                    | 6                        |
| Vadodara     | 139                                  | 139                      |
| Palghar      | 354                                  | 662                      |
| Thane        | 224                                  | 151                      |
| DNH          | 1                                    | 1                        |
| <b>Total</b> | <b>778</b>                           | <b>1013</b>              |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto 31.08.2021

### 2.2.3 Impact on Trees

Approximately 2,27,016 trees (inclusive of 72,610 Crop Trees i.e. Banana, Nilgiri and Bamboo) are expected to be impacted due to project both in the forest and non-forest areas during RAP Implementation as on August' 2021. No. of trees impacted for every 100 km stretch starting from Mumbai has been identified along with the details of trees on the forest land, government land, and private land.

Table 2-7 provides details on the number of trees impacted on the alignment during RAP preparation and during RAP implementation.

**Table 2-7: Details of trees impacted due to project as on August' 2021**

| Distance from Mumbai (Km) | No. of trees    | Forest tree   | Trees on Govt. Land | Trees on Pvt. Land |
|---------------------------|-----------------|---------------|---------------------|--------------------|
| 0-100                     | 22,867          | 9,594         | 3,564               | 9,160              |
| 100-200                   | 95,352          | 8,996         | 9,698               | 63,448             |
| 200-300                   | 55,658          | 1,243         | 91                  | 63,669             |
| 300-400                   | 24,808          | 238           | 1,599               | 27,383             |
| 400-508                   | 28,332          | 50            | 5,139               | 23,143             |
| <b>Total</b>              | <b>2,27,016</b> | <b>20,121</b> | <b>20,092</b>       | <b>1,86,803</b>    |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021

## 2.2.4 Other Common Property Resources

The impact on CPR's after completion of JMS survey as on August' 2021, is detailed in Table 2-8. Efforts were made to avoid the impact by possible adjustment in the design of proposed pillars without compromising the design standards and safety of the project. Along with that NHSRCL is in continues discussion with affected villagers and concern community and district administration/LAO to find out the likely alternative arrangements. In case, these CPR's can't be saved by putting all the possible efforts, these have been relocated or re-stored or adequately compensated with due agreement of PAP's.

**Table 2-8: District wise CPRs affected as on August' 2021**

| District  | CPR                   | No. of CPR Impacted (in no.) | Area of CPR (sqm) |          |                      |
|-----------|-----------------------|------------------------------|-------------------|----------|----------------------|
|           |                       |                              | Total             | Affected | Extent of impact (%) |
| Ahmedabad | Crematorium           | 25                           | 10.81             | 10.81    | 100.00               |
|           | Small Temple          |                              | 4                 | 4        | 100.00               |
|           | Small Temple          |                              | 4                 | 4        | 100.00               |
|           | Footpath school       |                              | 14.78             | 14.78    | 100.00               |
|           | Big Temple            |                              | 284.34            | 284.34   | 100.00               |
|           | Pay & Use Toilet      |                              | 159.55            | 33.22    | 20.82                |
|           | Bus Stop              |                              | 113.28            | 113.28   | 100.00               |
|           | Police Station        |                              | 42.84             | 20.29    | 47.36                |
|           | Small Temple          |                              | 4                 | 4        | 100.00               |
|           | Mosque                |                              | 147.84            | 110.21   | 74.55                |
|           | Small Temple          |                              | 4                 | 4        | 100.00               |
|           | Small Temple          |                              | 2.56              | 2.56     | 100.00               |
|           | Public Toilet         |                              | 63.5              | 63.5     | 100.00               |
|           | Temple                |                              | 7.27              | 3.21     | 44.15                |
|           | Temple                |                              | 5.38              | 5.38     | 100.00               |
|           | Temple                |                              | 4.84              | 2.41     | 49.79                |
|           | Temple                |                              | 3.2               | 1.23     | 38.44                |
|           | Small Temple          |                              | 4.84              | 2.41     | 49.79                |
|           | Common Toilet         |                              | 14.1              | 8.16     | 57.87                |
|           | Temple                |                              | 7.08              | 7.08     | 100.00               |
|           | Small Temple          |                              | 2.55              | 2.55     | 100.00               |
|           | Public Toilet         |                              | 3.77              | 3.77     | 100.00               |
|           | Masjid(Mosque)        |                              | 224               | 224      | 100.00               |
|           | Pay & Use Toilet      |                              | 9.38              | 8.38     | 89.34                |
|           | Big Temple            |                              | 115               | 115      | 100.00               |
| Kheda     | Pond (Mahij)          | 15                           | 5968              | 744      | 12.47                |
|           | Pond (Degham)         |                              | 48259             | 657      | 1.36                 |
|           | Pond (Degham)         |                              | 5666              | 5        | 0.09                 |
|           | Pond (Gothaj)         |                              | 28531             | 2025     | 7.10                 |
|           | Pond (Piplag)         |                              | 3703              | 1199     | 32.38                |
|           | Pond (Bhumel)         |                              | 4047              | 118      | 2.92                 |
|           | Pond (Bhumel)         |                              | 14472             | 754      | 5.21                 |
|           | Pump Room             |                              | 14.02             | 14.02    | 100                  |
|           | School                |                              | 128.46            | 6.1      | 4.75                 |
|           | Toilet of school      |                              | 51.72             | 51.72    | 100.00               |
|           | Toilet                |                              | NA                | NA       | NA                   |
|           | Temple                |                              | 20.79             | 4.23     | 20.35                |
|           | Anganwadi             |                              | 47.29             | 47.29    | 100                  |
|           | Bus Stand             |                              | 74.29             | 51.68    | 69.57                |
|           | Panchayat plot - 2 No |                              | NA                | NA       | NA                   |
| Anand     | Temple                | 5                            | 8194              | 2663     | 32.50                |
|           | Pond (Mogar)          |                              | 18919             | 2097     | 11.08                |
|           | Pond (Chikhodhara)    |                              | 5564              | 43.00    | 0.77                 |

| District                             | CPR   | No. of CPR Impacted (in no.) | Area of CPR (sqm)                        |          |                      |      |       |
|--------------------------------------|---|------------------------------|--|----------|----------------------|------|-------|
|                                      |   |                              | Total                                    | Affected | Extent of impact (%) |      |       |
|                                      | Pond (Chikhodhara)  |                              | 4047                                     | 1425     | 35.21                |      |       |
|                                      | Trust (Welfare Society)   |                              | 149.31                                   | 35.43    | 23.73                |      |       |
| Vadodara                             | Temple-Gorwa  | 12                           | 14345                                    | 1040     | 7.25                 |      |       |
|                                      | Temple, Manjalpur   |                              | 7.96                                     | 7.96     | 100.00               |      |       |
|                                      | Temple, Manjalpur   |                              | 2.14                                     | 2.14     | 100.00               |      |       |
|                                      | Shiv Temple (Vadsar)  |                              | 21                                       | 21       | 100.00               |      |       |
|                                      | Temple, Chhani  |                              | 16.12                                    | 16.12    | 100.00               |      |       |
|                                      | Shani Temple Nanawati Chawl, Vadodara Kasba                     |                              | 143                                      | 143      | 100.00               |      |       |
|                                      | Mosque, Akota   |                              | NA                                       | NA       | NA                   |      |       |
|                                      | Dargah, Dhantekari Vadodara Kasba                               |                              | NA                                       | NA       | NA                   |      |       |
|                                      | Property on gauchar land (Samadhi (Tomb) T. Mubarak )           |                              | 37.59                                    | 2.4      | 6.38                 |      |       |
|                                      | Temple, Sankarda  |                              | 2.17                                     | 2.17     | 100.00               |      |       |
|                                      | Post mortem room, Sankarda                                      |                              | NA                                       | NA       | NA                   |      |       |
|                                      | Water Tank/underground sump, Dashrath                           |                              | 28.26                                    | 28.26    | 100                  |      |       |
|                                      | Bharuch   |                              | Graveyard - Gate, Boundary Wall          | 8        | 14909                | 2507 | 16.82 |
|                                      |   |                              | Property (Pump House) on Government land |          | 30161                | 2901 | 9.62  |
| Primary School Boundary Wall - 6 no. |   | NA                           | 1119                                     |          | NA                   |      |       |
| Surat                                | Public Building - 2 no. (Post Office & Boundary Wall od School) | 19                           | 670.6                                    | 429.13   | 63.99                |      |       |
|                                      | Handpump/Watertank/Well - 8 no.                                 |                              | 380.16                                   | 371.27   | 97.66                |      |       |
|                                      | Others - 9 no   |                              | 77313.37                                 | 3131.74  | 4.05                 |      |       |
| Navsari                              | Temple - 6 no.  | 14                           | 46.48                                    | 39.68    | 85.37                |      |       |
|                                      | Graveyard - 3 no.   |                              | NA                                       | NA       | NA                   |      |       |
|                                      | Well/ Hand Pump/ Water Tank/Bore well/ Pump House - 4 no.       |                              | NA                                       | NA       | NA                   |      |       |
|                                      | Others - 1 no   |                              | NA                                       | NA       | NA                   |      |       |
|                                      |   |                              | NA                                       | NA       | NA                   |      |       |
| Valsad                               | Temple - 10 no.   | 16                           | 60.33                                    | 58.63    | 97.18                |      |       |
|                                      | Public Building   |                              | 1263.5                                   | 1020.03  | 80.73                |      |       |
|                                      | Tomb/Cremation - 2 no.  |                              | 139.56                                   | 124.52   | 89.22                |      |       |
|                                      | Well - 3 no.  |                              | 137.19                                   | 137.19   | 100                  |      |       |
| Palghar                              | Temple - 4 no.  | 36                           | 194.55                                   | 194.55   | 100                  |      |       |
|                                      | Church - 1 no.  |                              | 521.55                                   | 521.55   | 100                  |      |       |
|                                      | Water Tank, Well - 9 no.  |                              | 785.89                                   | 785.89   | 100                  |      |       |
|                                      | School & Others - 4 no.   |                              | 664.84                                   | 664.84   | 100                  |      |       |
|                                      | Anganwadi, Grampanchayat, Primari Health Center etc.- 16 no.    |                              | 418.17                                   | 418.17   | 100                  |      |       |
|                                      |   |                              | NA                                       | NA       | NA                   |      |       |
| Thane                                | Well - 4 no.  | 8                            | NA                                       | NA       | NA                   |      |       |
|                                      | Crematorium   |                              | NA                                       | NA       | NA                   |      |       |
|                                      | School ( Anjur)   |                              | 8688                                     | 2404     | 28                   |      |       |
|                                      | Temple ( Shil )   |                              | 313.49                                   | 313.49   | 100                  |      |       |
|                                      | Temple ( Dive Anjur)  |                              | 87.48                                    | 87.48    | 100                  |      |       |
|                                      | <b>Total</b>  | <b>158</b>                   |  |          |                      |      |       |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Structure Valuation Report prepared upto August' 2021

## 2.3 Vulnerable Groups

Vulnerability assessment has been done for the following categories of households which include disabled, destitute, orphans, Women-Headed Household (WHH), BPL population, Schedule Caste, Scheduled Tribe, landless, persons above 65 yrs of age with no immediate family members to support etc.

As per RAP Implementation results upto August' 2021, approximately 29% of the households reported to be falling in the vulnerable category. Out of 4,426 vulnerable households, maximum 70% have reported in ST category, followed by 12% Below Poverty Line Households (BPL) category, followed by Scheduled caste (8%), and Women Headed Household (6%). Vulnerability status for the PAHs for the project is provided in Table 2.8.

**Table 2-8: Vulnerability Status of PAHs<sup>2</sup> - August' 2021**

| Particulars       | Vulnerable   |              | Vulnerability Category |             |             |             |             |             |                                  |              |             |              |             |
|-------------------|--------------|--------------|------------------------|-------------|-------------|-------------|-------------|-------------|----------------------------------|--------------|-------------|--------------|-------------|
|                   | Yes          | No           | BPL                    | WHH         | Disable     | Destitute   | Orphan      | Landless    | Elderly person without dependent | ST           | SC          | > 1 Category | Others      |
| Ahmedabad         | 130          | 197          | 12                     | 27          | 3           | 0           | 1           | 0           | 0                                | 26           | 21          | 40           | 0           |
| Kheda             | 111          | 615          | 83                     | 7           | 0           | 0           | 0           | 0           | 5                                | 0            | 6           | 10           | 0           |
| Anand             | 91           | 419          | 80                     | 5           | 4           | 0           | 0           | 0           | 1                                | 0            | 0           | 1            | 0           |
| Vadodara          | 132          | 1038         | 10                     | 14          | 0           | 0           | 0           | 0           | 4                                | 41           | 57          | 6            | 0           |
| Bharuch           | 119          | 872          | 47                     | 14          | 10          | 0           | 0           | 0           | 5                                | 32           | 11          | 0            | 0           |
| Surat             | 43           | 929          | 0                      | 6           | 5           | 0           | 0           | 0           | 0                                | 9            | 21          | 2            | 0           |
| Navsari           | 211          | 616          | 112                    | 9           | 1           | 0           | 0           | 0           | 12                               | 30           | 26          | 21           | 0           |
| Valsad            | 662          | 731          | 70                     | 29          | 1           | 0           | 0           | 0           | 0                                | 513          | 30          | 19           | 0           |
| Palghar           | 2816         | 4182         | 98                     | 129         | 0           | 0           | 0           | 0           | 4                                | 2432         | 131         | 22           | 0           |
| Thane             | 57           | 1173         | 0                      | 11          | 1           | 0           | 0           | 0           | 0                                | 10           | 35          | 0            | 0           |
| DNH               | 54           | 143          | 0                      | 0           | 0           | 0           | 0           | 0           | 0                                | 44           | 10          | 0            | 0           |
| Mumbai            | 0            | 0            | 0                      | 0           | 0           | 0           | 0           | 0           | 0                                | 0            | 0           | 0            | 0           |
| <b>Total</b>      | <b>4426</b>  | <b>10915</b> | <b>512</b>             | <b>251</b>  | <b>25</b>   | <b>0</b>    | <b>1</b>    | <b>0</b>    | <b>31</b>                        | <b>3137</b>  | <b>348</b>  | <b>121</b>   | <b>0</b>    |
| <b>Percentage</b> | <b>28.85</b> | <b>71.15</b> | <b>11.57</b>           | <b>5.67</b> | <b>0.56</b> | <b>0.00</b> | <b>0.02</b> | <b>0.00</b> | <b>0.70</b>                      | <b>70.88</b> | <b>7.86</b> | <b>2.73</b>  | <b>0.00</b> |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021

Note: 121 PAHs falling in more than 1 category (>1 Category) has been put separately, not in respective vulnerability groups

## 2.4 Title holders and Non-Title holders

The assessment of both the title holder and non-title holder as per results of RAP implementation as on August' 2021 indicate that approximately 69% are titleholder and 31% are non titleholder . Details are provided in Table 2-10.

**Table 2-10: PAHs with the breakup of Titleholders and Non-Titleholders**

| District  | PAH Ownership |            |          |        |        |       | Total |
|-----------|---------------|------------|----------|--------|--------|-------|-------|
|           | TH            | NTH        |          |        |        | Total |       |
|           |               | Encroacher | Squatter | Tenant | Others |       |       |
| Ahmedabad | 158           | 0          | 169      | 0      | 0      | 169   | 327   |
| Kheda     | 712           | 0          | 14       | 0      | 0      | 14    | 726   |
| Anand     | 494           | 0          | 16       | 0      | 0      | 16    | 510   |
| Vadodara  | 850           | 0          | 320      | 0      | 0      | 320   | 1170  |
| Bharuch   | 906           | 0          | 85       | 0      | 0      | 85    | 991   |
| Surat     | 944           | 28         | 0        | 0      | 0      | 28    | 972   |

<sup>2</sup> There are no vulnerable people in Mumbai. The land parcel affected in Mumbai belongs to a private company called Godrej Industries, a global conglomerate, headquartered in India and balance is government land.

| District          | PAH Ownership |             |             |            |          | Total        |              |
|-------------------|---------------|-------------|-------------|------------|----------|--------------|--------------|
|                   | TH            | NTH         |             |            |          |              |              |
|                   |               | Encroacher  | Squatter    | Tenant     | Others   |              | Total        |
| Navsari           | 803           | 24          | 0           | 0          | 0        | 24           | 827          |
| Valsad            | 1373          | 20          | 0           | 0          | 0        | 20           | 1393         |
| Palghar           | 3075          | 2993        | 460         | 470        | 0        | 3923         | 6998         |
| Thane             | 1056          | 92          | 37          | 45         | 0        | 174          | 1230         |
| DNH               | 176           | 0           | 21          | 0          | 0        | 21           | 197          |
| Mumbai            | 0             | 0           | 0           | 0          | 0        | 0            | 0            |
| <b>Total</b>      | <b>10547</b>  | <b>3157</b> | <b>1122</b> | <b>515</b> | <b>0</b> | <b>4794</b>  | <b>15341</b> |
| <b>Percentage</b> | <b>68.75</b>  | <b>1</b>    | <b>1</b>    | <b>1</b>   | <b>1</b> | <b>31.25</b> | <b>100</b>   |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August ' 2021

Note

Non-titleholder details including encroachers, squatter, tenants have been included in Table above. However, there was a limitation in capturing the data of farm workers/ tillers during the census survey, because this detail was not provided by the owners of the farmland during the census survey.

There are two ways to get the information on tillers a) through land-owners b) through Government record in each district. NHSRCL has tried to get this information through land owners but has been unable to get the same as land owners are not forthcoming in providing this information. However, tillers, if identified subsequently during RAP implementation, shall be addressed through the proposed system of Grievance redressal by Grievance Redressal Committee (GRC) as per the provisions of Entitlement Matrix. Any such PAP can also contact directly to NHSRCL, LAO and Gram Panchayat Sarpanch, who will be the member of GRC Committee at the district level.

### **3.0 PREVAILING DEMOGRAPHY AND SOCIO-ECONOMIC STATUS OF PROJECT AFFECTED COMMUNITIES**

This chapter discusses the brief methodology for census and socio-economic survey, the demographic and socio-economic profile of the project influence area and analysis of data obtained from census & socio-economic survey. The demographic and social profile of the project influence area is based on the analysis of secondary data taken from various sources. Census and the socio-economic are the primary data obtained during the field survey.

#### **3.1 Methodology for Census and Socio-Economic Survey**

Land acquisition proposal formed the basis for conducting a census and socio-economic survey. Surveyors were provided a list of land owners of Gata/ Survey No. of the village for conducting the survey. Census survey was conducted with owners and others (encroacher, squatter, tenant) who were available during the survey. To cover all, efforts were made by revisiting the villages to conduct a survey with as many affected persons as possible. Affected persons not staying in the concerned village and nearby area and those whose whereabouts could not be traced have not been covered in the survey. The survey was conducted to generate data to assess the extent of impacts and baseline data on socio-economic conditions of the PAPs.

The survey formats covered data generation on demography, education, occupation, sources of income, land holding, ownership of dwelling and other properties, consumer durables and consumer assets owned by the households, livestock holding, availability of basic facilities (drinking water, toilet, bathroom, electricity, etc.) and their views on the project and option for resettlement and rehabilitation. Census and the socio-economic survey were conducted by engaging a team of surveyors recruited locally. The survey was administered to head of the household; preferably otherwise an adult member of the household was requested to provide the response.

The socio-economic survey questionnaire was developed keeping in view the aims and objectives and baseline data needed for assessing the socio-economic conditions of project affected persons with specific concern to vulnerable sections of the society (Scheduled Caste, Scheduled Tribe, Women-Headed Household, Disabled, Elderly Persons, etc.) for monitoring the status of project affected persons during and after the implementation of project, if any. The socio-economic survey was conducted among 20% of the project affected households of the total households administered census survey.

#### **3.2 Demographic Profile of the Project Influence Area**

This section provides briefly the socio-economic profile of the states of Maharashtra and Gujarat & UT of DNH, Project Influence Area (PIA) and Direct Impact Zone (DIZ). The project influence area has been considered district boundaries through which the project alignment traverses namely, suburban Mumbai, Thane, Palghar in Maharashtra and Union Territory of Dadra & Nagar Haveli and Valsad, Navsari, Surat, Bharuch, Vadodara, Anand, Kheda, and Ahmedabad in Gujarat. The Direct Impact Zone has been considered in all the villages and urban areas in which land is acquired.

## **3.2.1 Overview of Maharashtra**

### **3.2.1.1 State Profile**

Maharashtra occupies the western & central part of the country and has a long coastline stretching nearly 720 km along the Arabian Sea. The Sahyadri mountain ranges provide a natural backbone to the State on the west, while the Satpuda hills along the north and Bhamragad – Chiroli Gaikhuri ranges on the east serve as its natural borders. The State is surrounded by Gujarat to the north-west, Madhya Pradesh to the north, Chhattisgarh to the east, Telangana to the south-east, Karnataka to the south and Goa to the south-west.

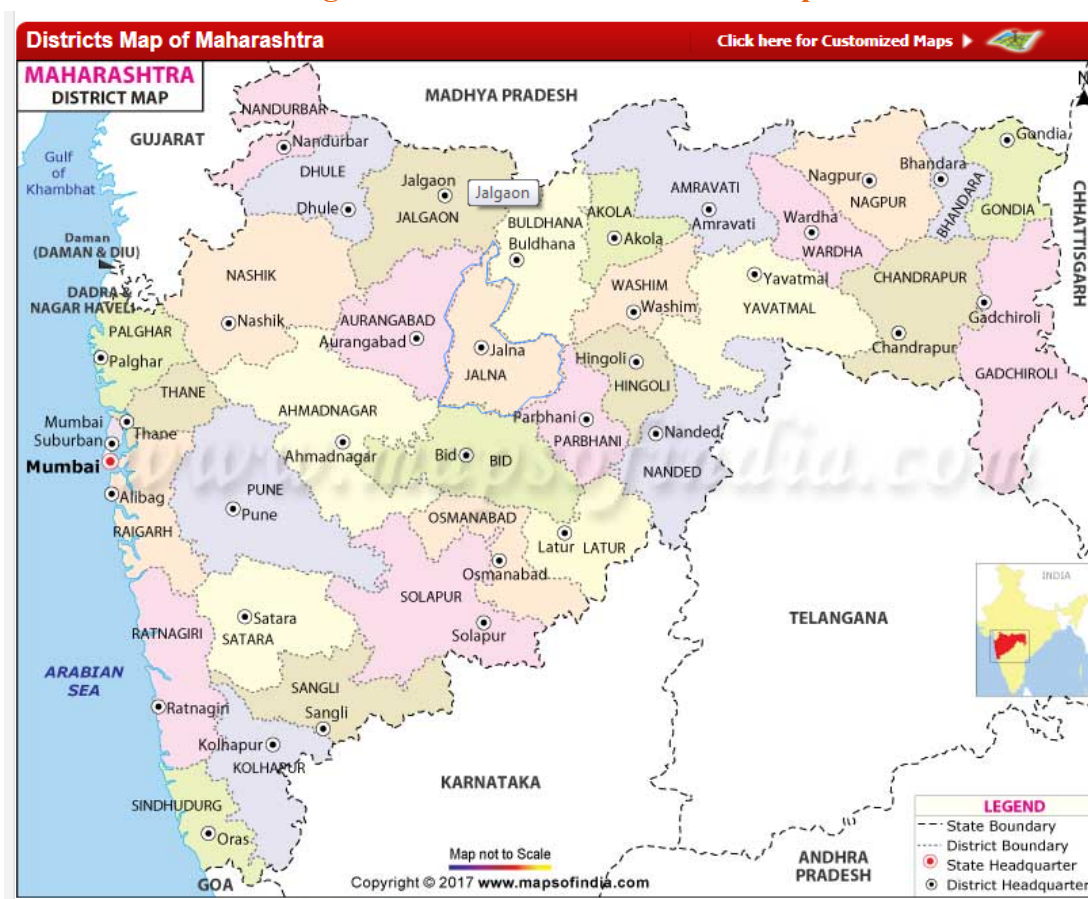
The state enjoys a tropical monsoon climate. The hot scorching summer from March onwards is followed by the monsoon in early June. The rich green cover of the monsoon season persists during the mild winter that follows through an unpleasant October transition. Maharashtra is the second largest state in India in terms of population and has geographical area about 3.08 lakh sq. km. As per Population Census-2011, the population of the State is 11.24 crore which is 9.3 percent of the total population of India and is highly urbanized with 45.2 percent people residing in urban areas. Mumbai, the capital of Maharashtra and the financial capital of India, houses the headquarters of most of the major corporate & financial institutions.

The state has 36 districts, which are divided into six revenue divisions viz. Konkan, Pune, Nashik, Aurangabad, Amravati, and Nagpur. Well-developed infrastructure, abundant natural resources, connectivity to all major areas, skilled manpower and quality education make Maharashtra an ideal destination for setting up of new industries. The State has focused on the development of infrastructure & smart cities.

Agriculture is a major occupation of the people in Maharashtra. Both food and cash crops are grown in the state. Maharashtra is not just a geographical expression, but an entity built on the collective efforts of its people. Natural as well as cultural diversities have helped in the development of a unique Marathi culture. It has its own spiritual dimension and traditionally known as Land of Saints. Varied customs and traditions co-exist peacefully in Maharashtra. The state is well known throughout the country for its rich music and dances. Lavnis, Bharuds, Povadas, and Gondhals are the major forms of folk music in the State and represent the best that the Maharashtrian society has contributed in the field of music. Maharashtra also has a very good theatre tradition. Maharashtra celebrates all major religious festivals from around the world in a peaceful and harmonious manner. As such the State has played a significant role in the social and political sphere of the nation.

Hinduism is majority religion in the state of Maharashtra with 79.83 % followers. Islam is the second most popular religion in the state with approximately 11.54 % following it. In Maharashtra, Christianity is followed by 0.96 %, Jainism by 1.25 %, Sikhism by 0.20 % and Buddhism by 5.81 %. Around 0.16% stated 'Other Religion', approximately 0.25 % stated 'No Particular Religion'. An overview of the state is presented below in Table 3-1.

Figure 3-1: Maharashtra District Map



Source: Maps of India, 2018

Table 3-1: An Overview of Maharashtra

| Description                             | Census 2011  |
|---|--------------|
| Estimated Population                    | 11.24 Crores |
| Actual Population                       | 112,374,333  |
| Population Growth                       | 15.99%       |
| Area km <sup>2</sup>                    | 307,713      |
| Density/km <sup>2</sup>                 | 365          |
| Male                                    | 58,243,056   |
| Female                                  | 54,131,277   |
| Sex Ratio                               | 929          |
| SC population (%)                       | 11.8         |
| ST population (%)                       | 9.4          |
| Percentage of State Population in India | 21.16%       |
| Literacy                                | 82.34%       |
| Male Literacy                           | 88.38%       |
| Female Literacy                         | 75.87%       |
| Total Literate                          | 81,554,290   |
| Male Literate                           | 45,257,584   |
| Female Literate                         | 36,296,706   |
| Rural population (%)                    | 45.22%       |
| Urban population (%)                    | 54.78%       |

Source: Census 2011



Maharashtra is also known to have the largest contribution in terms of output of industrial products to the tune of 15% and more than 40% of the revenue of the country is generated here. About 64.14% of state's population is involved in agriculture and related activities. Industry makes for 46% of contribution to GSDP. Various important industries in Maharashtra comprise of electrical, chemical, non-electrical, related products and machinery, petroleum and related products, textiles, metal products, pharmaceuticals, jewelry, machine tools, engineering goods, plastic items and iron and steel castings. Food products from the state in large quantities include grapes, mangoes, oranges, bananas, rice, wheat, bajra, rice, pulses, and jowar. Those products under cash crops category are cotton, groundnut, turmeric, sugarcane, and tobacco. The total area under irrigation is about 33,500 sq. km.

Gross Domestic Product or GDP in gross figures were about 224.12 billion dollars for the state of Maharashtra in 2011. Debt of the state stands at around 209,000 crores, which amounts of GDP's 17%. In 2012, the state had given a surplus in revenue of about 152.49 crores in surplus, where the spending amounted to 136,559.21 crores in rupees while the revenue in total was 136,711.70 crores in rupees. The state has the credit of having the highest urbanization at 42% of its entire population.

### **3.2.1.2 Project Influence Area – Thane, Palghar & Mumbai Sub Urban District**

Thane District is a district in the Indian state of Maharashtra in Konkan Division. At the 2011 Census it was the most populated district in the nation, with 11,060,148 inhabitants; however, in August 2014 the district was split into two with the creation of a new Palghar district, leaving the reduced Thane district with a 2011 Census population of 8,070,032. The headquarters of the district is the city of Thane. Other major cities in the district are Navi Mumbai, Kalyan-Dombivli, Mira-Bhayander, Bhiwandi, Ulhasnagar, Ambarnath, Badlapur, Murbad, and Shahapur. This is the most industrialized district in India. The district is situated between 18°42' and 20°20' north latitudes and 72°45' and 73°48' east longitudes. The revised area of the district is 4,214 km<sup>2</sup>. The district is bounded by Nashik district to the north-east, Pune and Ahmednagar districts to the east, and by Palghar district to the north. The Arabian Sea forms the western boundary, while it is bounded by Mumbai City District and Mumbai Suburban District to the southwest and Raigad District to the south. The district had a population density of 1,157 inhabitants per square kilometer. Its population growth rate over the decade 2001-2011 was 35.94%. It had a sex ratio of 880 females for every 1000 males, and a literacy rate of 86.18%. The economy of Thane district is primarily dependent on non-agriculture sector. 82.9 percent are engaged in household industry workers and other workers. The district is famous for its Chickoo and lychee plantations, mainly from Dahanu Tahsil. The history of Thane and many important old trade centres in the district such as Sopara, Kalyan and Vasai, shows that from before the Christian era the creeks, forests, and hills of the district were traversed by important trade-routes passing through the important ghats of Sahyadris such as Thal Pass, Malsej Pass, Nana Pass, Bor Pass, Shirghat Pass, etc. But the condition of transport and Communications upto the middle of the 19th century was far from satisfactory. By the end of the last century navigation through coastal sea and creeks was much more important than inland transport, and was mainly through the Vasai, Dahanu, and Thane creeks, and Ulhas and Vaitarna rivers. The district was also served by the first railway route in India, which was opened for traffic from Mumbai to Thane in 1853. This railway route was the first route not only in India but also in the East. The opening of railway and communication in the district ushered in a process of

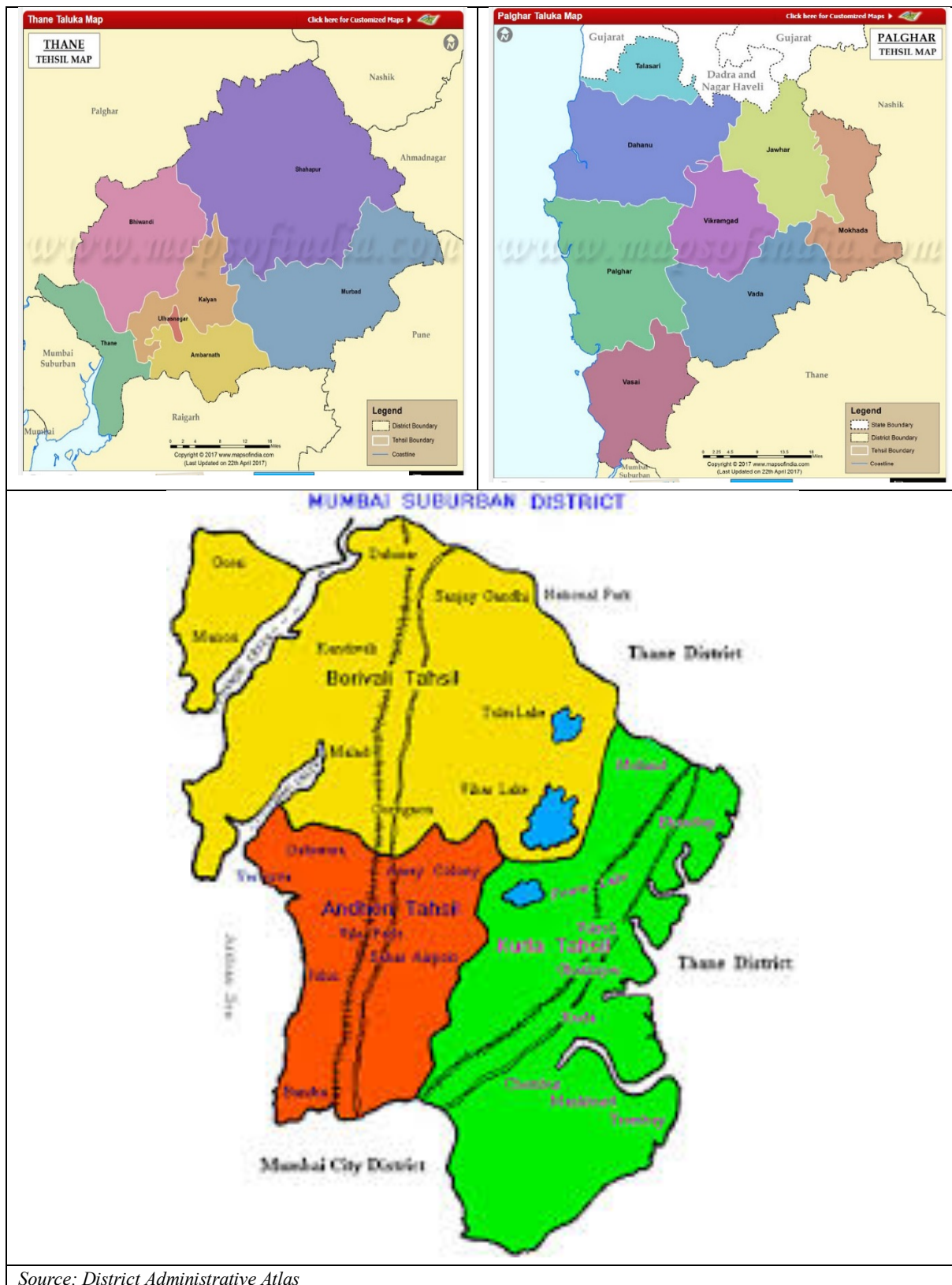
economic change. Since the beginning of the 20th century considerable improvement has been made in transport by roads and railways and in communications by post, telegraphs, telephones and wireless networks.

Palghar District is a district in the state of Maharashtra in Konkan Division. On 1 August 2014, the Maharashtra State government announced the formation of the 36th district of Maharashtra, when a new Palghar District was carved out of the old Thane district. Palghar District starts from Dahanu at the north and ends at Naigaon. It comprises the talukas of Palghar, Vada, Vikramgad, Jawhar, Mokhada, Dahanu, Talasari and Vasai-Virar. At the 2011 Census, the talukas now comprising the district had a population of 2,990,116. Palghar has an urban population of 1,435,210, that is 48% of the total population is living in Urbanized Area. The district is bounded by Thane and Nashik Districts on the east and north-east and by Valsad District of Gujarat state and Union Territory of Dadra and Nagar Haveli on the north. The Arabian Sea forms the western boundary, while Vasai-Virar is part of Mumbai Metropolitan Region. Palghar has India's first atomic power plant located at Tarapur. The industrial town of Boisar is also home to one of Maharashtra's largest industrial areas at Tarapur MIDC. Maharashtra's largest fishing port is Satpati; Dahanu, Arnala, Vasai, and Datiware are also major fishing ports. Dahanu is best known for their chickoo production in the whole of India. A special Chickoo festival is held every year at Bordi beach in Dahanu.

Mumbai Suburban District is a district of Maharashtra in Konkan Division. Its headquarters is in Bandra. It consists of three administrative subdivisions: Kurla, Andheri, and Borivali. The district along with Mumbai City district and other suburban communities make up the metropolis of Mumbai on Salsette Island. The district occupies an area of 446 km<sup>2</sup>. This is the second smallest district of Maharashtra, and it administratively comes under Konkan Division. The jurisdiction of Mumbai Suburban District is from Bandra to Dahisar, from Kurla (Chuna Bhatti) to Mulund and from Kurla up to Trombay Creek. Mumbai Suburban District is one of the largest districts in the country by population. The current population is 9,332,481, according to the 2011 census, making it the fifth most populous district in India (out of 672). The Mithi River is the main river in the district. According to the 2011 census, Mumbai Suburban district has a population of 9,332,481. This gives it a ranking of 5th in India (out of a total of 640). The district has a population density of 25,291.28 inhabitants per square kilometer (65,504.1/sq mi). Its population growth rate over the decade 2001-2011 was 8.01%. Mumbai Suburban has a sex ratio of 857 females for every 1000 males, and a literacy rate of 90.9%.

Summary of project affected districts in Maharashtra is given in Table 3-2.

Figure 3-2: Map of Thane, Palghar, and Mumbai Suburban



Source: District Administrative Atlas

**Table 3-2: Project affected districts in Maharashtra at a Glance**

| Indicators   |                         | Thane     | Palghar   | Mumbai Sub |
|--|-------------------------|-----------|-----------|------------|
| Actual Population  |                         | 8,070,032 | 2,990,116 | 9,356,962  |
| Male   |                         | 4,319,299 | 1,545,779 | 5,031,323  |
| Female   |                         | 3,750,733 | 1,444,337 | 4,325,639  |
| Population Growth  |                         | 36.01%    | 36.01%    | 8.29%      |
| Area Sq. Km  |                         | 9,558     | 5,344     | 446        |
| Density/km2  |                         | 1,157     | 560       | 20,980     |
| Proportion to Maharashtra Population                             |                         | 7.18%     | 7.18%     | 8.33%      |
| Sex Ratio (Per 1000)   |                         | 886       | 934       | 860        |
| Child Sex Ratio (0-6 Age)  |                         | 913       | 950       | 913        |
| Literacy (%) in total population above 6 years                   |                         | 87.24     | 86.50     | 89.91      |
| Male Literacy (%) in the total male population above 6 years     |                         | 55.74     | 51.76     | 92.92      |
| Female Literacy (%) in the total female population above 6 years |                         | 44.26     | 48.24     | 86.37      |
| Total Child Population (0-6 Age)                                 |                         | 923,541   | 403,605   | 930,884    |
| Literates  |                         | 6,243,386 | 1,992,775 | 7,575,485  |
| Male Literates   |                         | 3,474,840 | 1,116,556 | 4,223,029  |
| Female Literates   |                         | 2,559,746 | 876,219   | 3,352,456  |
| Rural population (%)   |                         | 13.10 %   | 47.78     | 00         |
| Urban population (%)   |                         | 86.90 %   | 52.22     | 100        |
| Work Force Participation Rate (WFR)                              |                         | 44.54     | 43.81     | 39.92%     |
| WPR (Male) - %   |                         | 78.20     | 66.73     | 78.83      |
| WPR (Female) - %   |                         | 21.80     | 33.27     | 21.17      |
| Main Workers   |                         | 89.92     | 81.57     | 94.13      |
| Main workers (Male) - %  |                         | 80.49     | 70.74     | 79.96      |
| Main workers (Female) - %  |                         | 19.51     | 29.26     | 20.04      |
| Main Workers (%)   | Cultivator - %          | 3.68      | 15.68     | 0.30       |
|  | Agricultural Labour - % | 2.95      | 17.67     | 0.50       |
|  | Household Worker- %     | 2.45      | 2.64      | 2.98       |
|  | Others - %              | 90.92     | 64.00     | 96.22      |
| Marginal workers   |                         | 10.08     | 18.43     | 5.87       |
| Marginal workers (Male) - %                                      |                         | 57.79     | 48.97     | 60.63      |
| Marginal workers (Female) - %                                    |                         | 42.21     | 51.03     | 39.37      |
| Marginal Workers- %  | Cultivator - %          | 10.40     | 18.10     | 2.60       |
|  | Agricultural Labour - % | 12.93     | 42.79     | 1.42       |
|  | Household Worker- %     | 5.27      | 3.84      | 6.40       |
|  | Others - %              | 71.40     | 35.27     | 89.59      |
| Non-Workers - %  |                         | 68.39     | 56.19     | 60.08      |
| Male - %   |                         | 37.45     | 39.98     | 37.12      |
| Female - %   |                         | 62.55     | 60.02     | 68.88      |

Source: Census 2011

### 3.2.1.3 Socio-Economic Profile of Direct Impact Zone - Maharashtra

The MA-HSR alignment passes through the boundaries of 108 census villages in Maharashtra. The following sections provide brief information about the villages and towns of Thane and Palghar district as per census 2011. Summary of relevant data is presented in Table 3-3.

**Table 3-3: Summary of Villages & Towns – Maharashtra MA-HSR alignment**

| Description  | Thane    |        | Palghar  |           |
|--|----------|--------|----------|-----------|
|  | Villages | Town   | Villages | Town      |
| Population   | 81,227   | 22,161 | 168,759  | 1,230,140 |
| Male (%)   | 55.26    | 56.44  | 84,079   | 652,209   |
| Female (%)   | 44.74    | 43.56  | 84,680   | 577,931   |
| Gender Ratio (female 1000 male)                      | 809      | 771    | 1007     | 886       |
| Child Sex Ratio                                      | 911      | 919    | 996      | 911       |
| Literacy Rate (excluding age group of 0-6)           | 82.75    | 87.66  | 62.78    | 88.55     |
| Male literates (%)                                   | 59.85    | 59.85  | 57.74    | 54.90     |
| Female literates (%)                                 | 40.15    | 40.15  | 42.26    | 45.10     |
| SC population (%)                                    | 6.00     | 4.02   | 1.51     | 4.20      |
| ST Population (%)                                    | 10.25    | 3.17   | 72.15    | 4.75      |
| Workers (%)  | 41.83    | 41.91  | 45.08    | 40.10     |
| Male workers (%)                                     | 78.63    | 86.34  | 60.67    | 75.85     |
| Female workers (%)                                   | 21.37    | 13.66  | 39.33    | 24.15     |
| Main workers (%)                                     | 85.66    | 91.95  | 69.96    | 90.83     |
| Workers engaged in cultivation to total workers (%)  | 11.53    | 2.02   | 24.78    | 1.55      |
| Workers engaged in agricultural to total workers (%) | 8.14     | 0.38   | 28.71    | 2.36      |
| Workers engaged in HH work to total workers (%)      | 2.64     | 1.31   | 2.32     | 2.80      |
| Workers engaged other work to total workers (%)      | 78.68    | 96.27  | 44.17    | 93.29     |
| Marginal workers (%)                                 | 14.33    | 8.04   | 30.04    | 9.17      |
| Workers engaged in cultivation to total workers (%)  | 14.01    | 3.48   | 20.34    | 4.64      |
| Workers engaged in agriculture to total workers (%)  | 10.46    | 1.20   | 47.78    | 5.53      |
| Workers engaged in HH work to total workers (%)      | 6.07     | 2.68   | 3.66     | 5.56      |
| Workers engaged other work to total workers (%)      | 59.58    | 92.64  | 28.21    | 84.28     |
| Non-Workers (%)                                      | 58.16    | 58.08  | 54.92    | 59.90     |
| Male (%)   | 34.45    | 34.87  | 40.91    | 37.74     |
| Female (%)   | 61.55    | 65.12  | 59.09    | 62.26     |

Source: Census 2011

As per Census 2011, the total population of all the villages and one town at Thane district are 81,227 and 22,161 respectively. In Palghar the total population of all the villages and one town are 168,759 and 1,230,140 respectively. The overall sex ratio is 809 in rural areas and 771 in urban areas in Thane and 1007 in rural areas and 886 in urban areas in Palghar district. The Schedule Tribe (ST) population constitutes 10.25% and 3.17% of the total population in rural and urban areas respectively in Thane district and 72.15% and 4.75% of the total population in rural and urban areas respectively in Palghar district. Majority of areas under Palghar district are notified schedule V areas. (Details of the Scheduled areas coming under the alignment have been discussed in the IPP report).

Literacy is one of the important indicators of measurement of development. Understanding of literacy level of likely project affected persons is important from a rehabilitation point of view. People likely to be affected are mostly native of these villages and therefore socio-economic conditions of villagers are a reflection of likely project affected persons. From the data provided in Table 3.3, it may be seen that overall literacy rate (excluding the population of 0-6 years) is 82.75% in rural areas and 87.66% in urban areas in Thane district and 62.78% in rural areas and 88.55% in the urban areas Palghar district.

Percentage of workers engaged in different activities indicates the nature of employment available in the area. In Thane district as per Census 2011, 41.83% of the total population are workers which comprise 85.66% main workers and 14.33% marginal workers in rural areas. Non-workers constitute about 58.16% of the total population indicating moderate dependency ratio. In urban areas, however, workers comprise 41.91% of the total population i.e. less than rural areas but main workers constitute 79.25% of the total workers. In rural areas, the majority of workers (91.95% main workers and 8.04% marginal workers) are engaged in agricultural activities (71.38%). In urban areas, a large majority of workers are engaged in other work activities (96.27%). High literacy rate, engagement in non-agricultural work and high sex ratio are indicators of development status. Overall the development status of the project area is high.

In Palghar district as per Census 2011, 45.08% of the total population are workers which comprise 69.96% main workers and 30.04% marginal workers in rural areas. Non-workers constitute about 54.92% of the total population indicating moderate dependency ratio. In urban areas, however, workers comprise 40.10% of the total population i.e. less than rural areas but main workers constitute 90.83% of the total workers. In rural areas, the majority of workers are engaged in other work activities (44.17%). In urban areas, a large majority of workers are engaged in other work activities (93.29%). High literacy rate, engagement in non-agricultural work and high sex ratio are indicators of development status. Overall the development status of the project area is high.

### **Livelihood source**

As per census survey report, 2011 the majority of workers are engaged in non-agricultural activities. There are 1548 large and medium scale industries in the district. It provides employment to 214,430 persons. The main products of these industries are drugs, textiles, adhesives, plastics, rubber, steel, pharmaceuticals, engineering, fertilizers, electronics, chemicals, iron & steel etc. Availability of electricity has been one of the main causes for the rapid industrial development of the district. The district gets a bulk supply of electricity from the Koyana Hydro-Electric Project and from M/s Tata Hydro Electric Company in Raigad district. The Maharashtra State Electricity Board is the largest Power Distribution Agency in the district. The Tarapur Atomic Power Station which has ushered an era of utilization of atomic energy for electricity generation is also situated in the district. Manufacture of machinery, machine tools and parts except electrical machinery taken together with the iron and steel basic industry and metal products are the most important and the biggest group of industries in the district and includes manufacture of prime movers, boilers, refrigerators, machine tools,

computing and accounting machinery, industrial machinery for food and textile industries, machinery for chemicals, paper, cement etc. It provides machine tools and machinery to other industries in the country. The raw materials required by these factories include pig iron, coal, coke, steel plates, sheet metal, ferrous materials, stainless steel wire rods, cast iron, M.S. steel, bars and wires, brass, tin plates, steel, etc. Basic industrial chemicals including fertilizers, vegetable and animal oils and fats, manufacture of paints, varnishes and lacquers and manufacture of miscellaneous chemical products which can be classified as chemicals and chemical products is an important industry in Thane district.

Fisheries constitute an important extractive industry in Thane district. It is an important economic activity and a source of livelihood to a large number of people in the district. It is carried out in the sea as well as in creeks and estuaries which have formed the western border of the district. Marine fishery predominates over inland fishery in the district and provides employment to about three fourth of the persons engaged in the fishing industry. The commercially important varieties of fish available in large quantities are Saranga (White Pomfret), Halwa (Black Pomfret) Durha, Dadha, Rawas, Ghol, Koth, Bombil (Bombay Duck), Kolambi, Kolim (Karaandi), Wam etc. in the district.

There are cotton as well as non-cotton power looms industries in the district. They are mainly situated at Bhiwandi, Thane, and Kalyan. For centuries, Bhiwandi has been known for its handicrafts. The deteriorating conditions of the handloom industry and the rapid industrialization in the country compelled handloom weavers to replace their handlooms with power looms. Proximity to Mumbai, the main all India market for raw material yarn, accessories, stores as also for cloth, offered special advantages to the power looms in Bhiwandi. The raw material required by these industries are cotton yarn, art silk, Indian wool, rayon yarn, nylon, polyester yarn, viscose yarn, synthetic yarn, dye chemicals, bleaching chemicals, caustic soda, soda ash, starches etc.

There are grain, mill products, bakery products, cocoa, chocolate and sugar confectionery, salt, ice, slaughtering, preparation and preservation of meat, dairy products, canning and preservation of fruits and vegetables, canning, preserving and processing of fish etc. are developed in the district.

There are plywood and veneer, wooden boxes, barrels, bamboo, cane baskets, bobbins, industrial fixtures, cork & cork products are manufactured in Thane district. The raw materials required for these units are indigenously available. Wood and splints are brought from Mysore and Kerala, cardboard from Gujarat and other raw materials from Mumbai. The availability of timber from the neighboring areas was one of the most important reasons for the localization of the industry in the district.

The important machines required for the production consist of unit processing machines like saws, peeling machines, box making machines, box closing machines, stick making machines, box filling and labeling machines, friction and packing machines and other equipment like dryer, polishing drums, sieves etc. The bulk of the original machines were imported but the latest additions are indigenously fabricated by the various firms.

Khadi & Village Industries play an important role in providing employment opportunities and improving the Standard of living of a Small Section of people in the district. Besides providing, employment opportunities in rural areas with a small investment, especially for the weaker sections of the society, they create consumer goods by adopting simple techniques and using raw materials which are locally available. In Thane district, the Khadi & Village Industries Board has organized various industries such as processing of cereals and pulses, ghani oil, village leather, pottery, carpentry and blacksmith, cane and bamboo, soap making, gohar (methane) gas and lime manufacturing etc. The sources of livelihood are shown in Table 3-4.

**Table 3-4: Livelihood sources - Maharashtra**

| State                                     | Agricultural Commodities  |
|---|---|
| Maharashtra (Thane, Palghar & Mumbai Sub) | Banana, Cereals, Coconut, Fruit, Jowar, Paddy, Rice, Tendu Leaves, Tuar, Toddy, vegetables, Chikoo, Urad, Betal leaves, Mango   |
|   | Manufacturers Commodities   |
| Maharashtra (Thane, Palghar & Mumbai Sub) | Bamboo Cane product, Bricks, Broom, Cloth, Die, Edible oil, Milk product, Pencil, Plywood, Rice mill, Rubber cable, salt, steel pipe, wooden furniture, Tiles, plastic product, Honey |
|   | Handicrafts Commodities   |
| Maharashtra (Thane, Palghar & Mumbai Sub) | Bamboo basket   |

Source: Village Amenities Data 2011

Land use pattern: In the study region, more than 31 percent population is engaged in agriculture. Hence, it is important to see the land use pattern of the district. The area under forest is 40.58 percent, area not available for cultivation is 6.30 percent and fallow land is 6.74 percent, net sowed land 44.40 percent and cultivable waste 1.98 percent. This land use pattern shows that number of peoples are engaged in primary activates. A statement showing the land holdings size in the study area villages is provided in Table 3-5.

**Table 3-5: Land Holding Size in Project affected district**

| SN | Land Utilization                   | Area (in hectare) | %     |
|----|------------------------------------|-------------------|-------|
| 1  | Area under Forest                  | 351,229           | 40.58 |
| 2  | Area not available for cultivation | 58,597            | 6.45  |
| 3  | Fallow land                        | 33,795            | 3.72  |
| 4  | Net sown area                      | 407,393           | 44.87 |
| 5  | Cultivable Waste                   | 454,299           | 50.03 |

Source: District Statistical Abstract, 2014.



Irrigation: Out of total cultivable area (4,07,393 hectare) only 10,284-hectare (3.33 percent) area is under irrigation. Surya Major Irrigation Project has two contour canals LBC and RBC of 47 km and 28.51 km length respectively takes off from the Kavadas pickup weir. The project benefits and area of 14,696 Irrigable Command Area (ICA), Culturable Command Area (CCA) is 20,155 hectares and the ultimate irrigation potential of the project is 27,188 hectares. Dahanu and Palghar tehsil has a highest area under irrigated land 4,060 and 2,599 hectares of irrigation from canal irrigation in this region. However, the north-east part of the study region including Talasari and Mokhada tehsils have less than 5 percent of the irrigated land as this is located in hilly areas.

### **Social Infrastructure**

Infrastructural facilities are the main source of Industrial Development of the district. Thane district is at the third rank of industrially developed in the State. More than 50% economic and social development of the district done on its Industrialization progress. The MIDC has developed 10 Industrial Estates in the district. The international market of Mumbai and its port, transportation facilities and subsidy and facilities provided by State Government, due to all these facilities, the district is very much developed industrially. For electricity generation, the first Atomic Energy Project of the Country started at Tarapur in the Palghar taluka of the district.

As per village amenities data 2011, there are 4,133 schools in the study area villages. All the villages have at least one primary school. Normally for higher education, students go to bigger towns and cities like Thane, Palghar. Health amenities are not adequate in the study area villages. There are 17 Allopathic Hospitals, 25 Nursing Homes, 100 Maternity and Child Welfare Centres in the project districts. Tap water, handpumps are the major sources of drinking water. Transportation facilities are adequate in all study area villages.

The total railway track length in the district is 345.73 km spread in Western and Central part of the district. The Western Railway passes through Vasai, Palghar and Dahanu Tehsils of the district and Central railway passes through Thane, Kalyan, Ulhasnagar and Shahpur tehsils of the district. Continuous local train facilities available in the district. Due to railway facilities in the district, it becomes very easier to get skilled workers from the nearby area and to supply finished goods in Mumbai market.

The district is well connected by roads with other major cities like Mumbai, Pune, Nasik, Raigad and most of the districts of the State. Air Transport facilities have not been developed in the district so far. But proximity to Mumbai has made the domestic airport and International Airport easily accessible to Thane district.

**Table 3-6: Social infrastructure in the Maharashtra Study Area Villages**

| District                       | Educational Institution  | Health Facilities   | Post Office | Drinking water supply                  | Communication | Transportation            | Approach Road                             | Power Supply   |
|--------------------------------|--|---|-------------|--|---------------|---------------------------|---|--|
| Thane, Palghar, and Mumbai Sub | Govt Pre Primary-184<br>Govt Primary-1287<br>Pvt Primary-611<br>Govt Middle-485<br>Pvt Middle-5<br>Govt Sec-688<br>Pvt Sec-486<br>Govt S Sec-189<br>Pvt S Sec-139<br>Govt College-22<br>Pvt College-37 | PHC-1<br>PHSC-13<br>MCW-100<br>Vet Hospital-3<br>Allopathic Hospital-17<br>Dispensary-196<br>Family Welfare-25<br>Nursing Home-25<br>Medicine Shop-1406 | Yes         | Tap Water, Well, hand pump, Tube well, | Available     | Bus, Train & taxi service | Approach paved road,<br>Approach mud road | Electricity for domestic,<br>Electricity for all purpose |

Source: Village Amenities Data 2011 of various districts

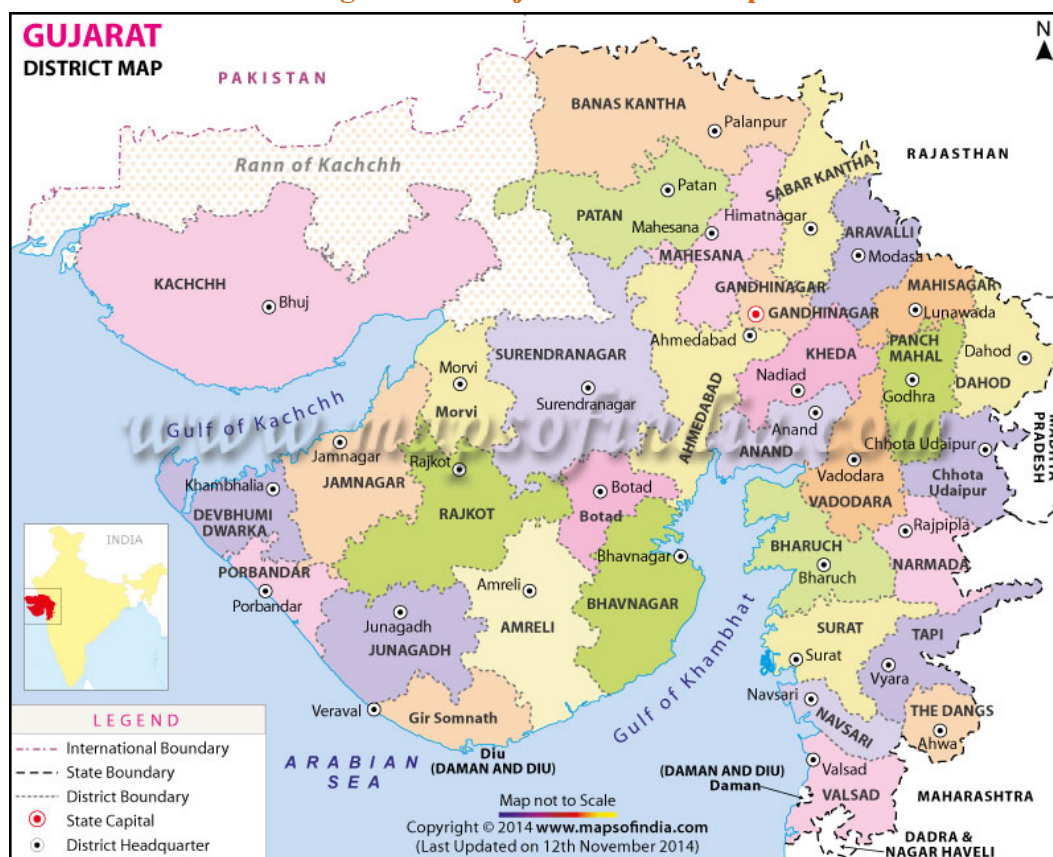
PHC-Primary Health center, PHSC-Primary Health Sub Centre, MCW- Maternity and Child Welfare Centre

### 3.2.2 Overview of Gujarat

Gujarat is located on the western coast of India. It has an area of 196,024 km<sup>2</sup> with the longest coastline of 1,600 km, most of which lie on the Kathiawar peninsula, and a population more than 60 million. The state is bordered by Rajasthan to the north, Maharashtra to the south, Madhya Pradesh to the east, and the Arabian Sea and the Pakistani province of Sindh to the west. Its capital city is Gandhinagar, while its largest city is Ahmedabad. The state currently has 33 administrative districts. As per Census, the population of India has reached 1.21 billion (121 crores) in 2011 which is an increase of 17% from the earlier figure of 103 crores of 2001. Although population growth rate has decreased actual population continues to rise. Gujarat population data shows that it has a total population of 6.03 crore (60.3 million) which is approximately 4.99% of total Indian population. Literacy rate in Gujarat has seen an upward trend and is 79.31% as per 2011 census. Of that, male literacy stands at 87.23% while female literacy is at 70.73%. The urban population of the state is 42.6%, which used to be at 37.4% in 2001. Rural population in the state in 2011 fell to 57.4% from 62.6% in 2001. Ahmedabad is the most populated district in the State, with 7.20 million people, up 11.94% from 2001, followed by Surat with 6.07 million people, up 10.07%, as per Gujarat's Directorate of census operations.

Hinduism is majority religion in the state of Gujarat with 88.57 % followers. Islam is the second most popular religion in the state with approximately 9.67 % following it. In Gujarat, Christianity is followed by 0.52%, Jainism by 0.96 %, Sikhism by 0.10 % and Buddhism by 0.10 %. Around 0.03% stated 'Other Religion', approximately 0.10 % stated 'No Particular Religion'. An overview of the state is presented below in Table 3-7.

Figure 3-3: Gujarat District Map



Source: Maps of India

**Table 3-7: An Overview of Gujarat**

| Indicators                         | Census 2011 |
|------------------------------------|-------------|
| Estimated Population               | 6.03 Crore  |
| Actual Population                  | 60,383,628  |
| Population Growth                  | 19.17%      |
| Area km <sup>2</sup>               | 196,024     |
| Density/km <sup>2</sup>            | 308         |
| Male                               | 31,482,282  |
| Female                             | 28,901,346  |
| Sex Ratio                          | 918         |
| SC population (%)                  | 6.7         |
| ST population (%)                  | 14.8        |
| Percentage of the total population | 4.99%       |
| Literacy                           | 79.31       |
| Male Literacy                      | 87.23       |
| Female Literacy                    | 70.73       |
| Total Literate                     | 41,948,677  |
| Male Literate                      | 23,995,500  |
| Female Literate                    | 17,953,177  |
| Rural population (%)               | 57.40%      |
| Urban population (%)               | 42.60%      |

Source: Census 2011

The economy of Gujarat has significant agricultural as well as industrial production within India. Major agricultural produce of the state includes cotton, groundnuts (peanuts), dates, sugar cane, milk & milk products. Industrial products include cement and petrol. Gujarat recorded the lowest unemployment rate in India in 2015, with 1.2% of the labour force being unemployed. Gujarat is the main producer of tobacco, cotton, and groundnuts in India. Other major crops produced are rice, wheat, jowar, bajra, maize, tur, and gram. Gujarat has an agricultural economy; the total crop area amounts to more than one-half of the total land area. Animal husbandry and dairying have played a vital role in the rural economy of Gujarat. Dairy farming, primarily concerned with milk production, functions on a cooperative basis and has more than a million members. Gujarat is the largest processor of milk in India. Amul milk Co-operative Federation products are well known all over India and is Asia's biggest dairy.

### 3.2.2.1 Project Influence Area - Gujarat

The project influence area constitutes of 8 districts in Gujarat namely Ahmedabad, Kheda, Anand, Vadodara, Bharuch, Surat, Navsari, and Valsad. These are the districts through with the alignment passes through.

**Ahmedabad District:** In 2011 census, Ahmedabad had a population of 7,214,225 of which male and female were 3,788,051 and 3,426,174 respectively. In 2001 census, Ahmedabad had

a population of 5,816,519 of which males were 3,074,556 and remaining 2,741,963 were females. Ahmedabad district population constituted 11.94 percent of total Gujarat population. As per census 2011 data, the density of Ahmedabad district is 890 people per sq. km. Ahmedabad district administers 8,107 sq. km area. The average literacy rate of Ahmedabad in 2011 were 85.31 compared to 79.50 of 2001. Male and female literacy were 90.74 and 79.35 respectively. Total literate in Ahmedabad district were 5,435,760 of which male and female were 3,025,463 and 2,410,297 respectively. Sex Ratio in Ahmedabad stood at 904 per 1000 male lower than the national average of 940 as per 2011 census.

**Kheda District:** In 2011 census, Kheda had a population of 2,299,885 of which male and female were 1,185,727 and 1,114,158 respectively. In 2001 census, Kheda had a population of 2,024,216 of which males were 1,052,823 and remaining 971,393 were females. Kheda District population constituted 3.81 percent of total Gujarat population. As per census 2011 data, the density of Kheda district is 582 people per sq. km. Kheda district administers 3,953 sq. km area. The average literacy rate of Kheda in 2011 were 82.65 compared to 71.96 of 2001. Male and female literacy were 91.31 and 73.49 respectively. Total literate in Kheda District were 1,660,243 of which male and female were 942,480 and 717,763 respectively. Sex Ratio in Kheda stood at 940 per 1000 male same as the national average of 940 as 2011 census.

**Anand District:** In 2011 census, Anand had a population of 2,092,745 of which male and female were 1,087,224 and 1,005,521 respectively. In 2001 census, Anand had a population of 1,856,872 of which males were 972,000 and remaining 884,872 were females. Anand District population constituted 3.46 percent of total Gujarat population. As per census 2011 data, the density of Anand district is 653 people per sq. km. Anand district administers 3,204 sq. km area. The average literacy rate of Anand in 2011 were 84.37 compared to 74.51 of 2001. Male and female literacy were 91.82 and 76.36 respectively. Total literate in Anand District were 1,551,253 of which male and female were 874,481 and 676,772 respectively. Sex Ratio in Anand stood at 925 per 1000 male lower than the national average of 940 as per 2011 census.

**Vadodara District:** In 2011 census, Vadodara had population of 4,165,626 of which male and female were 2,153,736 and 2,011,890 respectively. In 2001 census, Vadodara had a population of 3,641,802 of which males were 1,897,368 and remaining 1,744,434 were females. Vadodara District population constituted 6.89 percent of total Gujarat population. The density of Vadodara district for 2011 is 552 people per sq. km. Vadodara district administers 7,546 sq. km area. The average literacy rate of Vadodara in 2011 were 78.92 compared to 70.76 of 2001. Male and female literacy were 85.39 and 72.03 respectively. Total literate in Vadodara District were 2,893,080 of which male and female were 1,614,087 and 1,278,993 respectively. Sex Ratio in Vadodara stood at 934 per 1000 male lower than the national average of 940 as per 2011 census.

**Bharuch District:** In 2011 census, Bharuch had a population of 1,551,019 of which male and female were 805,707 and 745,312 respectively. In 2001 census, Bharuch had a population of 1,370,656 of which males were 713,676 and remaining 656,980 were females. Bharuch District population constituted 2.57 percent of total Gujarat population. The density of Bharuch district for 2011 is 238 people per sq. km. Bharuch district administers 6,509 sq. km area. The average literacy rate of Bharuch in 2011 were 81.51 compared to 74.41 of 2001. Male and female literacy were 87.45 and 75.09 respectively. Total literate in Bharuch District were 1,118,276 of

which male and female were 623,047 and 495,229 respectively. Sex Ratio in Bharuch stood at 925 per 1000 male lower than the national average of 940 as per 2011 census.

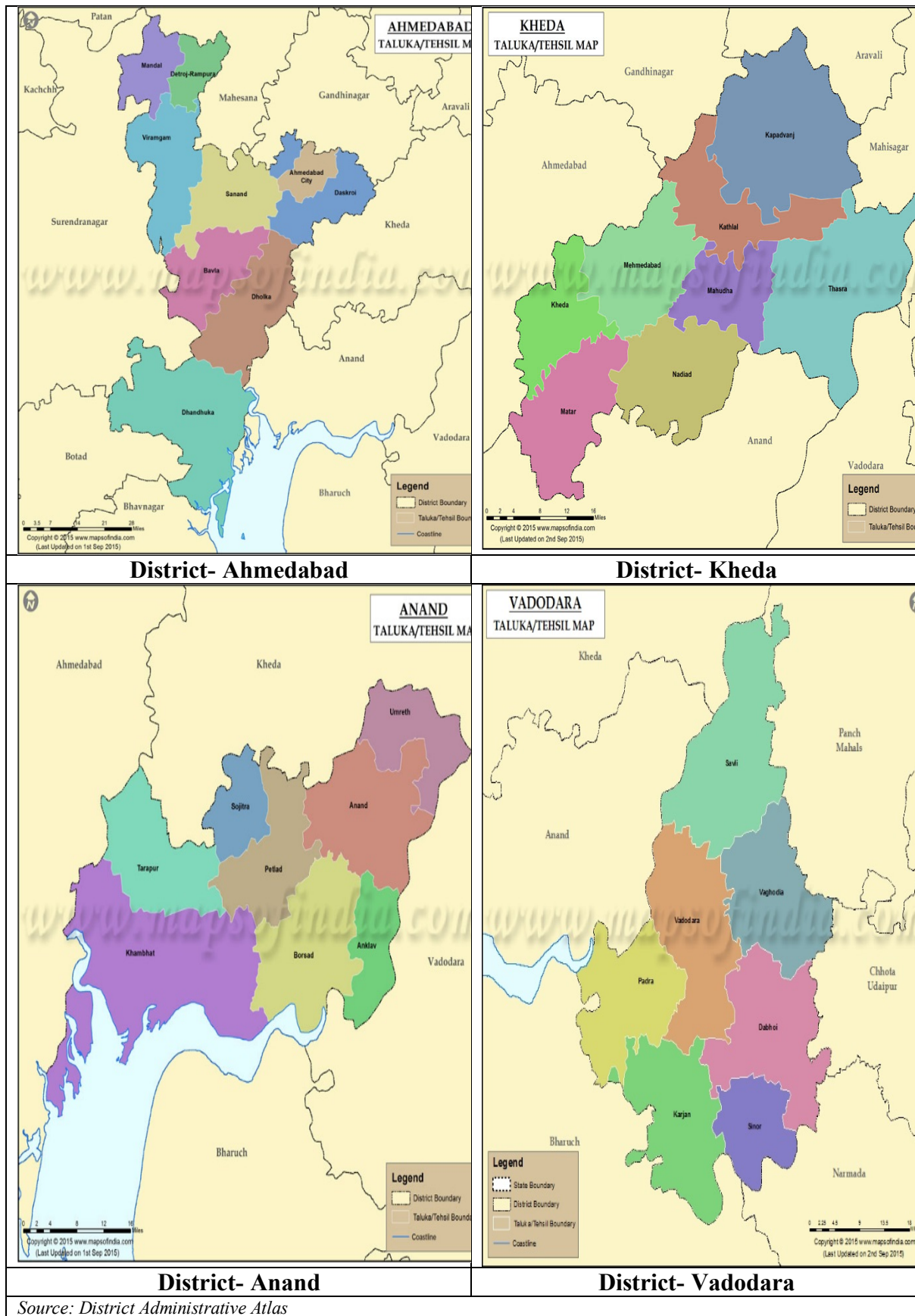
**Surat District:** In 2011 census, Surat had a population of 6,081,322 of which male and female were 3,402,224 and 2,679,098 respectively. In 2001 census, Surat had a population of 4,275,540 of which males were 2,362,072 and remaining 1,913,468 were females. Surat District population constituted 10.06 percent of total Gujarat population. The density of Surat district for 2011 is 1,337 people per sq. km. Surat district administers 4,549 sq. km area. The average literacy rate of Surat in 2011 were 85.53 compared to 77.62 of 2001. Male and female literacy were 89.56 and 80.37 respectively. Total literate in Surat District were 4,571,410 of which male and female were 2,687,468 and 1,883,942 respectively. Sex Ratio in Surat stood at 787 per 1000 male lower than the national average of 940 as per 2011 census.

**Navsari District:** In 2011 census, Navsari had a population of 1,329,672 of which male and female were 678,165 and 651,507 respectively. In 2001 census, Navsari had a population of 1,229,463 of which males were 628,988 and remaining 600,475 were females. Navsari District population constituted 2.20 percent of total Gujarat population. The density of Navsari district for 2011 is 592 people per sq. km. Navsari district administers 2,246 sq. km area. The average literacy rate of Navsari in 2011 were 83.88 compared to 75.83 of 2001. Male and female literacy were 88.75 and 78.83 respectively. Total literate in Navsari District were 1,001,909 of which male and female were 539,471 and 462,438 respectively. Sex Ratio in Navsari stood at 961 per 1000 male higher than the national average of 940 as per 2011 census.

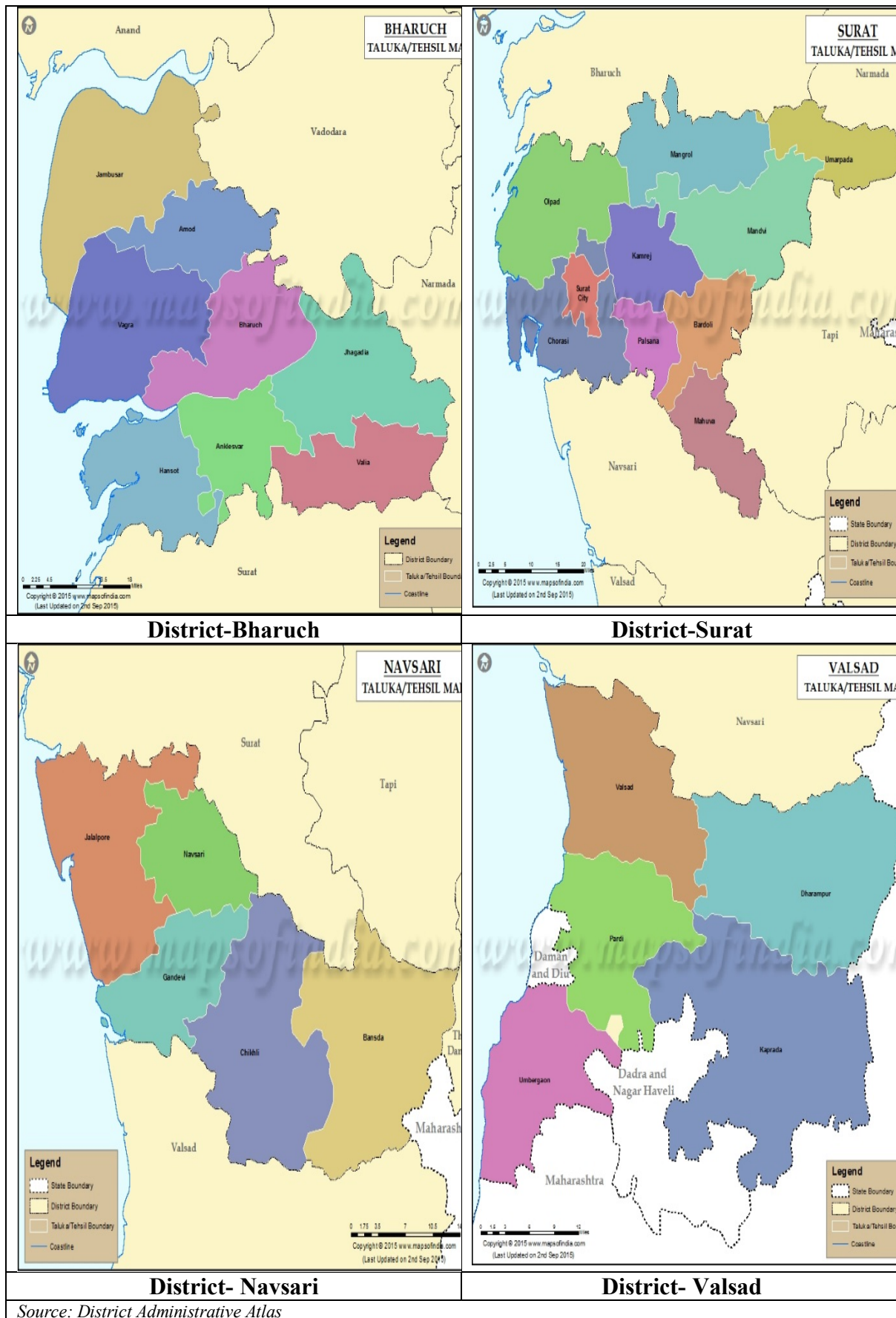
**Valsad District:** In 2011 census, Valsad had a population of 1,705,678 of which male and female were 887,222 and 818,456 respectively. In 2001 census, Valsad had a population of 1,410,553 of which males were 734,799 and remaining 675,754 were females. Valsad District population constituted 2.82 percent of total Gujarat population. The density of Valsad district for 2011 is 567 people per sq. km. Valsad district administers 3,008 sq. km area. The average literacy rate of Valsad in 2011 were 78.55 compared to 69.15 of 2001. Male and female literacy were 84.55 and 72.06 respectively. Total literate in Valsad District were 1,170,657 of which male and female were 655,528 and 515,129 respectively. Sex Ratio in Valsad stood at 922 per 1000 male lower than the national average of 940 as per 2011 census.

District wise summary in the project influence area is given in Table 3-8.

**Figure 3-4: Map of Thane, Palghar, and Mumbai Suburban**



Source: District Administrative Atlas



Source: District Administrative Atlas



Table 3-8: Project affected districts in Gujarat at a Glance

| Indicators                       | Consolidated | Ahmedabad | Kheda     | Anand     | Vadodara  | Bharuch   | Surat     | Navsari   | Valsad    |
|----------------------------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Actual Population                | 264,40,172   | 72,14,225 | 22,99,885 | 20,92,745 | 41,65,626 | 15,51,019 | 60,81,322 | 13,29,672 | 17,05,678 |
| Male                             | 139,88,056   | 37,88,051 | 11,85,727 | 10,87,224 | 21,53,736 | 8,05,707  | 34,02,224 | 6,78,165  | 8,87,222  |
| Female                           | 124,52,116   | 34,26,174 | 11,14,158 | 10,05,521 | 20,11,890 | 7,45,312  | 26,79,098 | 6,51,507  | 8,18,456  |
| Population Growth                | 18.70%       | 23.45%    | 13.62%    | 13.70%    | 14.38%    | 13.16%    | 42.24%    | 8.15%     | 20.92%    |
| Area Sq. Km                      | 39,122       | 8,107     | 3,953     | 3,204     | 7,546     | 6,509     | 4549      | 2,246     | 3,008     |
| Density/km <sup>2</sup>          | 675.84       | 890       | 582       | 653       | 552       | 238       | 1337      | 592       | 567       |
| Proportion to Gujarat Population | 36.17%       | 4.13%     | 3.81%     | 3.46%     | 6.89%     | 2.57      | 10.10%    | 1.14%     | 2.82%     |
| Sex Ratio (Per 1000)             | 890          | 904       | 940       | 925       | 934       | 925       | 787       | 961       | 922       |
| Child Sex Ratio (0-6 Age)        | 887.13       | 857       | 896       | 844       | 897       | 920       | 835       | 923       | 925       |
| Average Literacy                 | 82.59        | 85.31     | 82.65     | 84.36     | 78.92     | 81.51     | 85.53     | 83.88     | 78.55     |
| Male Literacy                    | 88.70        | 90.74     | 91.31     | 91.82     | 85.39     | 87.45     | 89.56     | 88.75     | 84.55     |
| Female Literacy                  | 75.95        | 79.35     | 73.49     | 76.36     | 72.03     | 75.09     | 80.37     | 78.83     | 72.06     |
| Total Child Population (0-6 Age) | 31,53,468    | 8,42,518  | 2,91,133  | 2,54,008  | 4,99,811  | 1,79,103  | 7,36,286  | 1,35,170  | 2,15,439  |
| Literates                        | 194,02,588   | 54,35,760 | 16,60,243 | 15,51,253 | 28,93,080 | 11,18,276 | 45,71,410 | 10,01,909 | 11,70,657 |
| Male Literates                   | 109,62,025   | 30,25,463 | 9,42,480  | 8,74,481  | 16,14,087 | 6,23,047  | 26,87,468 | 5,39,471  | 6,55,528  |
| Female Literates                 | 84,40,563    | 24,10,297 | 7,17,763  | 6,76,772  | 12,78,993 | 4,95,229  | 18,83,942 | 4,62,438  | 5,15,129  |
| Rural population (%)             | 53.92%       | 15.96%    | 77.23%    | 69.66%    | 50.41%    | 66.15%    | 20%       | 69.23%    | 62.74%    |
| Urban population (%)             | 46.08%       | 84.04%    | 22.77%    | 30.34%    | 49.59%    | 33.85%    | 80%       | 30.77%    | 37.26%    |
| Work Participation Rate (WPR)    | 39.79%       | 35.97%    | 37.49%    | 40.37%    | 33.99%    | 40.43%    | 41.99%    | 44.51%    | 43.57%    |
| WPR (Male) - %                   | 71.02%       | 81.99%    | 79.85%    | 57.72%    | 83.74%    | 74.77%    | 62.98%    | 68.92%    | 58.18%    |
| WPR (Female) - %                 | 21.92%       | 18.01%    | 20.15%    | 21.60%    | 16.25%    | 25.23%    | 15.33%    | 31.08%    | 27.74%    |
| <b>Main Workers</b>              | 79.64        | 89.88     | 85.12     | 81.68     | 93.11     | 83.96     | 39.55     | 86.17     | 77.68     |
| Main workers (Male) - %          | 72.88        | 85.99     | 87.04     | 82.63     | 85.41     | 80.5      | 61.02%    | 73.6      | 87.25     |
| Main workers (Female) - %        | 20.09        | 14.01     | 12.95     | 17.26     | 14.58     | 19.5      | 12.29%    | 26.4      | 55.9      |
| Main Workers (%)                 | 13.03        | 5.48      | 22.68     | 20.93     | 1.61      | 13.49     | 4.23%     | 19.27     | 20.74     |
|                                  | 21.70        | 8.21      | 40.01     | 38.2      | 2.72      | 37        | 11.42%    | 31.79     | 15.57     |
|                                  | 1.22         | 1.82      | 1.31      | 1.81      | 1         | 1.26      | 1.37%     | 1.04      | 1.48      |
|                                  | 51.67        | 84.48     | 35.98     | 39.06     | 94.65     | 48.25     | 82.98%    | 47.9      | 62.21     |

| Indicators                    | Consolidated | Ahmedabad | Kheda | Anand | Vadodara | Bharuch | Surat  | Navsari | Valsad |
|-------------------------------|--------------|-----------|-------|-------|----------|---------|--------|---------|--------|
| <b>Marginal workers</b>       | 12.25        | 10.12     | 14.87 | 18.32 | 6.88%    | 16.04   | 2.44   | 13.83   | 22.32  |
| Marginal workers (Male) - %   | 38.43        | 46.4      | 38.67 | 37.05 | 61.18    | 44.77   | 1.97%  | 39.72   | 39.65  |
| Marginal workers (Female) - % | 46.57        | 53.6      | 61.32 | 62.95 | 18.81    | 55.23   | 3.04%  | 60.28   | 60.35  |
| Marginal Workers- %           | 7.48         | 5.62      | 4.22  | 5.17  | 3.18     | 7.04    | 5.26%  | 17.78   | 16.78  |
|                               | 40.54        | 29.51     | 63.42 | 53.45 | 8.66     | 58.42   | 34.40% | 54.34   | 56.15  |
|                               | 2.01         | 4.69      | 1.03  | 2.58  | 3.2      | 2.25    | 6.14%  | 2.26    | 0.02   |
|                               | 37.35        | 60.18     | 31.31 | 38.82 | 84.93    | 32.28   | 54.19% | 25.62   | 25.1   |
| <b>Non-Workers - %</b>        | 60.21        | 64.03     | 62.5  | 59.63 | 66       | 59.57   | 58.01  | 55.49   | 56.43  |
| Male - %                      | 36.93        | 35.95     | 35.04 | 36.83 | 35.72    | 36.45   | 37.02  | 36.63   | 41.82  |
| Female - %                    | 67.54        | 64.05     | 64.96 | 63.17 | 64.27    | 63.55   | 84.67  | 63.37   | 72.26  |

Source: Census 2011

### 3.2.2.2 Socio-Economic Profile of Direct Impact Zone - Gujarat

The MA-HSR alignment passes through the boundaries of 195 census villages in Gujarat spread over eight districts.

According to the 2011 census, the total population in these districts is 26 million with Ahmedabad being the most populous district and Navsari being the least populous.

The average population density in these districts is 676 inhabitants per square kilometer. This is highest for Surat, followed by Ahmedabad. Population density is lowest for Bharuch. Average population growth rate over the decade 2001-2011 in the project influence area was 18.7%. Surat has the highest growth rate among all project influence district followed by Ahmedabad. The project influence area has a sex ratio of 890 females for every 1000 males. The highest sex ratio is observed in Navsari followed by Kheda. An average literacy rate of 82.6% was observed in project-affected district. 54% of the population in project-affected district constitute of the rural population with 40% worker's participation rate.

Agriculture and animal husbandry are the predominant economic activities. Dairy is the main activity in animal husbandry. Nowadays, poultry is steadily growing activity under animal husbandry. The food industry has also grown at a noticeable rate during the last decade.

#### Livelihood source

As per census survey report 2011, 22% main workers and 40% marginal workers are engaged in agricultural activities. Cotton, sugarcane, and paddy are the main crops produced in project villages. District wise productivity of major crops is shown in below Table 3-9.

**Table 3-9: Major Crops – Project Affected districts - Gujarat**

| District  | Agricultural Commodities (First) | Agricultural Commodities (Second) | Agricultural Commodities (Third) |
|-----------|----------------------------------|-----------------------------------|----------------------------------|
| Ahmedabad | Bajra/ Pearl millet              | Wheat                             | Paddy                            |
| Kheda     | Maize                            | Tobacco                           | Pearl millet/bajra               |
| Anand     | Pearl millet/ Bajra              | Wheat                             | Tobacco                          |
| Vadodara  | Cotton                           | Pigeon Pea                        | Oil Seeds                        |
| Bharuch   | Cotton                           | Pigeon Pea                        | Wheat                            |
| Surat     | Sugarcane                        | Paddy                             | Vegetables                       |
| Navsari   | Sugarcane                        | Paddy                             | Vegetables                       |
| Valsad    | Paddy                            | Sugarcane                         | Vegetables                       |

Source: Village Amenities Data 2011

Land Utilization: Agriculture forms a major source of land utilization in project villages followed by land under pasture. The project will have a major impact on these activities. A statement showing land utilization in the study area villages is provided in Table 3-10.

**Table 3-10: District wise Land utilization in Project area villages**

| District Name | Total Geographical Area (Ha)                                 | Area under Non-Agricultural Uses (Ha) | Barren & Un-cultivable Land Area (Ha) | Permanent Pastures and Other Grazing Land Area (Ha) | Land Under Misc. Tree Crops etc. Area (Ha) | Culturable Waste Land Area (Ha) | Fallows Land other than Current Fallows Area (Ha) | Current Fallows Area (Ha) | Net Area Sown (Ha) | Total Unirrigated Land Area (Ha) | Area Irrigated by Source (Ha) |
|---------------|--|---------------------------------------|---------------------------------------|---|--|---------------------------------|---|---------------------------|--------------------|----------------------------------|-------------------------------|
| Ahmedabad     | <i>Village level census data not available for Ahmedabad</i> |                                       |                                       |   |  |                                 |   |                           |                    |                                  |                               |
| Kheda         | 14121.11   | 488.92                                | 528.69                                | 589.23  | 93.3                                       | 116.14                          | 426.95  | 110.91                    | 11766.97           | 2658.66                          | 9108.31                       |
| Anand         | 9609.19  | 259.39                                | 636.87                                | 551.88  | 40.51                                      | 157.62                          | 189.88  | 134.13                    | 7638.91            | 0                                | 7638.91                       |
| Vadodara      | 21389.56   | 507.76                                | 1054.82                               | 956.22  | 140.53                                     | 376.65                          | 245.12  | 348.27                    | 17628.53           | 8092.44                          | 9536.09                       |
| Bharuch       | 20287.94   | 765.01                                | 871.46                                | 459.85  | 112.14                                     | 575.15                          | 177.23  | 154.42                    | 17168.2            | 9539.64                          | 7628.56                       |
| Surat         | 15139.92   | 998.63                                | 501                                   | 1156.62   | 109.86                                     | 170                             | 134.44  | 471.96                    | 11501.82           | 1195.25                          | 10306.57                      |
| Navsari       | 11169.51   | 496.66                                | 551.87                                | 285.67  | 79.56                                      | 100.02                          | 185.19  | 80.67                     | 9386.25            | 1737.31                          | 7648.94                       |
| Valsad        | 15122.23   | 326.92                                | 735.16                                | 299.14  | 30.24                                      | 288.13                          | 174.2   | 330.55                    | 12584.22           | 8183.49                          | 4400.73                       |
| Total         | 106839.46  | 3843.29                               | 4879.87                               | 4298.61   | 606.14                                     | 1783.71                         | 1533.01   | 1630.91                   | 87674.9            | 31406.79                         | 56268.11                      |
| Percentage    |  | 4%                                    | 5%                                    | 4%  | 1%   | 2%                              | 1%  | 2%                        | 82%                | 29%                              | 53%                           |

Source: Village Amenities Data 2011 of various district

Irrigation: As per Village Amenities Data 2011, irrigation is carried out from surface water as well as from groundwater. Canals, tanks, wells are the important sources for irrigation. The major source of irrigation in the study area villages are given in Table 3-11.

**Table 3-11: District wise Source of Irrigation in the Study Area Villages**

| Village Name | Canals Area (in Hectares)                                    | Wells/Tube Wells Area (in Hectares) | Tanks/Lakes Area (in Hectares) |
|--------------|--|-------------------------------------|--------------------------------|
| Ahmedabad    | <i>Village level census data not available for Ahmedabad</i> |                                     |                                |
| Kheda        | 3455.383   | 5469.167                            | 183.76                         |
| Anand        | 7072.62  | 11564.42                            | 0                              |
| Vadodara     | 2318.36  | 6425.86                             | 442.56                         |
| Bharuch      | 4072.39  | 3352.89                             | 190.29                         |
| Surat        | 7538.31  | 2445.88                             | 118.02                         |
| Navsari      | 4527.81  | 2252.47                             | 555.17                         |
| Valsad       | 2578.73  | 1465.7                              | 155.76                         |
| Total        | <b>31563.603</b>   | <b>32976.387</b>                    | <b>1645.56</b>                 |

Source: Village Amenities Data 2011 of various district

## Social Infrastructure

As per village amenities data 2011, there are 461 schools in the study area villages. According to 2011 Census data, the literacy rate in project districts is 82.6 percent, compared to the 78 percent rate of literacy in Gujarat and the national average of 74 percent. All the villages have at least one primary school. Category wise total school is provided below

- Govt Primary-240
- Private Primary-171
- Govt Secondary School - 39
- Private Secondary School-5
- Govt Senior Secondary School-4
- Private Senior Secondary School-2
- Private Arts and Science Degree College-1

Health amenities are adequate in the project affected villages. Overall there is 89 health facility across all study area village. Category wise health facility in project-affected village is provided below.

- Community Health Center (CHC) - 2
- Primary Health Centre (PHC) - 23
- Primary Health Sub Centre (PHSC) - 33
- HAM – 1
- Dispensary – 5
- NGO Medical facility – 11
- Medicine Shop-13
- Veterinary Hospital-1

Tap water, handpumps are the major sources of drinking water. Transportation facilities are adequate in all study area villages.

Presence of Ahmedabad - Nadiad – Vadodara expressway improves connectivity between the districts. There is a broad-gauge rail route that connects the district to Mumbai and Ahmedabad. There are three airports located in Ahmedabad, Surat, and Vadodara.

Grid connectivity is available in all villages and there are no non-electrified villages.

Table 3-12: Social infrastructure in the Gujarat Study Area Villages

| District  | Educational Institution   | Health Facilities   | Post Office         | Drinking water supply                  | Communication | Transportation            | Approach Road                             | Power Supply   |
|-----------|---|---|---------------------|--|---------------|---------------------------|---|--|
| Ahmedabad | Govt Primary-5<br>Govt Sec- 1 Pvt<br>Primary-1  | PHSC - 12   | Sub Post office - 2 | Tap Water, Well, hand pump, Tube well, | Available     | Bus, Train & taxi service | Approach paved road,<br>Approach mud road | Electricity for domestic,<br>Electricity for all purpose |
| Kheda     | Govt Primary-56<br>Pvt Primary-9<br>Govt Sec- 6<br>Pvt Sec- 1<br>ITI-1  | PHC-6   | Sub Post office-4   |  |               |                           |   |  |
| Anand     | Govt Primary-14<br>Pvt Primary-4<br>Govt Sec- 2   | PHC-3   | Sub Post office-3   |  |               |                           |   |  |
| Vadodara  | Private Pre-Primary<br>School-1<br>Govt Primary-25<br>Private Secondary<br>School-1<br>Govt Secondary<br>School-5<br>Private Senior<br>Secondary School-1 | PHC-5<br>PHSC - 8<br>Maternity and Child<br>Welfare Centre- 2<br>Family welfare center-<br>2<br>Hospital Allopathic-1<br>Dispensary-3 | Sub Post office-13  |  |               |                           |   |  |
| Bharuch   | Govt Primary-29<br>Govt. Secondary-6<br>Pvt Primary – 13<br>Pvt Secondary-4<br>Pvt Arts College-1   | PHSC- 9   | Sub Post office-14  |  |               |                           |   |  |

| District | Educational Institution   | Health Facilities   | Post Office                     | Drinking water supply | Communication | Transportation | Approach Road | Power Supply |
|----------|---|---|---------------------------------|-----------------------|---------------|----------------|---------------|--------------|
| Surat    | Govt Primary-33<br>Private Primary-3<br>Govt Secondary School - 5<br>Private Secondary School-2<br>Govt Senior Secondary School-1<br>Private Senior Secondary School-1<br>Private Arts and Science Degree College-1 | CHC - 1<br>PHC-1<br>PHSC - 14<br>HAM – 1<br>Dispensary – 1<br>NGO Medical facility – 11<br>Medicine Shop-13<br>Veterinary Hospital-1        | Sub Post office-3               |                       |               |                |               |              |
| Navsari  | Govt Primary-45<br>Pvt Primary-9<br>Govt Sec- 6<br>Govt Sr. Sec- 3<br>Pvt Sec.-2  | PHC-6   | Post office /Sub Post office-15 |                       |               |                |               |              |
| Valsad   | Govt Primary-62<br>Pvt Primary-6<br>Govt Sec- 6<br><br>Govt. Degree College-1   | Community Health Centre (CHC)- 1<br>Primary Health Centre (PHC)- 2<br>Govt. Dispensary/Health Centre- 1<br>3 Bedded Govt. Maternity Home- 1 | Post office /Sub Post office-21 |                       |               |                |               |              |

| District | Educational Institution   | Health Facilities   | Post Office                     | Drinking water supply | Communication | Transportation | Approach Road | Power Supply |
|----------|---|---|---------------------------------|-----------------------|---------------|----------------|---------------|--------------|
| Total    | Govt Primary-240<br>Private Primary-171<br>Govt Secondary School - 39<br>Private Secondary School-5<br>Govt Senior Secondary School-4<br>Private Senior Secondary School-2<br>Private Arts and Science Degree College-1 | CHC - 2<br>PHC-23<br>PHSC - 33<br>HAM – 1<br>Dispensary – 5<br>NGO Medical facility – 11<br>Medicine Shop-13<br>Veterinary Hospital-1 | Post office /Sub Post office-91 |                       |               |                |               |              |

Source: Village Amenities Data 2011 of various districts; PHC-Primary Health center, PHSC-Primary Health Sub Centre, MCW- Maternity and Child Welfare Centre



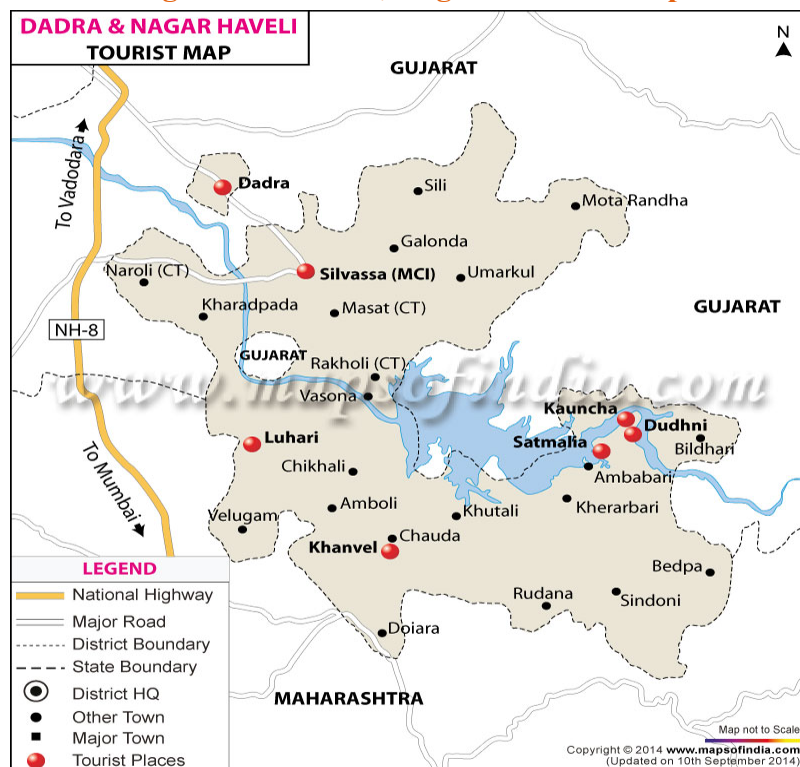
### 3.2.3 Overview of Dadra & Nagar Haveli (DNH)

Dadra & Nagar Haveli is located on the western side of the foothills of Western Ghat and has undulating terrain 40% of the total geographical area is covered with forests and thus offers it a look of woodland. The major river Daman Ganga and its tributaries criss-cross the U.T. and drain into the Arabian sea at Daman. The area of Dadra & Nagar Haveli spread over 491.00 sq. km. landlocked between Gujarat in North and Maharashtra in South was liberated from Portuguese Rulers by people themselves on 2nd August 1954. The people of the U.T. established free Administration of Dadra & Nagar Haveli, which was finally merged into Union of India in the year 1961.

As per details from Census 2011, Dadra & Nagar Haveli has a population of 3.44 Lakhs, an increase from figure of 2.20 Lakh in 2001 census. The total population of Dadra and Nagar Haveli as per 2011 census is 343,709 of which male and female are 193,760 and 149,949 respectively. In 2001, the total population was 220,490 in which males were 121,666 while females were 98,824. Hinduism is majority religion in the state of Dadra & Nagar Haveli with 93.93 % followers. Islam is second most popular religion in the state of Dadra & Nagar Haveli with approximately 3.76 % following it. In Dadra & Nagar Haveli state, Christianity is followed by 1.49 %, Jainism by 0.35 %, Sikhism by 0.06 % and Buddhism by 0.06 %. Around 0.09 % stated 'Other Religion', approximately 0.14 % stated 'No Particular Religion'.

As per census 2011, the tribal constitute 52% of the total population of the territory. The main tribes are Dhodia, Kokna, and Varli with small groups of Koli, Kathodi, Naika and Dubla scattered over the territory. The Dhodias and Dublas are mainly confined to the Northern part of the territory whereas the Koknas and Varlis and found all over. An overview of the state is presented below in Table 3-13.

**Figure 3-5: Dadra, Nagar & Haveli Map**



Source: Maps of India

**Table 3-13: An Overview of Dadra & Nagar Haveli**

| Indicators              | Census 2011 |
|-------------------------|-------------|
| Estimated Population    | 3.44 Lakhs  |
| Actual Population       | 343,709     |
| Population Growth       | 55.88%      |
| Area km <sup>2</sup>    | 491         |
| Density/km <sup>2</sup> | 700         |
| Male                    | 193,760     |
| Female                  | 149,949     |
| Sex Ratio               | 774         |
| SC population (%)       | 1.79%       |
| ST population (%)       | 51.95%      |
| Literacy                | 76.24 %     |
| Male Literacy           | 85.17 %     |
| Female Literacy         | 64.32 %     |
| Total Literate          | 223,230     |
| Male Literate           | 142,521     |
| Female Literate         | 80,709      |
| Rural population (%)    | 53.28 %     |
| Urban population (%)    | 46.72 %     |

Source: Census 2011

Business & Economy of Dadra & Nagar Haveli is mainly based on agriculture and the manufacturing industries. Since a large section of the union territory is covered with forests, forestry is also an important occupational source for the people of Dadra & Nagar Haveli. The major occupation of most of the tribal people of this union territory is agriculture. Jowar, sisam, millets, oilseeds, paddy, ragi, wheat, pulses, sugarcane, and tuvr are among the most important crops that are cultivated here. Vegetables such as cabbage, cauliflower, tomato, and brinjal are also very important agricultural products here. An industry has also been set up in Dadra & Nagar Haveli by the government that is totally forestry-related. This industry of Dadra & Nagar Haveli is a major producer of Khair from Khair wood. The other important products from the forests of Dadra & Nagar Haveli are sisam, mahara, sadra, and teak. There is also a poultry-

breeding farm run by the government of Dadra & Nagar Haveli. Buffaloes, goats, cattle, and sheep are among the various farm animals of the union territory of Dadra & Nagar Haveli. For the welfare of these animals, there is a well maintained veterinary hospital and two veterinary centers in the union territory. In Dadra & Nagar Haveli there are about four industrial estates. The major products that are manufactured here include electrical fixtures, watches, detergent powder, art silk fabrics, flooring tiles, textile frames, chemicals and so on.

### 3.2.3.1 Socio-Economic Profile of Direct Impact Zone - DNH

The MA-HSR alignment passes through the boundaries of 2 census villages (Dhapsa and Naroli). The following sections provide brief information about these villages as per census 2011. Summary of relevant data of these villages is presented in

Table 3-14.

**Table 3-14: Summary of villages MA-HSR alignment – DNH**

| Indicators  | Villages |
|---|----------|
| Population  | 16704    |
| Male (%)  | 57.96%   |
| Female (%)  | 42.03%   |
| Sex Ratio (females+ 1000 males)                     | 725      |
| Child Sex Ratio                                     | 856      |
| Literacy Rate (excluding age group of 0-6)          | 87.54%   |
| Male literates (%)                                  | 61.87%   |
| Female literates (%)                                | 38.13%   |
| SC population (%)                                   | 8.03%    |
| ST Population (%)                                   | 31.01%   |
| Workers (%)   | 46.77%   |
| Male workers (%)                                    | 83.92%   |
| Female workers (%)                                  | 16.07%   |
| Main workers (%)                                    | 92.10%   |
| Workers engaged in cultivation to total workers (%) | 5.82%    |
| Workers engaged in agriculture to total workers (%) | 5.71%    |
| Workers engaged in HH work to total workers (%)     | 0.42%    |
| Workers engaged other work to total workers (%)     | 88.04%   |

| Indicators  | Villages |
|---|----------|
| Marginal workers (%)                                | 7.89%    |
| Workers engaged in cultivation to total workers (%) | 3.57%    |
| Workers engaged in agriculture to total workers (%) | 15.56%   |
| Workers engaged in HH work to total workers (%)     | 2.76%    |
| Workers engaged other work to total workers (%)     | 78.12%   |
| Non-Workers (%)                                     | 53.22%   |
| Male (%)  | 35.15%   |
| Female (%)  | 64.84%   |

Source: Census 2011

As per Census 2011, the total population of all the villages is 16,704. The composition of male and female populations in both rural and urban are 58% and 42%. The overall sex ratio is 725. Child sex ratio is higher than as compared to overall sex ratio. Schedule Caste (SC) constitutes 8.03% of the total population and the Schedule Tribe (ST) population constitutes 31.01% of the total population.

Literacy is one of the important indicators of measurement of development. Understanding of literacy level of likely project affected persons is important from a rehabilitation point of view. People likely to be affected are mostly native of these villages and therefore socio-economic conditions of villagers are a reflection of likely project affected persons. From the data provided in Table 3.3, it may be seen that overall literacy rate (excluding the population of 0-6 years) is 87.54%. Females comprise 38.13% of the total literates. Literacy rate in 2 of the villages is more than the average literacy rate (76.24%).

Percentage of workers engaged in different activities indicates the nature of employment available in the area. As per Census 2011, 46.77% of the total population are workers which comprise 92.10% main workers and 7.89% marginal workers. Non-workers constitute about 53.22% of the total population indicating moderate dependency ratio. High literacy rate, engagement in non-agricultural work and high sex ratio are indicators of development status. Overall the development status of the project area is moderate.

### Livelihood source

Agriculture is the vital sector of socio-economic development of the territory. The agriculture production is mainly depended on rainfall and mostly on a single crop system. The general topography of the territory is hilly and undulating except in the Central Northern and Western parts, as a result of which cultivable land tends to be available in patches rather than the large compact blocks.

This Union Territory falls in heavy rainfall agro-climatic zone. Cereal crops include Paddy, Ragi, Wheat, Jowar, Maize and Small Millets. The Pulses include Tur, Gram, other Kharif pulses such as Udid, Chola, and Rabi pulses Lang, Moong, Val. The Oil-Seeds cover the major oil-seeds like Nigerseeds, Mustard, Castor seeds, and Groundnut. The horticulture crops like Mango, Chiku, and Guava etc are grown on a large scale due to the congenial agro-climatic condition.

Land Holding: The land holding pattern in the study area villages indicates that large farmers account for 15.46% of total land holdings. A statement showing the land holdings size in DNH is provided in Table 3-15.

**Table 3-15: Average Size of Land Holding by Size Group in DNH**

| State | Average size per holding in Hectare |       |             |        |       |                 |
|-------|-------------------------------------|-------|-------------|--------|-------|-----------------|
|       | Marginal                            | Small | Semi Medium | Medium | Large | All size groups |
| DNH   | 0.51                                | 1.37  | 2.77        | 5.74   | 15.46 | 1.38            |

Source: Agricultural Census, 2010-11, DNH

Irrigation: The area irrigated for different crops is shown in the following table. The below statement indicates that in 2009-2010, the highest crop area under irrigation is of Paddy i.e. 9800 hectares whereas the area under irrigation for the fruits and vegetables, pulses and sugarcane are 3225 ha, 3050 ha, and 1048 ha respectively. (Ref Table 3-16)

**Table 3-16: Crop wise Area under irrigation**

| Name of crops         | Area in Hectares |           |           |
|-----------------------|------------------|-----------|-----------|
|                       | 2000-2001        | 2003-2004 | 2007-2008 |
| Paddy                 | 9000             | 10500     | 9800      |
| Fruits and Vegetables | 2531             | 3010      | 3225      |
| Pulses                | 8680             | 6845      | 3050      |
| Sugarcane             | 1200             | 924       | 1048      |

Source: Agricultural Census, 2010-11, DNH

The area irrigated by different sources in Dadra & Nagar Haveli district is presented below for the period 2000-01, 2003-04 and 2007-08. The below statement indicates that in 2000-01 area irrigated by government canals and wells are 3428.60 ha and 2973.78 ha respectively which increased to 3893 ha and 3517 ha respectively in 2007-08. The major source of irrigation is given in Table 3-17.

**Table 3-17: Area under irrigation by source**

| Source of irrigation | Area in Hectares |           |           |
|----------------------|------------------|-----------|-----------|
|                      | 2000-2001        | 2003-2004 | 2007-2008 |
| Govt. Canal          | 3428.60          | 1978      | 3893      |
| Wells                | 2973.78          | 3542      | 3517      |
| Total                | 6402.38          | 5520      | 7410      |

Source: Village Amenities Data, DNH

## Social Infrastructure

As per village amenities data 2011, there are 13 schools and colleges in the study area villages. In Dhapsa village there are private secondary school, Govt and private degree colleges. In Naroli

there are Govt. and private primary and secondary schools. Normally for higher education, students go to Silvassa or Vapi. For higher studies, the Central Government reserves seats for Medical, Engineering, Teacher Training Courses etc. in other States for the U.T. These seats are allotted on merit. There are 337 schools including middle, secondary and higher secondary schools in DNH. Tribal students are provided free co-education up to higher secondary level. They are supplied with free mid-day meals, free exercise notebooks, textbooks, teaching aids, two pairs of clothes and a pair of shoes and socks. There are 15 social welfare hostels with 1688 inmates providing free lodging and boarding. All eligible ST/SC and low-income group students are provided several facilities. For technical education, there is one ITI, a Polytechnic and an Institute of Hotel Management and Food Craft.

There is health center/dispensary in the study area villages. In DNH there is a District Civil Hospital, 1 CHC, 6 PHCs., 3 Rural Medical dispensaries, 1 mobile health dispensary, 50 sub-centers and a District T.B. Centre and ISM dispensary. Non-Emergency Medical Response Services i.e. “104” Service has been started from 21<sup>st</sup> November 2012. A scheme called “Matru Samrudhi Yojna” is also launched to promote institutional delivery under which 5000/- is given to mothers for opting delivery in Govt. Institute.

Drinking water facilities are extended to all villages through tap water, drinking water wells and hand pumps. The U.T. of Dadra & Nagar Haveli does not have its own Power Generating station and the entire power demand is met from Central Sector Power Generating Stations.

Transportation facilities are adequate in all study area villages. The nearest railway station is Vapi, Gujarat. By now the total length of roads in the territory is 809.552 km. out of which 809.552 km. is surfaced road. All Villages have been connected with all-weather roads. The nearest airport is located at Surat, Gujarat which is about 136 km from DNH headquarter Silvassa.

**Table 3-18: Social infrastructure in the Study Area Villages**

| Village | Educational Institution   | Health Facilities | Post Office | Drinking water supply                           | Communication | Transportation            | Approach Road               | Power Supply                                    |
|---------|---|-------------------|-------------|---|---------------|---------------------------|-----------------------------|---|
| Dhapsa  | Pvt Sr. Sec-1<br>Govt. Degree College-2<br>Pvt Degree College-1 | No                | No          | Tap Water,<br>Well,<br>hand pump,<br>Tube well, | Available     | Bus, Train & taxi service | Yes (Pucca and Kaccha both) | Electricity for domestic and commercial purpose |

| Village | Educational Institution   | Health Facilities            | Post Office | Drinking water supply | Communication | Transportation | Approach Road | Power Supply |
|---------|---|------------------------------|-------------|-----------------------|---------------|----------------|---------------|--------------|
| Naroli  | Govt Primary-6<br>Pvt Primary-1<br>Govt Sec- 1<br>Govt S. Sec-1 | Dispensary/<br>Health Centre | Yes         |                       |               |                |               |              |

Source: Village Amenities Data 2011, DNH

### 3.3 Project Affected Households

This section discusses the findings of the socio economic and the census survey carried out for the HSR project. The project will impact **total 15,341 PAHs**. Table 3-19 provides distribution of PAH for each district and the assessment of both the title holder and non-title holder has been done during the census survey and results are provided in Table 3-20.

**Table 3-19: Distribution Details of PAHs as on 31.08.2021**

| S.N.         | District  | Area in (Ha) | Private Land (Ha) | Number of Land Parcel Surveyed | Number of Land Parcel Surveyed during JMS | Percentage of Land Parcel wherein JMS Completed | Actual Data  |             | No of CPR  |
|--------------|-----------|--------------|-------------------|--------------------------------|---|---|--------------|-------------|------------|
|              |           |              |                   |                                |   |   | PAH          | Structures  |            |
| 1            | Ahmedabad | 133.38       | 27.22             | 223                            | 223                                       | 100   | 327          | 425         | 25         |
| 2            | Kheda     | 110.34       | 98.98             | 928                            | 928                                       | 100   | 726          | 358         | 15         |
| 3            | Anand     | 53.41        | 47.39             | 632                            | 632                                       | 100   | 510          | 307         | 5          |
| 4            | Vadodara  | 141.35       | 106.68            | 1063                           | 1063                                      | 100   | 1170         | 921         | 12         |
| 5            | Bharuch   | 139.99       | 127.17            | 1139                           | 1139                                      | 100   | 991          | 177         | 8          |
| 6            | Surat     | 161.93       | 144.04            | 1067                           | 1067                                      | 100   | 972          | 593         | 19         |
| 7            | Navsari   | 93.17        | 81.46             | 819                            | 819                                       | 100   | 827          | 455         | 14         |
| 8            | Valsad    | 122.43       | 107.4             | 1225                           | 1225                                      | 100   | 1393         | 1065        | 16         |
| 9            | Palghar   | 284.78       | 187.55            | 1507                           | 1482                                      | 98.34   | 6998         | 3719        | 36         |
| 10           | Thane     | 142.4        | 81.87             | 1063                           | 1063                                      | 100   | 1230         | 791         | 8          |
| 11           | DNH       | 8            | 7.52              | 143                            | 143                                       | 100   | 197          | 66          | 0          |
| 12           | Mumbai    | 4.82         | 3.92              | 5                              | 5   | 100   | 0            | 0           | 0          |
| <b>Total</b> |           | <b>1396</b>  | <b>1021.20</b>    | <b>9814</b>                    | <b>9789</b>                               | <b>99.75</b>                                    | <b>15341</b> | <b>8877</b> | <b>158</b> |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021

Note: There are only three plots in Mumbai, one government plot with government-owned petrol pump and another land parcel belongs to a private company called Godrej Industries, a global conglomerate, headquartered in India. No structure was identified in the land parcel and accessibility to the plot was not permitted.

Assessment of titleholders and non title holder indicates that approximately 69% are title holders and 31% are non title holder.

**Table 3-20: Distribution Details of PAHs for Title Holder and Non-Title Holder<sup>3</sup>**

| District          | PAH Ownership |             |            |            |            |              | Total        |
|-------------------|---------------|-------------|------------|------------|------------|--------------|--------------|
|                   | TH            | NTH         |            |            |            | Total        |              |
|                   |               | Encroacher  | Squatter   | Tenant     | Others     |              |              |
| Ahmedabad         | 158           | 0           | 0          | 0          | 169        | 169          | 327          |
| Kheda             | 712           | 0           | 0          | 0          | 14         | 14           | 726          |
| Anand             | 494           | 0           | 0          | 0          | 16         | 16           | 510          |
| Vadodara          | 850           | 0           | 0          | 0          | 320        | 320          | 1170         |
| Bharuch           | 906           | 0           | 85         | 0          | 0          | 85           | 991          |
| Surat             | 944           | 28          | 0          | 0          | 0          | 28           | 972          |
| Navsari           | 803           | 24          | 0          | 0          | 0          | 24           | 827          |
| Valsad            | 1373          | 20          | 0          | 0          | 0          | 20           | 1393         |
| Palghar           | 3075          | 2993        | 366        | 470        | 94         | 3923         | 6998         |
| Thane             | 1056          | 92          | 37         | 45         | 0          | 174          | 1230         |
| DNH               | 176           | 0           | 21         | 0          | 0          | 21           | 197          |
| Mumbai            | 0             | 0           | 0          | 0          | 0          | 0            | 0            |
| <b>Total</b>      | <b>10547</b>  | <b>3157</b> | <b>509</b> | <b>515</b> | <b>613</b> | <b>4794</b>  | <b>15341</b> |
| <b>Percentage</b> | <b>68.75</b>  | <b> </b>    | <b> </b>   | <b> </b>   | <b> </b>   | <b>31.25</b> | <b>100</b>   |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August' 2021

### 3.3.1 PAHs and Population Age group, Sex Composition, family size and Religion

#### Age and Sex wise population

The age and sex composition of the PAPs are provided in Table 3-21. Of the total PAPs, 51% constitute males and 49% constitute female. Approximately 63% of PAPs falls in the age group of 19-65 years. Only 5.4% of PAPs are elderly more than 65 years of age.

**Table 3-21: Age Wise Population Distribution**

| District  | Sex Composition |        |              |       | Age composition |      |       |       |     | Total |
|-----------|-----------------|--------|--------------|-------|-----------------|------|-------|-------|-----|-------|
|           | Male            | Female | Third Gender | Total | <=6             | 7-14 | 15-18 | 19-65 | >65 |       |
| Ahmedabad | 2493            | 2518   | 0            | 5011  | 707             | 601  | 432   | 3176  | 95  | 5011  |
| Kheda     | 2463            | 2333   | 0            | 4796  | 360             | 568  | 405   | 3158  | 305 | 4796  |
| Anand     | 2737            | 2673   | 7            | 5417  | 434             | 576  | 446   | 3577  | 384 | 5417  |
| Vadodara  | 4289            | 4116   | 0            | 8405  | 651             | 953  | 540   | 5681  | 580 | 8405  |

<sup>3</sup> The data for the owners and borrowers of the affected farming land is not available. Owners have not shared the information on tillers/ borrowers. These will be however identified by the District Administration (LAO) during project implementation and any objections and claim from their side will be addressed as per the law and as per the provision of entitlement matrix developed for the project. This will be reported in quarterly progress report shared with JICA.



| District          | Sex Composition |              |              |               | Age composition |              |             |              |             | Total         |
|-------------------|-----------------|--------------|--------------|---------------|-----------------|--------------|-------------|--------------|-------------|---------------|
|                   | Male            | Female       | Third Gender | Total         | <=6             | 7-14         | 15-18       | 19-65        | >65         |               |
| Bharuch           | 2349            | 2306         | 0            | 4655          | 303             | 394          | 315         | 3213         | 430         | 4655          |
| Surat             | 1162            | 1145         | 0            | 2307          | 532             | 370          | 570         | 805          | 30          | 2307          |
| Navsari           | 2478            | 2293         | 0            | 4771          | 261             | 369          | 277         | 3345         | 519         | 4771          |
| Valsad            | 5085            | 4525         | 0            | 9610          | 898             | 1367         | 983         | 5757         | 605         | 9610          |
| Palghar           | 8821            | 8761         | 0            | 17582         | 2207            | 1817         | 1919        | 11199        | 440         | 17582         |
| Thane             | 2344            | 2370         | 0            | 4714          | 409             | 669          | 780         | 2639         | 217         | 4714          |
| DNH               | 393             | 387          | 0            | 780           | 75              | 101          | 61          | 476          | 67          | 780           |
| <b>Total</b>      | <b>34614</b>    | <b>33427</b> | <b>7</b>     | <b>68048</b>  | <b>6837</b>     | <b>7785</b>  | <b>6728</b> | <b>43026</b> | <b>3672</b> | <b>68048</b>  |
| <b>Percentage</b> | <b>50.87</b>    | <b>49.12</b> | <b>0.01</b>  | <b>100.00</b> | <b>10.05</b>    | <b>11.44</b> | <b>9.89</b> | <b>63.23</b> | <b>5.40</b> | <b>100.00</b> |

Source: Census Survey Data, Dec 2017 – July 2018

## Family Size

Affected households under the project have been classified into four categories based on the number of family members. Out of the total, approximately 45% of the households are small families with less than 4 members and 35% have 5-6 members. Table 3-22 provides details on the family size of the PAHs.

**Table 3-22: Family Size of the PAHs**

| District          | Family Size  |              |              |             | Total         |
|-------------------|--------------|--------------|--------------|-------------|---------------|
|                   | <=4          | 5-6          | 7-8          | >8          |               |
| Ahmedabad         | 180          | 275          | 400          | 73          | 928           |
| Kheda             | 230          | 256          | 131          | 166         | 783           |
| Anand             | 300          | 288          | 145          | 168         | 901           |
| Vadodara          | 699          | 683          | 329          | 117         | 1828          |
| Bharuch           | 554          | 252          | 100          | 109         | 1015          |
| Surat             | 408          | 159          | 37           | 35          | 639           |
| Navsari           | 551          | 357          | 65           | 72          | 1045          |
| Valsad            | 872          | 740          | 257          | 177         | 2046          |
| Palghar           | 2183         | 1725         | 320          | 168         | 4396          |
| Thane             | 622          | 413          | 103          | 28          | 1166          |
| DNH               | 45           | 53           | 14           | 25          | 137           |
| <b>Total</b>      | <b>6644</b>  | <b>5201</b>  | <b>1901</b>  | <b>1138</b> | <b>14884</b>  |
| <b>Percentage</b> | <b>44.64</b> | <b>34.94</b> | <b>12.77</b> | <b>7.65</b> | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

## Religious Affiliation

Table 3-23 presents a district wise religion affiliation of the PAHs. Approximately 13,648 PAHs (92%) are Hindus and 1,129 PAH (7.6%) are Muslims. The balance constitutes Parsis, Christians, Sikh, and Buddhists.

**Table 3-23: Religious Affiliation of PAHs**

| District          | Religion     |             |             |             |             |             |             | Total         |
|-------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
|                   | Hindu        | Muslim      | Christian   | Buddhist    | Jain        | Parsi       | Sikh        |               |
| Ahmedabad         | 822          | 101         | 0           | 1           | 1           | 0           | 3           | 928           |
| Kheda             | 739          | 21          | 6           | 5           | 0           | 12          | 0           | 783           |
| Anand             | 854          | 43          | 0           | 3           | 1           | 0           | 0           | 901           |
| Vadodara          | 1746         | 56          | 10          | 4           | 8           | 0           | 4           | 1828          |
| Bharuch           | 537          | 478         | 0           | 0           | 0           | 0           | 0           | 1015          |
| Surat             | 624          | 15          | 0           | 0           | 0           | 0           | 0           | 639           |
| Navsari           | 942          | 99          | 1           | 2           | 1           | 0           | 0           | 1045          |
| Valsad            | 1969         | 74          | 1           | 1           | 1           | 0           | 0           | 2046          |
| Palghar           | 4149         | 217         | 8           | 1           | 19          | 2           | 0           | 4396          |
| Thane             | 1131         | 25          | 0           | 5           | 3           | 2           | 0           | 1166          |
| DNH               | 135          | 0           | 2           | 0           | 0           | 0           | 0           | 137           |
| <b>Total</b>      | <b>13648</b> | <b>1129</b> | <b>28</b>   | <b>22</b>   | <b>34</b>   | <b>16</b>   | <b>7</b>    | <b>14884</b>  |
| <b>Percentage</b> | <b>91.70</b> | <b>7.59</b> | <b>0.19</b> | <b>0.15</b> | <b>0.23</b> | <b>0.11</b> | <b>0.05</b> | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

### 3.3.2 Social Category of PAHs

Assessment of social categories of the PAHs as on August' 2021 show that majority (48%) belong to the general category (7,429 PAHs), followed by Other Backward Caste (OBC) category (27%), Schedule Tribe (22%), and Schedule Caste (2%) and 0.50% are from other social category. Social category detail for the different district in the state is provided in Table 3-24.

**Table 3-24: Social Category of PAHs**

| District          | Social Category |             |              |              |             |             | Total        |
|-------------------|-----------------|-------------|--------------|--------------|-------------|-------------|--------------|
|                   | General         | SC          | ST           | OBC          | BC          | Others      |              |
| Ahmedabad         | 79              | 28          | 44           | 176          | 0           | 0           | 327          |
| Kheda             | 435             | 5           | 6            | 280          | 0           | 0           | 726          |
| Anand             | 476             | 0           | 0            | 34           | 0           | 0           | 510          |
| Vadodara          | 851             | 57          | 41           | 204          | 0           | 17          | 1170         |
| Bharuch           | 847             | 25          | 60           | 59           | 0           | 0           | 991          |
| Surat             | 872             | 9           | 21           | 57           | 0           | 13          | 972          |
| Navsari           | 233             | 37          | 40           | 508          | 0           | 9           | 827          |
| Valsad            | 293             | 20          | 642          | 438          | 0           | 0           | 1393         |
| Palghar           | 2069            | 131         | 2432         | 2366         | 0           | 0           | 6998         |
| Thane             | 1131            | 35          | 18           | 8            | 0           | 38          | 1230         |
| DNH               | 143             | 10          | 44           | 0            | 0           | 0           | 197          |
| <b>Total</b>      | <b>7429</b>     | <b>357</b>  | <b>3348</b>  | <b>4130</b>  | <b>0</b>    | <b>77</b>   | <b>15341</b> |
| <b>Percentage</b> | <b>48.43</b>    | <b>2.33</b> | <b>21.82</b> | <b>26.92</b> | <b>0.00</b> | <b>0.50</b> | <b>100</b>   |

Source: MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan prepared upto August'2021

### 3.3.3 Ethnicity, Marital Status, Literacy Levels and Occupation of PAPs

#### Marital status

Marital status of the affected population is presented in Table 3-24. Approximately 54% of the PAPs are married, 41% are single, 4% widow/ widower and a small percent of people are divorced (0.6%).

**Table 3-24: Marital Status of PAPs**

| District          | Single       | Married      | Divorced    | Widow/ Widower | Total         |
|-------------------|--------------|--------------|-------------|----------------|---------------|
| Ahmedabad         | 2276         | 2485         | 46          | 204            | 5011          |
| Kheda             | 1556         | 3020         | 25          | 195            | 4796          |
| Anand             | 1829         | 3290         | 28          | 270            | 5417          |
| Vadodara          | 2918         | 5066         | 33          | 388            | 8405          |
| Bharuch           | 1611         | 2786         | 18          | 240            | 4655          |
| Surat             | 787          | 1281         | 64          | 175            | 2307          |
| Navsari           | 2600         | 1778         | 63          | 330            | 4771          |
| Valsad            | 4205         | 4954         | 50          | 401            | 9610          |
| Palghar           | 7785         | 9218         | 58          | 521            | 17582         |
| Thane             | 2123         | 2420         | 25          | 146            | 4714          |
| DNH               | 290          | 464          | 0           | 26             | 780           |
| <b>Total</b>      | <b>27980</b> | <b>36762</b> | <b>410</b>  | <b>2896</b>    | <b>68048</b>  |
| <b>Percentage</b> | <b>41.12</b> | <b>54.02</b> | <b>0.60</b> | <b>4.26</b>    | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

#### Literacy levels of PAPs

Information was collected for project affected people on the literacy levels. A total 9233 (14%) of the PAPs are uneducated, additional 21% of the PAPs have completed high school and only 12% are graduate or have higher degrees. Table 3-26 provides detail on the educational status of PAPs.

**Table 3-25: Educational Status of PAPs**

| District          | No Education | Below Elementary class (VII) | Completed elementary | Below High School | Completed High School | Not completed College | Graduate or higher | Total         |
|-------------------|--------------|------------------------------|----------------------|-------------------|-----------------------|-----------------------|--------------------|---------------|
| Ahmedabad         | 1089         | 999                          | 564                  | 556               | 1077                  | 302                   | 424                | 5011          |
| Kheda             | 666          | 550                          | 149                  | 1274              | 1119                  | 482                   | 556                | 4796          |
| Anand             | 943          | 1327                         | 914                  | 787               | 635                   | 179                   | 632                | 5417          |
| Vadodara          | 764          | 956                          | 1072                 | 1641              | 1949                  | 626                   | 1397               | 8405          |
| Bharuch           | 450          | 718                          | 830                  | 800               | 1116                  | 150                   | 591                | 4655          |
| Surat             | 532          | 455                          | 243                  | 417               | 132                   | 285                   | 243                | 2307          |
| Navsari           | 730          | 796                          | 665                  | 790               | 790                   | 324                   | 676                | 4771          |
| Valsad            | 1240         | 2146                         | 1534                 | 1639              | 1584                  | 539                   | 928                | 9610          |
| Palghar           | 2064         | 2230                         | 1333                 | 3574              | 4947                  | 1351                  | 2083               | 17582         |
| Thane             | 661          | 590                          | 311                  | 724               | 1067                  | 862                   | 499                | 4714          |
| DNH               | 94           | 168                          | 93                   | 108               | 111                   | 26                    | 180                | 780           |
| <b>Total</b>      | <b>9233</b>  | <b>10935</b>                 | <b>7708</b>          | <b>12310</b>      | <b>14527</b>          | <b>5126</b>           | <b>8209</b>        | <b>68048</b>  |
| <b>Percentage</b> | <b>13.57</b> | <b>16.07</b>                 | <b>11.33</b>         | <b>18.09</b>      | <b>21.35</b>          | <b>7.53</b>           | <b>12.06</b>       | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

### **Primary Occupation of PAPs**

Approximately 31% of PAP is too young to work/ disabled/ student/ dependent. For remaining, agriculture is the predominant occupation with approximately 17% of the PAPs are involved in agriculture, approx. 10% people are involved in private service and 8.8% are involved in household or cottage industries, and 7.7% into business/ trade. 0.8% of PAP are retired/ pensioner and approx. 3% of people are unemployed. The occupation wise distribution for PAPs is provided in Table 3-26.

Table 3-26: Primary Occupation of PAPs

| District          | Agriculture  | Allied Agriculture | Dairy       | Forestry    | Household/cottage industry | Business/trader/shop owner | Skilled professional | Unskilled labour | Private Service | Government Service | Retired/Pensioner | Unemployed but capable of work | Too young to work/disabled/student | Other       | Multiple work | Total         |
|-------------------|--------------|--------------------|-------------|-------------|----------------------------|----------------------------|----------------------|------------------|-----------------|--------------------|-------------------|--------------------------------|------------------------------------|-------------|---------------|---------------|
| Ahmedabad         | 395          | 37                 | 14          | 1           | 76                         | 165                        | 88                   | 321              | 488             | 18                 | 27                | 112                            | 2847                               | 280         | 142           | 5011          |
| Kheda             | 1862         | 236                | 4           | 1           | 56                         | 237                        | 181                  | 260              | 214             | 17                 | 38                | 66                             | 1456                               | 158         | 10            | 4796          |
| Anand             | 1433         | 75                 | 43          | 3           | 525                        | 92                         | 76                   | 120              | 250             | 7                  | 54                | 38                             | 1594                               | 1017        | 90            | 5417          |
| Vadodara          | 683          | 9                  | 7           | 2           | 801                        | 1785                       | 55                   | 227              | 1302            | 87                 | 79                | 115                            | 1949                               | 1185        | 119           | 8405          |
| Bharuch           | 1140         | 48                 | 12          | 6           | 879                        | 66                         | 120                  | 166              | 226             | 11                 | 44                | 97                             | 971                                | 804         | 65            | 4655          |
| Surat             | 420          | 43                 | 8           | 9           | 356                        | 384                        | 27                   | 54               | 396             | 8                  | 13                | 8                              | 503                                | 73          | 3             | 2307          |
| Navsari           | 1256         | 48                 | 30          | 21          | 831                        | 149                        | 88                   | 254              | 193             | 58                 | 97                | 165                            | 981                                | 534         | 66            | 4771          |
| Valsad            | 1039         | 29                 | 6           | 19          | 349                        | 418                        | 317                  | 371              | 841             | 50                 | 42                | 350                            | 3986                               | 1201        | 592           | 9610          |
| Palghar           | 2499         | 38                 | 23          | 13          | 1411                       | 1540                       | 739                  | 841              | 2554            | 158                | 138               | 818                            | 5641                               | 841         | 327           | 17582         |
| Thane             | 1000         | 25                 | 5           | 1           | 510                        | 403                        | 158                  | 150              | 540             | 20                 | 19                | 171                            | 1209                               | 302         | 200           | 4714          |
| DNH               | 104          | 5                  | 2           | 0           | 186                        | 18                         | 36                   | 71               | 42              | 60                 | 3                 | 47                             | 203                                | 3           | 0             | 780           |
| <b>Total</b>      | <b>11832</b> | <b>594</b>         | <b>154</b>  | <b>77</b>   | <b>5981</b>                | <b>5257</b>                | <b>1886</b>          | <b>2835</b>      | <b>7046</b>     | <b>494</b>         | <b>554</b>        | <b>1986</b>                    | <b>21341</b>                       | <b>6398</b> | <b>1614</b>   | <b>68048</b>  |
| <b>Percentage</b> | <b>17.39</b> | <b>0.87</b>        | <b>0.23</b> | <b>0.11</b> | <b>8.79</b>                | <b>7.73</b>                | <b>2.77</b>          | <b>4.17</b>      | <b>10.35</b>    | <b>0.73</b>        | <b>0.81</b>       | <b>2.92</b>                    | <b>31.36</b>                       | <b>9.40</b> | <b>2.37</b>   | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

### 3.3.4 Income, Expenditure and Poverty Dimensions of PAHs

#### Monthly Income

Census Survey on the monthly income levels of each PAHs indicates that 33% of PAHs has monthly income in the range of INR 5000-10000, 21% PAHs has monthly income in the range of INR 10000-20000, 17% PAHs in the range of INR 20000-50,000, 14% of PAHs have income less than INR 5000, 6% PAHs in the range of INR 50000 – 1 lakh and 5% PAHs has monthly income more than INR 1 lakh. District wise monthly income status of the PAHs is provided in Table 3-28.

**Table 3-27: Monthly Income of PAHs**

| District          | Monthly Income of PAHs (INR) |              |              |              |               |                  | Refused     | Total         |
|-------------------|------------------------------|--------------|--------------|--------------|---------------|------------------|-------------|---------------|
|                   | Less than 5000               | 5000-10000   | 10000-20000  | 20000-50000  | 50000- 1 lakh | more than 1 lakh |             |               |
| Ahmedabad         | 119                          | 558          | 114          | 58           | 12            | 48               | 18          | 928           |
| Kheda             | 105                          | 136          | 141          | 183          | 108           | 90               | 20          | 783           |
| Anand             | 65                           | 282          | 158          | 158          | 105           | 45               | 87          | 901           |
| Vadodara          | 245                          | 386          | 406          | 513          | 147           | 47               | 84          | 1828          |
| Bharuch           | 127                          | 449          | 159          | 94           | 143           | 43               | 1           | 1015          |
| Surat             | 51                           | 279          | 152          | 70           | 28            | 32               | 28          | 639           |
| Navsari           | 108                          | 334          | 189          | 286          | 23            | 97               | 7           | 1045          |
| Valsad            | 105                          | 681          | 518          | 405          | 226           | 112              | 0           | 2046          |
| Palghar           | 1031                         | 1426         | 969          | 598          | 102           | 80               | 189         | 4396          |
| Thane             | 157                          | 395          | 268          | 161          | 27            | 106              | 54          | 1166          |
| DNH               | 16                           | 44           | 32           | 33           | 8             | 3                | 1           | 137           |
| <b>Total</b>      | <b>2128</b>                  | <b>4970</b>  | <b>3106</b>  | <b>2558</b>  | <b>927</b>    | <b>704</b>       | <b>490</b>  | <b>14884</b>  |
| <b>Percentage</b> | <b>14.30</b>                 | <b>33.39</b> | <b>20.87</b> | <b>17.19</b> | <b>6.23</b>   | <b>4.73</b>      | <b>3.29</b> | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

Monthly income for Non-title holders is provided in Table 3-28. Table indicates that 27% of the non title holders are in in the income range of 5000-10000, 20% in the range of 10,000 – 20,000, 13% in the range of 20,000 to 50,000 and 1% having income more than 1 lakh per month.

**Table 3-28: Monthly Income of NTH PAHs (INR)**

| Particulars       | Monthly Income of NTH PAHs (INR) |             |             |             |              |                  | Refused     | Total       |
|-------------------|----------------------------------|-------------|-------------|-------------|--------------|------------------|-------------|-------------|
|                   | Less than 5000                   | 5000-10000  | 10000-20000 | 20000-50000 | 50000-1 lakh | more than 1 lakh |             |             |
| Ahmedabad         | 96                               | 394         | 77          | 53          | 6            | 2                | 16          | 644         |
| Kheda             | 1                                | 2           | 2           | 4           | 7            | 0                | 27          | 43          |
| Anand             | 2                                | 6           | 2           | 4           | 1            | 0                | 11          | 26          |
| Vadodara          | 5                                | 94          | 150         | 119         | 17           | 7                | 58          | 450         |
| Bharuch           | 10                               | 4           | 4           | 10          | 0            | 0                | 26          | 54          |
| Surat             | 0                                | 0           | 0           | 0           | 0            | 0                | 55          | 55          |
| Navsari           | 7                                | 7           | 2           | 1           | 1            | 0                | 39          | 57          |
| Valsad            | 30                               | 188         | 122         | 51          | 13           | 4                | 17          | 425         |
| Palghar           | 270                              | 496         | 421         | 317         | 38           | 34               | 772         | 2348        |
| Thane             | 61                               | 56          | 108         | 33          | 31           | 19               | 142         | 449         |
| DNH               | 4                                | 9           | 8           | 5           | 0            | 0                | 2           | 28          |
| <b>Total</b>      | <b>486</b>                       | <b>1256</b> | <b>896</b>  | <b>597</b>  | <b>114</b>   | <b>66</b>        | <b>1165</b> | <b>4579</b> |
| <b>Percentage</b> | <b>11</b>                        | <b>27</b>   | <b>20</b>   | <b>13</b>   | <b>2</b>     | <b>1</b>         | <b>25</b>   | <b>100</b>  |

Source: Census Survey Data, December 2017 – July 2018

### Sources of Income

Analysis on the source of income for various PAH done during the primary survey indicates that approx. 36% PAH primary source of Income is agriculture, followed by 22% having job/ service as their source of income. Approximately 8.5% people have reported more than one source of income. Table 3-29 provides district wise details on the primary source of income of the PAHs.

For the non-title holders, job/ service is the primary source of income for approx. 36.6% of NTH followed by labour approx. 17%. Approximately 2.5% of the NTH have reported more than one source of income. Table 3-30 provides district wise details on the primary source of income of the NTHs.

**Table 3-29: Primary Source of Income for PAHs**

| District     | Source of Income |                  |              |             |                     |             |             |           |                      | Total        |
|--------------|------------------|------------------|--------------|-------------|---------------------|-------------|-------------|-----------|----------------------|--------------|
|              | Agriculture      | Animal Husbandry | Job/ service | Business    | Agricultural labour | Labour      | Other       | Refusal   | More than one source |              |
| Ahmedabad    | 205              | 14               | 376          | 103         | 16                  | 155         | 13          | 0         | 47                   | 928          |
| Kheda        | 460              | 11               | 84           | 94          | 35                  | 91          | 4           | 0         | 4                    | 783          |
| Anand        | 552              | 76               | 38           | 31          | 69                  | 0           | 121         | 0         | 13                   | 901          |
| Vadodara     | 330              | 46               | 565          | 251         | 35                  | 237         | 184         | 0         | 180                  | 1828         |
| Bharuch      | 694              | 6                | 29           | 56          | 13                  | 34          | 125         | 0         | 57                   | 1015         |
| Surat        | 159              | 15               | 323          | 95          | 3                   | 7           | 13          | 0         | 24                   | 639          |
| Navsari      | 522              | 26               | 99           | 54          | 16                  | 103         | 35          | 26        | 164                  | 1045         |
| Valsad       | 589              | 14               | 495          | 171         | 106                 | 240         | 68          | 6         | 357                  | 2046         |
| Palghar      | 1326             | 32               | 885          | 438         | 114                 | 581         | 639         | 0         | 381                  | 4396         |
| Thane        | 439              | 0                | 314          | 218         | 29                  | 85          | 20          | 29        | 32                   | 1166         |
| DNH          | 51               | 0                | 42           | 7           | 23                  | 8           | 0           | 0         | 7                    | 137          |
| <b>Total</b> | <b>5327</b>      | <b>240</b>       | <b>3250</b>  | <b>1518</b> | <b>459</b>          | <b>1541</b> | <b>1222</b> | <b>61</b> | <b>1266</b>          | <b>14884</b> |
| Percentage   | 35.79            | 1.61             | 21.84        | 10.20       | 3.08                | 10.35       | 8.21        | 0.41      | 8.51                 | 100.00       |

Source: Census Survey Data, December 2017 – July 2018

The following table provide sources of income for non-title holder

**Table 3-30: Source of income Non-Title Holder (NTH)**

| District  | Source of Income NTH |                  |              |          |                     |        |       |         |                      | Total |
|-----------|----------------------|------------------|--------------|----------|---------------------|--------|-------|---------|----------------------|-------|
|           | Agriculture          | Animal Husbandry | Job/ service | Business | Agricultural labour | Labour | Other | Refusal | More than one source |       |
| Ahmedabad | 3                    | 0                | 89           | 50       | 2                   | 471    | 14    | 9       | 6                    | 644   |
| Kheda     | 12                   | 3                | 1            | 0        | 0                   | 0      | 0     | 27      | 0                    | 43    |
| Anand     | 7                    | 1                | 2            | 3        | 1                   | 1      | 0     | 11      | 0                    | 26    |



| District          | Source of Income NTH |                  |              |              |                     |              |              |              |                      | Total       |
|-------------------|----------------------|------------------|--------------|--------------|---------------------|--------------|--------------|--------------|----------------------|-------------|
|                   | Agriculture          | Animal Husbandry | Job/ service | Business     | Agricultural labour | Labour       | Other        | Refusal      | More than one source |             |
| Vadodara          | 9                    | 4                | 218          | 37           | 2                   | 69           | 49           | 44           | 18                   | 450         |
| Bharuch           | 15                   | 1                | 21           | 1            | 5                   | 1            | 5            | 5            | 0                    | 54          |
| Surat             | 0                    | 0                | 0            | 0            | 0                   | 0            | 0            | 55           | 0                    | 55          |
| Navsari           | 6                    | 1                | 2            | 0            | 0                   | 2            | 15           | 28           | 3                    | 57          |
| Valsad            | 18                   | 0                | 256          | 38           | 14                  | 52           | 32           | 2            | 13                   | 425         |
| Palghar           | 48                   | 0                | 865          | 363          | 38                  | 169          | 315          | 475          | 75                   | 2348        |
| Thane             | 0                    | 0                | 215          | 113          | 0                   | 0            | 68           | 53           | 0                    | 449         |
| DNH               | 0                    | 0                | 7            | 5            | 6                   | 7            | 2            | 1            | 0                    | 28          |
| <b>Total</b>      | <b>118</b>           | <b>10</b>        | <b>1676</b>  | <b>610</b>   | <b>68</b>           | <b>772</b>   | <b>500</b>   | <b>710</b>   | <b>115</b>           | <b>4579</b> |
| <b>Percentage</b> | <b>2.58</b>          | <b>0.22</b>      | <b>36.59</b> | <b>13.32</b> | <b>1.49</b>         | <b>16.86</b> | <b>10.93</b> | <b>15.51</b> | <b>2.51</b>          | <b>100</b>  |

Source: Census Survey Data, December 2017 – July 2018

## Expenditure Pattern

Information collected during census survey on expenditure pattern of PAHs indicates that monthly expenditure of most of the households (30.5%) lie in the range of INR 5000-10,000, followed by 30% in the range of INR 10,000-20,000. 3.74% PAHs refused to provide information on the month expenditure of their households. Table 3-31 provides district wise information on the monthly expenditure of the households.

**Table 3-31: Monthly Expenditure for PAHs**

| Particulars       | Monthly Expenditure of PAHs (INR) |              |              |              |              |                  | Refused     | Total         |
|-------------------|-----------------------------------|--------------|--------------|--------------|--------------|------------------|-------------|---------------|
|                   | Less than 5000                    | 5000-10000   | 10000-20000  | 20000-50000  | 50000-1 lakh | more than 1 lakh |             |               |
| Ahmedabad         | 120                               | 321          | 398          | 62           | 14           | 11               | 2           | 928           |
| Kheda             | 66                                | 239          | 347          | 87           | 34           | 10               | 0           | 783           |
| Anand             | 301                               | 302          | 130          | 121          | 22           | 13               | 12          | 901           |
| Vadodara          | 254                               | 467          | 623          | 344          | 60           | 23               | 57          | 1828          |
| Bharuch           | 224                               | 352          | 204          | 149          | 31           | 15               | 40          | 1015          |
| Surat             | 64                                | 234          | 171          | 79           | 27           | 31               | 33          | 639           |
| Navsari           | 266                               | 254          | 220          | 186          | 33           | 18               | 68          | 1045          |
| Valsad            | 301                               | 645          | 589          | 349          | 85           | 23               | 54          | 2046          |
| Palghar           | 868                               | 1223         | 1558         | 465          | 73           | 24               | 185         | 4396          |
| Thane             | 185                               | 440          | 237          | 93           | 9            | 99               | 103         | 1166          |
| DNH               | 14                                | 61           | 32           | 24           | 2            | 1                | 3           | 137           |
| <b>Total</b>      | <b>2663</b>                       | <b>4538</b>  | <b>4509</b>  | <b>1959</b>  | <b>390</b>   | <b>268</b>       | <b>557</b>  | <b>14884</b>  |
| <b>Percentage</b> | <b>17.89</b>                      | <b>30.49</b> | <b>30.29</b> | <b>13.16</b> | <b>2.62</b>  | <b>1.80</b>      | <b>3.74</b> | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

### 3.3.5 PAHs Access to Basic Social Infrastructure and Public Services

Detailed information was collected from all the PAHs with respect to access to drinking water and sanitation facilities, the source of light, available cooking medium during the census survey. The results from the survey are presented in the following section.

#### Source of Drinking Water

As per the information collected from the PAHs, majority of the households have access to tap water for drinking. Survey data indicates that 8,852 PAHs (59%) have access to drinking water through tap water supply, 2064 PAHs (14%) use hand pumps, 636 PAHs (4%) draw water from well, water from stream/ pond and other sources for drinking forms minor part of PAHs. Table 3-32 provides details on district wise source of drinking water.

**Table 3-32: Source of Drinking water for PAHs**

| District  | Source of drinking water |          |      |              |        | more than one | Total |
|-----------|--------------------------|----------|------|--------------|--------|---------------|-------|
|           | Tap water supply         | Handpump | Well | Stream/ Pond | Others |               |       |
| Ahmedabad | 702                      | 75       | 5    | 9            | 137    | 0             | 928   |
| Kheda     | 598                      | 24       | 129  | 4            | 23     | 5             | 783   |
| Anand     | 753                      | 39       | 86   | 2            | 18     | 3             | 901   |
| Vadodara  | 1073                     | 142      | 10   | 2            | 598    | 3             | 1828  |
| Bharuch   | 892                      | 55       | 10   | 5            | 48     | 5             | 1015  |
| Surat     | 473                      | 23       | 37   | 7            | 99     | 0             | 639   |
| Navsari   | 782                      | 63       | 19   | 0            | 169    | 12            | 1045  |

| District          | Source of drinking water |              |             |              |              | more than one | Total         |
|-------------------|--------------------------|--------------|-------------|--------------|--------------|---------------|---------------|
|                   | Tap water supply         | Handpump     | Well        | Stream/ Pond | Others       |               |               |
| Valsad            | 870                      | 495          | 96          | 2            | 568          | 15            | 2046          |
| Palghar           | 1676                     | 1085         | 199         | 17           | 1380         | 39            | 4396          |
| Thane             | 961                      | 58           | 43          | 2            | 34           | 68            | 1166          |
| DNH               | 72                       | 5            | 2           | 0            | 58           | 0             | 137           |
| <b>Total</b>      | <b>8852</b>              | <b>2064</b>  | <b>636</b>  | <b>50</b>    | <b>3132</b>  | <b>150</b>    | <b>14884</b>  |
| <b>Percentage</b> | <b>59.47</b>             | <b>13.87</b> | <b>4.27</b> | <b>0.34</b>  | <b>21.04</b> | <b>1.01</b>   | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

## Sanitation Status

Census survey indicated that only 86% PAHs have access to toilets and 14% of the PAHs still defecate in open. For PAHs with toilets, approximately 58% have individual pucca toilets within the households and 4% have Kutcha toilets and around 23% use community toilets. Detail status on district wise access to sanitation facilities is provided in Table 3-33.

**Table 3-33: Sanitation Status for PAHs**

| District          | Sanitation Status |                     |             |                 | More than one source | Total         |
|-------------------|-------------------|---------------------|-------------|-----------------|----------------------|---------------|
|                   | Community Toilet  | Flush/ Pucca Toilet | Kutcha Pit  | Open defecation |                      |               |
| Ahmedabad         | 235               | 384                 | 61          | 248             | 0                    | 928           |
| Kheda             | 93                | 504                 | 26          | 159             | 1                    | 783           |
| Anand             | 150               | 572                 | 30          | 146             | 3                    | 901           |
| Vadodara          | 149               | 1606                | 26          | 42              | 5                    | 1828          |
| Bharuch           | 122               | 698                 | 160         | 34              | 1                    | 1015          |
| Surat             | 180               | 380                 | 0           | 79              | 0                    | 639           |
| Navsari           | 71                | 876                 | 21          | 71              | 6                    | 1045          |
| Valsad            | 235               | 1440                | 267         | 98              | 6                    | 2046          |
| Palghar           | 1867              | 1349                | 8           | 1146            | 26                   | 4396          |
| Thane             | 372               | 712                 | 18          | 55              | 9                    | 1166          |
| DNH               | 5                 | 95                  | 27          | 10              | 0                    | 137           |
| <b>Total</b>      | <b>3479</b>       | <b>8616</b>         | <b>644</b>  | <b>2088</b>     | <b>57</b>            | <b>14884</b>  |
| <b>Percentage</b> | <b>23.37</b>      | <b>57.89</b>        | <b>4.33</b> | <b>14.03</b>    | <b>0.38</b>          | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

## Availability of bathing facility

Table 3-34 provides details on the status of bathroom available with the household. Census Survey data indicates that there are approximately 13% PAHs have do have bathroom within their premises, 59% have bathroom within the premises, 19% use bathroom outside the premises and balance PAH use community bathroom or bathe in open areas.

**Table 3-34: Availability of bathing facilities for PAHs**

| District          | No bathroom  | Status of Bathroom |              |             |             | more than one source | Total         |
|-------------------|--------------|--------------------|--------------|-------------|-------------|----------------------|---------------|
|                   |              | Inside             | Outside      | Community   | Open area   |                      |               |
| Ahmedabad         | 377          | 269                | 182          | 98          | 0           | 2                    | 928           |
| Kheda             | 55           | 355                | 248          | 61          | 63          | 1                    | 783           |
| Anand             | 14           | 555                | 220          | 74          | 22          | 16                   | 901           |
| Vadodara          | 57           | 1167               | 335          | 148         | 95          | 26                   | 1828          |
| Bharuch           | 0            | 425                | 522          | -60         | 99          | 29                   | 1015          |
| Surat             | 103          | 377                | 8            | 8           | 143         | 0                    | 639           |
| Navsari           | 39           | 945                | 34           | 4           | 18          | 5                    | 1045          |
| Valsad            | 78           | 818                | 1060         | 8           | 67          | 15                   | 2046          |
| Palghar           | 1160         | 2869               | 93           | 6           | 259         | 9                    | 4396          |
| Thane             | 89           | 959                | 78           | 6           | 34          | 0                    | 1166          |
| DNH               | 0            | 51                 | 71           | 1           | 14          | 0                    | 137           |
| <b>Total</b>      | <b>1972</b>  | <b>8790</b>        | <b>2851</b>  | <b>354</b>  | <b>814</b>  | <b>103</b>           | <b>14884</b>  |
| <b>Percentage</b> | <b>13.25</b> | <b>59.06</b>       | <b>19.15</b> | <b>2.38</b> | <b>5.47</b> | <b>0.69</b>          | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

### Electricity and Source of lighting

Assessment on electricity and source of lighting during the census survey indicated 87% PAHs have access to electricity which is the source of light for them and only 2.32% use kerosene as source of lighting. Approximately 1% of PAHs use more than one source of light in their houses. Table 3-35 provides details on district wise source of light for PAHs for the project.

**Table 3-35: Electricity and Source of light for PAHs**

| District          | Source of lighting |             |             |              |             | More than One Sources | Total         |
|-------------------|--------------------|-------------|-------------|--------------|-------------|-----------------------|---------------|
|                   | Electricity        | Kerosene    | Battery     | Solar Energy | Others      |                       |               |
| Ahmedabad         | 761                | 61          | 77          | 2            | 20          | 7                     | 928           |
| Kheda             | 710                | 30          | 1           | 0            | 8           | 34                    | 783           |
| Anand             | 863                | 17          | 6           | 1            | 5           | 9                     | 901           |
| Vadodara          | 1816               | 6           | 2           | 0            | 1           | 3                     | 1828          |
| Bharuch           | 989                | 10          | 5           | 0            | 7           | 4                     | 1015          |
| Surat             | 588                | 25          | 14          | 4            | 8           | 0                     | 639           |
| Navsari           | 1033               | 5           | 0           | 0            | 5           | 2                     | 1045          |
| Valsad            | 2013               | 18          | 6           | 0            | 6           | 3                     | 2046          |
| Palghar           | 2980               | 155         | 1           | 0            | 1232        | 28                    | 4396          |
| Thane             | 1086               | 18          | 5           | 0            | 15          | 42                    | 1166          |
| DNH               | 128                | 0           | 0           | 0            | 6           | 3                     | 137           |
| <b>Total</b>      | <b>12967</b>       | <b>345</b>  | <b>117</b>  | <b>7</b>     | <b>1313</b> | <b>135</b>            | <b>14884</b>  |
| <b>Percentage</b> | <b>87.12</b>       | <b>2.32</b> | <b>0.79</b> | <b>0.05</b>  | <b>8.82</b> | <b>0.91</b>           | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

## Cooking medium used by the Households

Assessment on the cooking medium used by the PAHs during the census survey indicated that 77% of the PAH use only LPG for cooking, 11% use only firewood for cooking, 3% use kerosene and balance use leaf straw or other medium for cooking. 3% PAH have reported use more than one source. Table 3-36 provides details on the Cooking medium used by PAHs.

**Table 3-36: Cooking medium used by PAHs**

| District          | Cooking medium used by the households |              |             |             |             |                      | Total         |
|-------------------|---------------------------------------|--------------|-------------|-------------|-------------|----------------------|---------------|
|                   | LPG                                   | Firewood     | Kerosene    | Leaf Straw  | Others      | more than one source |               |
| Ahmedabad         | 660                                   | 189          | 46          | 3           | 10          | 20                   | 928           |
| Kheda             | 417                                   | 274          | 8           | 1           | 6           | 77                   | 783           |
| Anand             | 496                                   | 293          | 0           | 0           | 0           | 112                  | 901           |
| Vadodara          | 1660                                  | 123          | 12          | 1           | 4           | 28                   | 1828          |
| Bharuch           | 853                                   | 115          | 9           | 0           | 6           | 32                   | 1015          |
| Surat             | 555                                   | 54           | 18          | 4           | 8           | 0                    | 639           |
| Navsari           | 872                                   | 128          | 8           | 0           | 19          | 18                   | 1045          |
| Valsad            | 1673                                  | 283          | 17          | 7           | 2           | 64                   | 2046          |
| Palghar           | 3081                                  | 204          | 347         | 0           | 725         | 39                   | 4396          |
| Thane             | 1064                                  | 22           | 50          | 1           | 0           | 29                   | 1166          |
| DNH               | 92                                    | 17           | 0           | 0           | 4           | 24                   | 137           |
| <b>Total</b>      | <b>11423</b>                          | <b>1702</b>  | <b>515</b>  | <b>17</b>   | <b>784</b>  | <b>443</b>           | <b>14884</b>  |
| <b>Percentage</b> | <b>76.75</b>                          | <b>11.44</b> | <b>3.46</b> | <b>0.11</b> | <b>5.27</b> | <b>2.98</b>          | <b>100.00</b> |

Source: Census Survey Data, December 2017 – July 2018

### 3.3.6 Household Assets

Detailed information was collected on household assets through socio-economic survey. The socio-economic survey was conducted for 20% (2977 PAH) of the PAH covered under the census survey.

#### Household items

Table 3-37 presents information on ownership of various household items among PAHs. The most common household item is television, followed by fridge and LPG connection.

**Table 3-37: Household items owned by PAHs**

| District  | Households Item Owned by PAHs (%) |        |                |           |        |                          |        |
|-----------|-----------------------------------|--------|----------------|-----------|--------|--------------------------|--------|
|           | TV                                | Fridge | LPG Connection | Microwave | Geyser | Grain storing facilities | Others |
| Ahmedabad | 36.76                             | 26.47  | 22.06          | 1.47      | 0.00   | 13.24                    | 0.00   |
| Kheda     | 32.62                             | 21.23  | 27.38          | 4.92      | 3.38   | 9.54                     | 0.92   |
| Anand     | 37.00                             | 28.70  | 23.32          | 1.12      | 1.79   | 5.61                     | 2.47   |
| Vadodara  | 27.35                             | 25.81  | 26.52          | 4.74      | 5.86   | 8.94                     | 0.77   |
| Bharuch   | 32.19                             | 31.62  | 26.50          | 3.42      | 2.28   | 3.70                     | 0.28   |
| Surat     | 29.87                             | 26.11  | 26.03          | 4.50      | 4.79   | 7.82                     | 0.88   |
| Navsari   | 33.99                             | 26.64  | 25.27          | 4.11      | 3.04   | 5.97                     | 0.98   |
| Valsad    | 34.76                             | 28.94  | 28.21          | 1.92      | 2.11   | 2.91                     | 1.15   |
| Palghar   | 29.66                             | 27.93  | 29.35          | 3.98      | 3.81   | 4.60                     | 0.66   |
| Thane     | 25.00                             | 22.92  | 22.92          | 12.50     | 16.67  | 0.00                     | 0.00   |

| District          | Households Item Owned by PAHs (%) |              |                |             |             |                          |             |
|-------------------|-----------------------------------|--------------|----------------|-------------|-------------|--------------------------|-------------|
|                   | TV                                | Fridge       | LPG Connection | Microwave   | Geyser      | Grain storing facilities | Others      |
| DNH               | 35.42                             | 22.92        | 20.83          | 6.25        | 6.25        | 8.33                     | 0.00        |
| <b>Percentage</b> | <b>31.59</b>                      | <b>27.36</b> | <b>27.20</b>   | <b>3.58</b> | <b>3.66</b> | <b>5.68</b>              | <b>0.93</b> |

Source: Socio Economic Survey Data, December 2017 – July 2018

## Livestock Details

The livestock ownership pattern for PAHs for each district is provided in

Table 3-38. The livestock owned by PAHs generally include buffalo and cows; with 78% PAH owns buffalos and 49% PAHs owns cows.

**Table 3-38: Livestock Holding of PAHs**

| District          | Livestock Holding of PAHs (%) |             |              |             |             |              |             |
|-------------------|-------------------------------|-------------|--------------|-------------|-------------|--------------|-------------|
|                   | Cow                           | Ox          | Buffalo      | Camel       | Sheep       | Goat         | Pig         |
| Ahmedabad         | 0.00                          | 0.00        | 100.00       | 0.00        | 0.00        | 0.00         | 0.00        |
| Kheda             | 29.49                         | 1.28        | 64.10        | 0.00        | 0.00        | 3.85         | 1.28        |
| Anand             | 25.20                         | 0.00        | 72.44        | 0.00        | 0.00        | 1.57         | 0.79        |
| Vadodara          | 23.02                         | 3.17        | 61.11        | 0.00        | 7.94        | 4.76         | 0.00        |
| Bharuch           | 40.28                         | 5.56        | 37.50        | 0.00        | 0.00        | 15.28        | 1.39        |
| Surat             | 63.77                         | 0.00        | 27.54        | 0.00        | 0.00        | 8.70         | 0.00        |
| Navsari           | 39.41                         | 0.49        | 55.67        | 0.99        | 0.00        | 2.96         | 0.49        |
| Valsad            | 35.42                         | 3.47        | 43.06        | 2.78        | 0.69        | 11.81        | 2.78        |
| Palghar           | 26.73                         | 10.26       | 47.49        | 0.00        | 6.68        | 8.59         | 0.24        |
| Thane             | 0.00                          | 0.00        | 0.00         | 0.00        | 0.00        | 0.00         | 0.00        |
| DNH               | 100.00                        | 0.00        | 0.00         | 0.00        | 0.00        | 0.00         | 0.00        |
| <b>Percentage</b> | <b>48.96</b>                  | <b>7.06</b> | <b>78.08</b> | <b>0.73</b> | <b>4.75</b> | <b>10.60</b> | <b>1.10</b> |

Source: Socio Economic Survey Data, Dec 2017 – July 2018

## Agricultural Implements

The details on the agricultural implement ownership for each district is provided in Table 3-39. 33% of the surveyed PAHs reported ownership of tractor and 13% reported ownership of power tiller. In addition, PAHs also reported ownership of other agricultural implements. Ownership of agricultural implements is low in Ahmedabad and Vadodara, where the alignment is passing through urban areas.

**Table 3-39: Agricultural Implements of PAHs**

| District          | Agricultural implements owned by PAHs (%) |              |             |              |                |              |               |
|-------------------|---|--------------|-------------|--------------|----------------|--------------|---------------|
|                   | Tractor                                   | Power Tiller | Thresher    | Harvester    | Genset Sprayer | Pump Set     | Electric Pump |
| Ahmedabad         | 50.00                                     | 0.00         | 0.00        | 0.00         | 0.00           | 0.00         | 50.00         |
| Kheda             | 28.57                                     | 13.10        | 8.33        | 7.14         | 1.19           | 15.48        | 26.19         |
| Anand             | 25.81                                     | 4.84         | 4.84        | 3.23         | 0.00           | 37.10        | 24.19         |
| Vadodara          | 13.79                                     | 3.45         | 3.45        | 1.72         | 3.45           | 39.66        | 34.48         |
| Bharuch           | 37.74                                     | 9.43         | 9.43        | 3.77         | 5.66           | 15.09        | 18.87         |
| Surat             | 12.71                                     | 4.97         | 2.21        | 1.66         | 1.10           | 13.81        | 12.71         |
| Navsari           | 31.62                                     | 12.82        | 5.13        | 4.27         | 0.85           | 23.08        | 22.22         |
| Valsad            | 31.40                                     | 13.22        | 5.79        | 11.57        | 6.61           | 9.09         | 22.31         |
| Palghar           | 18.39                                     | 8.36         | 5.35        | 15.05        | 7.36           | 27.42        | 18.06         |
| Thane             | 50.00                                     | 0.00         | 0.00        | 0.00         | 0.00           | 50.00        | 0.00          |
| DNH               | 25.00                                     | 0.00         | 0.00        | 0.00         | 0.00           | 0.00         | 75.00         |
| <b>Percentage</b> | <b>33.04</b>                              | <b>12.68</b> | <b>7.37</b> | <b>11.50</b> | <b>5.75</b>    | <b>31.42</b> | <b>29.65</b>  |

Source: Socio Economic Survey Data, Dec 2017 – July 2018

### Vehicular Assets

The ownership of vehicular assets among the PAHs is provided in Table 3-40. The vehicle ownership pattern indicates that 59.17% of the PAHs with motorized 2 wheelers and followed by 26.75% of PAHs owns a cycle.

**Table 3-40: Vehicular Assets owned by PAHs**

| District          | Other assets Owned by PAHs (%) |              |              |              |             |             |              |             |
|-------------------|--------------------------------|--------------|--------------|--------------|-------------|-------------|--------------|-------------|
|                   | Cycle                          | Motorbike    | Scooter      | Jeep/car     | Truck       | Bus         | Bullock Cart | Other       |
| Ahmedabad         | 22.5                           | 22.5         | 28           | 23           | 2           | 0.5         | 0.5          | 1           |
| Kheda             | 20.59                          | 26.47        | 32.94        | 13.53        | 2.35        | 2.35        | 0.59         | 1.18        |
| Anand             | 46.99                          | 35.74        | 9.04         | 6.83         | 0.60        | 0.00        | 0.60         | 0.20        |
| Vadodara          | 17.13                          | 50.54        | 9.64         | 17.13        | 0.43        | 0.21        | 0.00         | 4.93        |
| Bharuch           | 15.36                          | 46.08        | 19.11        | 15.36        | 0.00        | 0.34        | 0.34         | 3.41        |
| Surat             | 17.83                          | 26.36        | 26.36        | 26.36        | 0.78        | 0.00        | 0.00         | 2.33        |
| Navsari           | 34.63                          | 43.15        | 11.63        | 8.79         | 0.26        | 0.00        | 1.03         | 0.52        |
| Valsad            | 20.96                          | 55.28        | 12.11        | 10.40        | 0.31        | 0.16        | 0.16         | 0.62        |
| Palghar           | 31.49                          | 51.45        | 11.34        | 4.08         | 0.18        | 0.00        | 0.45         | 1.00        |
| Thane             | 18.98                          | 41.69        | 22.71        | 11.53        | 0.34        | 0.34        | 0.34         | 4.07        |
| DNH               | 18.78                          | 18.78        | 30.94        | 18.78        | 12.71       | 0.00        | 0.00         | 0.00        |
| <b>Percentage</b> | <b>26.75</b>                   | <b>43.98</b> | <b>15.19</b> | <b>10.90</b> | <b>0.98</b> | <b>0.21</b> | <b>0.39</b>  | <b>1.60</b> |

Source: Socio Economic Survey Data, Dec 2017 – July 2018

### 3.3.7 Perception about the project

Census survey also captured perception of the PAHs on awareness on the project, perceived benefits from the project and concerns from the project. The details of the survey are presented in the following section.

#### Awareness about High Speed Rail

During the census survey, majority of the PAHs (94%) expressed their awareness about the high-speed rail project; whereas only 6% expressed no awareness on the project. The 13,936 PAHs aware of the project provided further details on the mode of awareness for the project; 19% became aware through newspaper, 18% became aware through word of mouth from other villagers and 16% of PAHs indicated that they became aware about the project from the government officials. Table 3-41 provides details on the awareness status of the projects among PAHs.

**Table 3-41: Awareness About Project Activity by PAHs**

| Particulars       | Awareness about high speed rail |             | Mode of Awareness |              |              |                      |             |                      | Total         |
|-------------------|---------------------------------|-------------|-------------------|--------------|--------------|----------------------|-------------|----------------------|---------------|
|                   | YES                             | NO          | TV                | Newspaper    | Villagers    | Government officials | Others      | More Than One Source |               |
| Ahmedabad         | 860                             | 68          | 111               | 292          | 174          | 254                  | 2           | 27                   | 860           |
| Kheda             | 682                             | 101         | 126               | 133          | 128          | 16                   | 279         | 0                    | 682           |
| Anand             | 838                             | 63          | 119               | 258          | 137          | 101                  | 201         | 22                   | 838           |
| Vadodara          | 1762                            | 66          | 389               | 388          | 219          | 281                  | 35          | 450                  | 1762          |
| Bharuch           | 1006                            | 9           | 89                | 222          | 313          | 270                  | 84          | 28                   | 1006          |
| Surat             | 534                             | 105         | 123               | 162          | 184          | 38                   | 6           | 21                   | 534           |
| Navsari           | 1031                            | 14          | 109               | 192          | 162          | 273                  | 155         | 140                  | 1031          |
| Valsad            | 2006                            | 40          | 156               | 330          | 399          | 961                  | 55          | 105                  | 2006          |
| Palghar           | 4230                            | 166         | 2823              | 511          | 560          | 13                   | 304         | 19                   | 4230          |
| Thane             | 891                             | 275         | 474               | 176          | 166          | 31                   | 8           | 36                   | 891           |
| DNH               | 96                              | 41          | 14                | 5            | 16           | 10                   | 51          | 0                    | 96            |
| <b>Total</b>      | <b>13936</b>                    | <b>948</b>  | <b>4533</b>       | <b>2669</b>  | <b>2458</b>  | <b>2248</b>          | <b>1180</b> | <b>848</b>           | <b>13936</b>  |
| <b>Percentage</b> | <b>93.63</b>                    | <b>6.37</b> | <b>32.53</b>      | <b>19.15</b> | <b>17.64</b> | <b>16.13</b>         | <b>8.47</b> | <b>6.08</b>          | <b>100.00</b> |

Source: Census Survey Data, Dec 2017 – July 2018



## Perceived Benefits from the Project

Census survey also sought perception of the PAHs about the perceived benefits from the project. During the time of census survey, some of the PAPs were not aware on the benefits of the project and almost 40% PAHs initially did not perceive any benefit from the project and 25% indicated that the project would accrue positive benefits to them. However, the perception has changed over time and people have associated better with the project. Table 3-42 provides details on the benefits perceived on the project.

**Table 3-42: Benefits Perceived by PAH from the Project**

| District          | Perceived Benefit about High Speed Rail |              |              | Total        |
|-------------------|---|--------------|--------------|--------------|
|                   | Yes                                     | No           | Do not Know  |              |
| Ahmedabad         | 149                                     | 482          | 297          | 928          |
| Kheda             | 111                                     | 585          | 87           | 783          |
| Anand             | 170                                     | 581          | 150          | 901          |
| Vadodara          | 1070                                    | 508          | 250          | 1828         |
| Bharuch           | 317                                     | 456          | 242          | 1015         |
| Surat             | 221                                     | 231          | 187          | 639          |
| Navsari           | 206                                     | 583          | 256          | 1045         |
| Valsad            | 359                                     | 1420         | 267          | 2046         |
| Palghar           | 791                                     | 705          | 2900         | 4396         |
| Thane             | 362                                     | 332          | 472          | 1166         |
| DNH               | 37                                      | 71           | 29           | 137          |
| <b>Total</b>      | <b>3793</b>                             | <b>5954</b>  | <b>5137</b>  | <b>14884</b> |
| <b>Percentage</b> | <b>25.48</b>                            | <b>40.00</b> | <b>34.51</b> | <b>100</b>   |

Source: Census Survey Data, Dec 2017 – July 2018

The initial concerns on the project were related to loss of employment and non-transparency in getting the compensation. However, during later consultations and second stakeholder meeting, the awareness campaign by NHSRCL and RAP Consultant and series of informal consultations targeted on providing information on entitlements and transparency in grievance redressal. This has helped in changing the perception of PAPs evident from increase in census survey results confirming the willingness of people to support the project.

## Concerns on High Speed Rail project

Approximately 59.8% PAHs have concerns on the project and only 26.8% PAHs indicated that the project will have no concerns. Details of the PAHs expressing concerns are provided in Table 3-43.

**Table 3-43: Concerns expressed by PAHs on the project**

| District          | Concerns on High Speed Rail project |              |              | Total         |
|-------------------|-------------------------------------|--------------|--------------|---------------|
|                   | Yes                                 | No           | Do not Know  |               |
| Ahmedabad         | 366                                 | 299          | 263          | 928           |
| Kheda             | 486                                 | 238          | 59           | 783           |
| Anand             | 480                                 | 295          | 126          | 901           |
| Vadodara          | 1501                                | 279          | 48           | 1828          |
| Bharuch           | 558                                 | 245          | 212          | 1015          |
| Surat             | 283                                 | 235          | 121          | 639           |
| Navsari           | 637                                 | 282          | 126          | 1045          |
| Valsad            | 1266                                | 571          | 209          | 2046          |
| Palghar           | 2861                                | 1000         | 535          | 4396          |
| Thane             | 378                                 | 513          | 275          | 1166          |
| DNH               | 78                                  | 30           | 29           | 137           |
| <b>Total</b>      | <b>8894</b>                         | <b>3987</b>  | <b>2003</b>  | <b>14884</b>  |
| <b>Percentage</b> | <b>59.76</b>                        | <b>26.79</b> | <b>13.46</b> | <b>100.00</b> |

Source: Census Survey Data, Dec 2017 – July 2018

The type of concerns expressed by the PAHs included loss of income, pressure on existing infrastructure, the natural addition of population and conflict situations arising thereof. These were the concerns shown by the PAHs during initial stages of the project. However, after regular consultations at village and tehsil levels, the concerns expressed initially were reduced and the acceptability has increased for the project.

### 3.3.8 Project Induced Displacement

#### Displacement location in case of displacement

PAHs were asked about the preferred displacement location in case of displacement. However, actual displacement may happen for PAHs with structures directly impacted. Table 3-44 provides details on the preferred displacement location of PAHs with structures impacted.

**Table 3-44: Displacement Location for PAHs**

| District          | Displacement location in case of displacement |                     |               |                          |              | More than one | Total         |
|-------------------|---|---------------------|---------------|--------------------------|--------------|---------------|---------------|
|                   | Same land plot                                | Same community area | Same district | Location does not matter | Others       |               |               |
| Ahmedabad         | 195   | 478                 | 81            | 84                       | 46           | 44            | 928           |
| Kheda             | 199   | 383                 | 114           | 46                       | 41           | 0             | 783           |
| Anand             | 387   | 290                 | 101           | 74                       | 30           | 19            | 901           |
| Vadodara          | 70  | 345                 | 249           | 48                       | 947          | 169           | 1828          |
| Bharuch           | 106   | 277                 | 43            | 11                       | 577          | 1             | 1015          |
| Surat             | 63  | 365                 | 187           | 4                        | 13           | 7             | 639           |
| Navsari           | 157   | 372                 | 154           | 92                       | 270          | 0             | 1045          |
| Valsad            | 768   | 435                 | 296           | 79                       | 464          | 4             | 2046          |
| Palghar           | 255   | 2687                | 857           | 28                       | 471          | 98            | 4396          |
| Thane             | 182   | 245                 | 407           | 74                       | 216          | 42            | 1166          |
| DNH               | 28  | 29                  | 9             | 2                        | 69           | 0             | 137           |
| <b>Total</b>      | <b>2410</b>                                   | <b>5906</b>         | <b>2498</b>   | <b>542</b>               | <b>3144</b>  | <b>384</b>    | <b>14884</b>  |
| <b>Percentage</b> | <b>16.19</b>                                  | <b>39.68</b>        | <b>16.78</b>  | <b>3.64</b>              | <b>21.12</b> | <b>2.58</b>   | <b>100.00</b> |

Source: Census Survey Data, Dec 2017 – July 2018

The assessment was done on the history of previous displacement cases for all the PAHs and it was indicated that majority (98%) PAHs did not have a history of previous displacement. Only 2% of household has been displaced earlier. The details on the history of displacement are provided in Table 3-45.

**Table 3-45: History of Displacement**

| District          | History of previous displacements |              | Total         |
|-------------------|-----------------------------------|--------------|---------------|
|                   | Yes                               | No           |               |
| Ahmedabad         | 0                                 | 928          | 928           |
| Kheda             | 2                                 | 781          | 783           |
| Anand             | 13                                | 888          | 901           |
| Vadodara          | 13                                | 1815         | 1828          |
| Bharuch           | 27                                | 988          | 1015          |
| Surat             | 0                                 | 639          | 639           |
| Navsari           | 20                                | 1025         | 1045          |
| Valsad            | 28                                | 2018         | 2046          |
| Palghar           | 122                               | 4274         | 4396          |
| Thane             | 54                                | 1112         | 1166          |
| DNH               | 26                                | 111          | 137           |
| <b>Total</b>      | <b>305</b>                        | <b>14579</b> | <b>14884</b>  |
| <b>Percentage</b> | <b>2.05</b>                       | <b>97.95</b> | <b>100.00</b> |

Source: Census Survey Data, Dec 2017 – July 2018

### Type of R&R assistance suggested

Details on the type of R&R assistance sought by PAH were discussed during the census survey. Most of the PAHs (77%) of PAHs indicated that cash grant equivalent to loss as the most preferred mode of R&R assistant and only 8% of the PAH wanted training for self-employment. Details on the type of R&R assistance sought by PAH is provided in Table 3-46.

**Table 3-46: Resettlement & Rehabilitation Assistance Suggested by PAHs<sup>4</sup>**

| District          | R&R Assistance suggested     |                                   |              |               | Total         |
|-------------------|------------------------------|-----------------------------------|--------------|---------------|---------------|
|                   | Training for self-employment | Cash Grant equivalent to the loss | Others       | More than one |               |
| Ahmedabad         | 59                           | 738                               | 106          | 25            | 928           |
| Kheda             | 46                           | 609                               | 128          | 0             | 783           |
| Anand             | 107                          | 648                               | 95           | 51            | 901           |
| Vadodara          | 59                           | 1347                              | 137          | 285           | 1828          |
| Bharuch           | 111                          | 802                               | 67           | 35            | 1015          |
| Surat             | 187                          | 420                               | 21           | 11            | 639           |
| Navsari           | 82                           | 869                               | 94           | 0             | 1045          |
| Valsad            | 86                           | 1772                              | 145          | 43            | 2046          |
| Palghar           | 245                          | 3312                              | 733          | 106           | 4396          |
| Thane             | 199                          | 855                               | 107          | 5             | 1166          |
| DNH               | 17                           | 76                                | 44           | 0             | 137           |
| <b>Total</b>      | <b>1198</b>                  | <b>11448</b>                      | <b>1677</b>  | <b>561</b>    | <b>14884</b>  |
| <b>Percentage</b> | <b>8.05</b>                  | <b>76.91</b>                      | <b>11.27</b> | <b>3.77</b>   | <b>100.00</b> |

Source: Census Survey Data, Dec 2017 – July 2018

<sup>4</sup> The Compensation provisions are prepared as per legal framework of the project which is mainly based on the RFCTLARR Act 2013 and World Bank OP 4.12(Para 12, clause a and b. According to that all linear projects like, Rail, Road etc. are not required to opt Land for Land option. The livelihoods of PAPs are land-based but the land taken for the project is a small fraction of the affected assets and they will continue their livelihood on the remaining land after land acquisition.

## No of PAH to be Relocated

The number of PAHs who need to be relocated is provided in Table 3-47 and also discussed in chapter 6 in detail. The details of the resettlement site to be developed for the physically relocated PAPs is provided in Chapter 6.

**Table 3-47: Number of PAHs who need to be relocated – As on August' 2021**

| SN           | District              | PAH who need to be relocated as per RAP on 10.08.2018 | PAH identified for relocation during RAP Implementation as on 31.08.2021* |
|--------------|-----------------------|---|---|
| 1            | Ahmedabad             | 149   | 190   |
| 2            | Kheda                 | 25  | 121   |
| 3            | Anand                 | 25  | 75  |
| 4            | Vadodara              | 446   | 473   |
| 5            | Bharuch               | 29  | 57  |
| 6            | Surat                 | 49  | 104   |
| 7            | Navsari               | 214   | 87  |
| 8            | Valsad                | 376   | 369   |
| 9            | Palghar               | 485   | 2613  |
| 10           | Thane                 | 30  | 316   |
| 11           | Dadra & Nagar, Haveli | 59  | 45  |
| <b>Total</b> |                       | <b>1887</b>   | <b>4450</b>   |

Source: Census Survey Data, Dec 2017 – July 2018 and updated based on MAHSR JMS Reports received for 295 villages (except two villages in Palghar) and Micro Plan / objection & claim checking by LAO/ R&R administrator as on August' 2021.

\*Note: The number of PAH identified for relocation is based on actual JMS survey (no. has significantly increased in Maharashtra section due to consideration of compensation & RR Assistance for all Title Holders, Encroachers, Squatters, multiple ownership in Gola Plots and partially affected structure use for living was not possible, alignment shift, shifting of station in Vadodara and Thane).

## Anticipation of difficulty after displacement

An assessment was also done for anticipated difficulty after displacement for PAHs. Most of the PAHs (32%) indicated that finding a new source of income was the biggest challenge for them, followed by finding a suitable farmland (14%). The details of difficulties anticipated by PAHs after displacement is provided in Table 3-48.

**Table 3-48: Anticipated difficulty after Displacement as perceived by PAHs**

| District          | Anticipation of difficulty after displacement |                     |                           |                          |  |              |                      | Total         |
|-------------------|---|---------------------|---------------------------|--------------------------|--|--------------|----------------------|---------------|
|                   | Find a new source of Income                   | Finding a new house | finding suitable farmland | finding suitable schools | Access to public facilities/ utilities/ services | others       | More than One Source |               |
| Ahmedabad         | 178   | 474                 | 102                       | 6                        | 6  | 20           | 142                  | 928           |
| Kheda             | 173   | 136                 | 407                       | 38                       | 15   | 5            | 9                    | 783           |
| Anand             | 313   | 167                 | 320                       | 1                        | 4  | 17           | 79                   | 901           |
| Vadodara          | 513   | 130                 | 270                       | 3                        | 128  | 69           | 715                  | 1828          |
| Bharuch           | 438   | 34                  | 215                       | 0                        | 2  | 183          | 143                  | 1015          |
| Surat             | 418   | 77                  | 106                       | 0                        | 6  | 1            | 31                   | 639           |
| Navsari           | 469   | 144                 | 270                       | 7                        | 0  | 152          | 3                    | 1045          |
| Valsad            | 918   | 419                 | 361                       | 6                        | 0  | 28           | 314                  | 2046          |
| Palghar           | 855   | 294                 | 13                        | 4                        | 166  | 2514         | 550                  | 4396          |
| Thane             | 438   | 103                 | 38                        | 34                       | 104  | 324          | 125                  | 1166          |
| DNH               | 17  | 28                  | 16                        | 0                        | 10   | 66           | 0                    | 137           |
| <b>Total</b>      | <b>4730</b>                                   | <b>2006</b>         | <b>2118</b>               | <b>99</b>                | <b>441</b>                                       | <b>3379</b>  | <b>2111</b>          | <b>14884</b>  |
| <b>Percentage</b> | <b>31.78</b>                                  | <b>13.48</b>        | <b>14.23</b>              | <b>0.67</b>              | <b>2.96</b>                                      | <b>22.70</b> | <b>14.18</b>         | <b>100.00</b> |

Source: Census Survey Data, Dec 2017 – July 2018

### 3.4 Community Development Needs

During the village level consultations conducted for the project, a detailed assessment of the community development needs was undertaken for the project and results from the same has been used to develop the entitlement, R &R assistance, and income restoration programme for the community affected by the project. In addition, detail assessment of the community development needs has also been done for the areas with substantial tribal population, since community-level integration for tribal communities is more important as tribal communities are closely knit units.

An Indigenous People Plan and Village Development Plan addressing the needs of the community has been prepared for Palghar district under the project for the villages with the substantial tribal population to improve the basic facilities and create assets for them. For other Schedule V areas, NHSRCL will coordinate with the tribal development officers of the district and state authorities to include the eligible project affected people as part of various tribal development programmes and ensure that they are benefitted from that.

Activities on village development plan in Palghar is being implemented by NHSRCL and Palghar Development Corridor team with support from Office of District Collector, Palghar. The project is being implemented in 73 villages under 4 blocks of Palghar district i.e. Vasai, Palghar, Dahanu, and Talasari. Project Management Unit has been set up to implement various activities under the Village Development Plan (VDP). Palghar Village Development Plan activities will address all the community needs of the villages and facilitate all-round development of the villages in areas related to skill development, health, nutrition, sanitation and basic infrastructure facilities, etc. Details of Village Development Plan are provided in the IPP report prepared for the project.

### 3.5 Stakeholders Consultation and Participation

#### 3.5.1 Stakeholders of the HSR Project

There are multiple stakeholders for the HSR project, which were consulted during various stakeholder consultations. The list of the stakeholders is provided in the following section

| Priority Stakeholders                                  | Description   | Relationship to Project   |
|--|---|---|
| Affected – Community, households, families and persons | Land or asset owners having interest in the project.  | Directly or indirectly affected. Includes communities, households, families, and persons.   |
| Government Depts.                                      | District administration and Line departments  | Departments directly involved in the land acquisition and R & R for the project.  |
| Central Govt.  | MoR and NHSRCL.   | Ownership of the project- Project planning and development, land acquisition, dissemination of information, provision of the R&R budget, engagement of external agencies, disbursement of R&R assistance, the establishment of grievance redressal committee etc. |
| Political parties and Interest groups                  | Political parties, interest or pressure groups including representatives and association of specific stakeholders, NGO/CBO and other interested parties at local levels | May represent some groups and instrumental in influencing the views, opinions, and perception about the project.  |
| Media  | Print and electronic media which may or may not represent some groups and will be key in  | The direct impact which may be responsible for the perception developed about the project by the affected people.   |

| Priority Stakeholders | Description   | Relationship to Project |
|-----------------------|---|-------------------------|
|                       | disseminating information about the project and related activities involving the project. |                         |

### 3.5.2 Methods followed in the Stakeholders Consultation

Stakeholder consultation was carried out at four levels:

1. Consultation at District level
2. Consultation at Tehsil level
3. Consultation at Village level
4. Consultation with group of people (FGD) & individuals

#### **District level consultations:**

District level consultations were conducted for the second stakeholder consultations with the representatives from the district authorities, key government departments, project affected persons, other stakeholders having interest in the project, Non-government organizations, Media, NHSRCL representatives, etc. The information on the district level consultations was given through newspaper advertisements to the wide range of stakeholders directly or indirectly involved in the project. The second stakeholder's consultation was organized at a central place in each district to ensure maximum participation of stakeholders.

The presentation was made in the local language (for each stakeholder consultation) and subsequently the floor was open for participants for seeking clarifications, raising concerns, providing suggestions, etc during the stakeholder consultation meeting. The presentation included project details, alignment details, rehabilitation and rehabilitation principles, entitlement matrix along with compensation disbursement details, etc. Proceedings of the stakeholder's consultations were recorded and video graphed. Minutes of the meeting, attendance sheet, newspaper clipping regarding the consultations and photographs of these meetings were documented refer **Appendix D1**.

The date for the stakeholder's consultation was decided by District Collector. Subsequently, RAP consultant identified venue for stakeholders meetings keeping in view the proximity, accessibility, capacity of the meeting hall (for about 500 participants), public address system and othe facilities accomodating large number of participants. Approval for holding stakeholders consultations at identified venue was obtained from District Administration and NHSRCL.

All the stakeholder meetings were concluded successfully with a vote of thanks from the district administration and NHSRCL. Most of the participants in various stakeholder consultations were satisfied with the answers provided by NHSRCL and the district administration on land acquisition and related process and procedure. NHSRCL and district administration assured that the land acquisition process will be done with full transparency and a helpline shall be made available for any queries from the project affected persons in the future.

#### **Tehsil level consultation:**

Tehsil level stakeholder consultations were carried out for first stakeholder consultation before starting the socio-economic survey. These consultations were held at tehsil level with representation from officials from key Government Departments such as Mamlatdar, Dy.

Mamlatdar, Talati and village representatives like Sarpanch, Dy. Sarpanch and project affected persons. The objective of such consultations was to inform them about the project, its features (such as nature of physical constructions, alignment etc.), expected impacts, policies that govern project-related land acquisitions and R&R benefits such as compensation, information flow, grievance redress mechanism, etc.

Participants included both officials and village representatives. Based on a formal request by NHSRCL concerned Tehsildar invited relevant stakeholders for the consultation (Appendix E). Invitation letters were sent through several channels including elected representative and government official at a village level (Sarpanch and Talati). In addition, advertisement/information in the local newspaper was published for further information to PAPs and other stakeholders. Further, follow up was done either through a direct physical visit to their offices or over the phone on the day or a day prior to the meeting to ensure their participation. Such visits also provided the opportunity to brief the stakeholders about the project and the objective of the proposed stakeholder's consultation.

Stakeholders consultation at tehsil level included a presentation in the Gujarati language in Gujarat and DNH and Marathi in Maharashtra to the participants followed by open discussion and clarifications around queries and concerns raised by event participants.

Proceedings of the stakeholder's consultations/meetings were recorded and a Minutes of Meeting (MoM), attendance sheet and photographs of these meetings were documented refer **Appendix D2**. Stakeholder meetings were concluded with broad consensus from the majority of the participants. The broad agreement of participants is also evident from the fact that further consultations, survey and other major activities of the project viz., RoW marking, conducting JMS, fixing of RoW pillars, etc have been carried out with much ease.

### **Village level consultation**

The community representatives (CRs) of RAP consultant visited each project affected the village multiple times to inform the key opinion leaders about the project activities, affected plots, and likely project impacts. A leaflet comprising of Frequently Asked Questions (FAQs) as approved by NHSRCL was handed over in the meeting to participants (**Appendix F**). The FAQ was prepared in local language for easy understanding of the local population. Minutes of the meeting of all such consultations/interactions have been included in the monthly report.

### **Focused Group Discussion**

Focused group discussion with vulnerable communities as identified during the census and socio-economic survey and key opinion leaders as identified during village level consultation were conducted. The key aspect of such discussion covered development needs to prepare time-bound RAP for PAPs so that they are not worse off than the present socio-economic condition after the implementation of the project. In other words, assist project affected persons in improving their living standards or at least restore their socio-economic conditions with additional assistance to vulnerable groups.

Focus group discussions were conducted as part of the project with identified groups to understand the concerns and needs of the specific groups. The category of PAPs selected for FGD included Women groups, small-scale traders, PAPs from SC & ST categories, etc.



## 4.0 LEGAL AND POLICY FRAMEWORK

A Legal and Policy Framework (LPF) has been prepared by National High-Speed Rail Corporation Limited for the Mumbai-Ahmedabad High Speed Rail Project. This LPF includes purpose and objectives, resettlement and rehabilitation principles, applicable acts, notifications, guidelines, policies, entitlement matrix and approach to be followed in minimizing and mitigating adverse impacts likely to be caused by the project implementation. The compensation and resettlement and rehabilitation assistance to project affected persons shall be provided in accordance with this LPF in letter and spirit.

### 4.1 Purpose and Objective

Approximately 1022.37 hectares of private land area spread across three districts of Maharashtra, eight districts of Gujarat and DNH over a total length of 508.17 km is required for the project. The land is required for construction of elevated rail tracks, construction of road all along for maintenance of rail tracks, railway stations, maintenance depots, parking space, etc. Majority of land is required for construction of elevated rail tracks and road for maintenance purpose i.e., the land width of 13.5 meters for railway tracks and 4 meters for the road. Acquisition of land required for the project will affect properties falling within the Right of Way (RoW) and thereby persons associated with the properties. The acquisition of land will mainly impact agricultural land. The impacts of the project will not be limited to agricultural land but will also affect and displace people residing and/ or operating a business or other activities from the structures that are falling on the RoW. Thus, the project will cause both physical and economic impacts. Therefore, improvements on land will be impacted leading to relocation, disruption of shelter and business, loss of livelihood, etc. The broad impacts likely to be caused due to the proposed project are:

- Loss of agricultural land;
- Severance of land plots;
- Residual land area becoming unviable;
- Loss of structure (full or partial) of Titleholder, Squatter, Encroacher, Occupant;
- Loss of other properties and assets such as boundary walls, hand pumps, tube wells, dug wells, etc,
- Displacement of owners and tenants of both residential and commercial entities,
- Loss of livelihood of land owners and persons associated with land and business,
- Loss of kiosk, work shed, etc
- Loss of trees, standing crops, etc
- Loss of common property resources such as religious places, samadhi, graveyard, cremation places, water resources, village gates, etc,
- Impacts on the livelihood of persons losing business units including commercial encroachers and squatters,
- Disruption of social network during the construction period and access to resources, etc.

The purpose and objectives of legal and policy framework are to ensure that compensation and resettlement and rehabilitation aspects of the project are consistent with the national, state laws, notifications, policies and funding agency's guidelines. Resettlement and rehabilitation activities are implemented in accordance with the provisions laid down under this section.

## 4.2 Legal Frameworks for Land Acquisition and Resettlement & Rehabilitation

The following section outlines the laws, policy principles and procedures recommended to be followed for land acquisition, compensation and resettlement and rehabilitation assistance for project affected households/ persons (PAHs/PAPs).

- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR, 2013);
- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Gujarat Amendment) Act, 2016;
- Govt. of Gujarat, Revenue Department Resolution No: LAQ - 22-2014/54/5- Declaration of consent award under section 23A;
- Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Acts, 2006;
- The Scheduled Castes and The Scheduled Tribes (Prevention of Atrocities) Act, 1989;
- Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 12 May 2015, Revenue & Forest Department, Govt. of Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method
- Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 30 Sept 2015, Revenue & Forest Department, Govt. of Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method
- The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra
- The Gazette of India, Extraordinary, S.O 425(E), Ministry of Rural Development Notification dated 9th February 2016;
- The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996;
- The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra on PESA exemption of linear projects;
- Japan International Cooperation Agency (JICA) Guidelines for Environmental and Social Considerations, April 2010 and World Bank OP.4.12 and 4.10 guidelines.
- Right to Information Act, 2005
- CSR activities under Companies Act, 2013

The Resettlement and Rehabilitation policy is based on the fundamental principle that the project affected persons should improve their socio-economic conditions after the implementation of the project and also share the benefits of the project. Other resettlements and rehabilitation principles are as under:

### 4.2.1 The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR, 2013)

This Act repeals the Land Acquisition Act, 1894 and is applicable to all states in India (except the State of Jammu and Kashmir). RFCTLARR, 2013 is a first national/central law that addresses land acquisition and rehabilitation and resettlement. This Act provides enhanced compensation as compared to earlier LA Act of 1894 and resettlement & rehabilitation assistance. It provides enhanced compensation (factor of 2 in rural areas and a factor of 1 in urban areas).

The Act lays down procedures for providing resettlement & rehabilitation assistance, fair compensation of the affected families (and not just the titleholders) due to land acquisition, rehabilitation, and resettlement. Some of the key features include the following: (i) Preliminary investigations/preparation of Social Impact Assessment (SIA) and prepare a Social Impact

Management Plan (SIMP). (ii) Preliminary notification stating: project/ public purpose; reasons necessitating land acquisition; summary of SIA; and particulars of the Administrator appointed for the purpose of rehabilitation and resettlement; receipt of objections and hearing after the approval of SIA and within 12 months from the date of SIA approval; (iii) Preparation of Rehabilitation and Resettlement scheme and its declaration by the District Collector after the same is approved by the Commissioner-Rehabilitation and Resettlement; (iv) Public notice and award of compensation and R&R assistances by District Collector (DC) within a period of twelve months from the date of the award publication.

The objectives of Act are as follows:

- to minimize displacement and to promote, as far as possible, non-displacing or least displacing alternatives;
- to ensure adequate rehabilitation package and expeditious implementation of the rehabilitation process with the active participation of the affected families;
- to ensure that special care is taken especially for protecting the rights of the members of the Scheduled Castes and Scheduled Tribes, and to create obligations on the State for their treatment with concern and sensitivity;
- to provide a better standard of living, making concerted efforts for providing sustainable income to the affected families;
- to integrate rehabilitation concerns into the development planning and implementation process; and
- Where displacement is because of land acquisition, to facilitate the harmonious relationship between the requiring body and affected families through mutual cooperation.

Salient features of the RFCTLARR Act, 2013 are listed below:

- (i) The Act provides for land acquisition as well as rehabilitation and resettlement. It replaces the Land Acquisition Act, 1894 and National Rehabilitation and Resettlement Policy, 2007.
- (ii) The act provides for the baseline for compensation to be multiplied by a factor of 1 or 2 for urban and rural areas
- (iii) Social Impact Assessment is a key requirement; the Social Impact Assessment report shall be examined by an independent multi-disciplinary expert group, which will also include social science and rehabilitation experts; SIA is exempted in Gujarat under section 10A of RFCTLARR (Gujarat Amendment) act 2016. However, in-case of Dadar and Nagar Haveli, SIA is a mandatory requirement for Land Acquisition Process. In Maharashtra, since land Acquisition is being done through direct negotiation, SIA is not required.
- (iv) The affected communities shall be duly informed and consulted at each stage, including public hearings in the affected areas for social impact assessment, wide dissemination of the details of the survey to be conducted for R&R plan or scheme.
- (v) Compensation in rural areas would be calculated by multiplying market value by 2 and adding assets attached to the land or building and adding a solatium. In urban areas it would be market value plus assets attached to the land and solatium;
- (vi) The Collector shall take possession of land only after ensuring that full payment of compensation, as well as rehabilitation and resettlement entitlements, are paid or tendered to the entitled persons; families will not be displaced from land till their alternative R&R sites are ready for occupation;
- (vii) The benefits to be offered to the affected families include; land-for-land, to the extent Government land would be available in the resettlement areas; preference for employment in the project to at least one person from each nuclear family subject to the availability of vacancies and suitability of the affected person; training and capacity building for taking up suitable jobs and for self-employment; preference to groups of cooperatives of the affected persons in the allotment of other economic opportunities in or around the project site; wage employment to the willing affected persons in the construction work in the project; housing benefits including houses to the landless affected families in both rural and urban areas; and other benefits;

- (viii) Financial support to the affected families for construction of cattle sheds, shops, and working sheds; transportation costs, temporary and transitional accommodation and comprehensive infrastructural facilities and amenities in the resettlement area including education, healthcare, drinking water, roads, electricity, sanitation, religious activities, cattle grazing, and community resources, etc.;
- (ix) Special provision for the STs and SCs include preference in land-for-land; a Tribal Development Plan (TDP) for settling land rights due, restoring titles of the Scheduled Tribes as well as the Scheduled Castes on the alienated land; community consultations; upfront payment of one-third of the compensation amounts the affected families initially as first instalment; payment of an additional twenty-five percent if relocated outside district. Rehabilitation and resettlement benefits to which they are entitled in monetary terms along with a one-time entitlement of fifty thousand rupees;
- (x) For ensuring transparency, provision has been made for mandatory dissemination of information on displacement, rehabilitation, and resettlement, with names of the affected persons and details of the rehabilitation packages. Such information shall be placed in the public domain on the Internet as well as shared with the concerned Gram Sabha and Panchayat, etc. by the project authorities;
- (xi) No income tax shall be levied, and no stamp duty shall be charged on any amount that accrues to an individual because of the provisions of the new law;
- (xii) The final award will include damage to any standing crops and trees which might have been harmed due to the process of acquisition (including the preliminary inspection).

The main schedules and sections of RFCTLARR 2013 are presented below

| Schedules  | Description  |
|------------|--|
| Schedule 1 | Compensation for land owners   |
| Schedule 2 | R&R entitlements to both land owners and families whose livelihood is dependent on land owners |
| Schedule 3 | Provision of infrastructural amenities   |
| Schedule 4 | List of enactments regulating LA and R&R (13 nos.)   |

| Section    | Description  |
|------------|--|
| Section 4  | Preparation of SIA Study (within a period of 6 months from the date of its commencements)  |
| Section 5  | A public hearing for SIA   |
| Section 6  | Publication of SIA study   |
| Section 7  | Appraisal of SIA report by an expert group. Recommendation to be made by the expert group in 2 months from the date of its constitution  |
| Section 8  | Examinations of proposals for LA and SIA report by appropriate Government.   |
| Section 9  | Exemption from SIA (invoking the urgency provisions U/s 40)  |
| Section 10 | Special provisions to safeguard food security (not applicable in case of projects that are linear in nature- Railways, Highways, MDR, irrigations canals, powerlines etc.)   |
| Section 11 | Publications of preliminary notification and power of officers. (to be issued within 12 months from the date of appraisal of SIA report submitted by the expert group U/s 7.   |
| Section 12 | A preliminary survey of land and power of officers to carry out a survey   |
| Section 13 | Payment for damage   |
| Section 14 | Lapse of SIA report. (notification U/s 11 to be issued within 12 months from the date of appraisal of the report. Appropriate Government may extend the period of 12 months justifying the circumstances in writing. |
| Section 15 | Hearing of objections (within 60 days from the date of publication of preliminary notification U/s 11)   |
| Section 19 | Publication of declaration and summary of Rehabilitation & Resettlement  |
| Section 25 | Period within which award to be made (12 months from the date of publications of the declarations U/s 19). In case no award is made within the period the entire process of LA shall lapse.                          |
| Section 26 | Determination of market value of land by Collector   |
| Section 27 | Determination of amount of compensation  |
| Section 30 | Award of solatium and interest @12% to be paid in every case.  |

### **Summary of RFCTLARR Act, 2013:**

- Social Impact Assessment is a pre-requisite before publishing a preliminary notification under sub-section (1) of section 11 for initiating the land acquisition process.
- The notification issued under sub-section (1) of section 11 shall contain a statement on the nature of the public purpose involved, reasons necessitating the displacement of affected persons, summary of the Social Impact Assessment Report and particulars of the Administrator appointed for the purposes of rehabilitation and resettlement under section 43.
- However, provisions under section 10 (dealing with food security) are exempted in case of projects that are linear in nature including railways.
- The time period for completing the SIA - from the issuance of notification under sub-section (1) of section 4 is 6 months. The time period required for evaluation of SIA report by Expert Group is 2 months. Overall time required for SIA and completing other formalities before publishing a preliminary notification under section 11, RFCTLARR Act 2013 is one year.
- Land acquired under this act shall vest in the name of acquiring agency.
- The time required for land acquisition including SIA report is a minimum of two (2) years.
- Compensation and rehabilitation and resettlement assistance as per Schedule I & II of RFCTLARR Act, 2013.

#### **4.2.2 Govt. of Gujarat, Revenue Department Resolution No: LAO:22-2014/54/5-Declaration of consent award under section 23A**

The resolution deals with accord/incentive amount to be paid to landowners in Consent Award. As per the Act, for the public interest, in order that the farmers agree and come forward to give their land, the 80% amount of estimated compensation should be given as immediate disbursement at the time of possession. Balance amount should be given immediately after completion of the legal process. An encouragement amount of 25% on market value should be given has been declared by the state government. As per this, the regular and consent award has to be paid of land.

Under Section 23-A only when following conditions are fulfilled it is considered as consent award.

#### **Conditions**

1. Wherever the land owner gives the cost of land, in such cases written consent in the prescribed format.
2. At the time of taking possession of land 80% of compensation to be given in advance amount immediately.
3. Before declaring consent award, the acquiring body should give its consent in writing regarding the rates to be paid to land owner.
4. It is to be clearly mentioned in the agreement that the landowner who opts for consent award shall in no way be entitled to any additional compensation under any reference or file suit in court regarding same.
5. Consent award will not be possible for land which has ownership dispute.
6. The market cost of land should be as per provisions of the new land acquisition act-2013 section 26. Market cost should not be unrealistic.
7. Acquiring body requires early possession should be clearly mentioned in the consent award with reasons.
8. The encouragement amount shall be paid one time only as 25% of the main amount and shall not be multiplied by any factor.
9. This resolution has been passed as per revenue department even number file and consent of finance department dated 24/03/2018

### **4.2.3 Other Key Safeguard Legal Frameworks (National, State, District, Tribe, SC/ST, etc.)**

#### **4.2.3.1 *The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Gujarat Amendment) Act, 2016***

The Act came into force on 15<sup>th</sup> August 2016. Relevant sections of the said Act are discussed below.

- Section 10A of this Act deals with the exemption of SIA for an infrastructure project. The State Government may, in the public interest, by notification in the Official Gazette, exempt any of the following projects from the application of the provisions of Chapter II and Chapter III of this Act, which includes “infrastructure projects including projects under public-private partnership where the ownership of land continues to vest with the government provided that the State Government shall, before the issue of notification, ensure the extent of land for the proposed acquisition is the bare minimum land required for such project.
- Section 23 (A) of the said Act deals with consent award.
- Sub-section (1) of 23 (A) - Notwithstanding anything contained in section 23, if at any stage of the proceedings, the Collector is satisfied that all the persons interested in the land who appeared before him have agreed in writing on the matters to be included in the award of the Collector in the form prescribed by rules made by the State Government, he may, without making further enquiry, make an award according to the terms of such agreement.
- Sub-section (2) of Section 23 (A) – The determination of compensation for any land under sub-section (1) shall not in any way affect the determination of compensation in respect of their lands in the same locality or elsewhere in accordance with the other provisions of this Act.
- Sub-section (3) of Section 23 (A) – Notwithstanding anything contained in the Registration Act, 1908, no agreement made under sub-section (1) shall be liable to registration under that Act.
- Section 31A of the Act deals with “Payment of lump-sum amount by State Government for its linear nature projects”. Notwithstanding anything contained in this Act, it shall be competent for the State Government to pay, whenever the land is to be acquired for its own use amounting to less than one hundred acres or whenever the land is to be acquired in case of projects which are linear in nature as referred to in proviso to sub-section (4) of section 10, as Rehabilitation and Resettlement cost, such lump sum amount equal to fifty per cent of the amount of compensation as determined under section 27 to the affected families.

#### **4.2.3.2 *Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 12 May 2015, Revenue & Forest Department, Govt. of Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method***

Earlier land required for the projects were acquired/taken from the farmers through negotiation by direct purchase method and compensation being paid accordingly by State Government. However, with RFCTLARR Act, 2013 coming into effect, there was confusion among the farmers about compensation payable. This was resulting in a delay in acquisition of land and subsequently delay in the start of project work. The Govt. of Maharashtra recognized the confusion among the farmers to handover land due to the difference in compensation payable as per the RFCTLARR Act, 2013 of Central Govt. In view of the above, a special committee was constituted for detailed deliberation. The committee recommended acquiring private land for irrigation & other projects through negotiation by direct purchase method with some principle guidelines since it is not banned as per the new land acquisition Act. Considering the recommendations of the committee, Govt. took a decision as under:

**Govt. Decision (Shasan Nirnay):**

Generally, for a different project, the private land required is acquired as per the prevailing Land Acquisition Act by concerned Land Acquiring institution. However, if the land required by Land Acquiring institution is acquired by direct purchase method instead of acquiring as per Land acquisition act which is not prohibited acquiring through direct purchase method it shall be done considering following directive principle.

- a. Directive Principle - Land required for new projects other than irrigation project. While acquiring land through direct purchase method shall be acquired for the entire project.
- b. District level committee for deciding compensation – A committee shall be constituted under the presidentship of Collector to decide the rate of land being acquired through direct purchase method. The committee shall comprise the following:
  1. Distt. Collector - President
  2. Superintending Engineer Irrigation - Member
  3. Superintending Engineer PWD - Member
  4. Distt. Govt. Pleader - Member
  5. Asstt. Director of Town Planning - Member
  6. Competent Authority of acquiring body - Member
  7. Concerned Dy. Collector (Land Acquisition) - Member
  - (i) In addition to this as per requirement for exercising valuation of trees/ fruit trees/ forest trees/ standing crops, construction & other amenities competent person or specialist of the related subject from Agriculture, Forest, gardening etc. shall be included as invitee member.
  - (ii) Above mentioned committee before deciding the compensation of land will verify the valuation of land as per land acquisition act in vogue, documentation regarding the original owner of land & legal search report of land through Govt. Pleader.
- c. Procedure for deciding compensation - For Projects while acquiring the land through direct purchase method, the amount of compensation shall be calculated as per the provision of Article no. 26 to 30 of land acquisition act 2013 & Schedule I, including other related features then 25% should be added to the above-calculated compensation.
- d. Options to farmers while accepting the compensation - Following two options shall be offered to farmers while acquiring the land through direct purchase method for a project.
  1. Paying complete compensation as calculated vide (C) above at one time.
  2. (a) while purchasing land/ taking over land 50% amount will be paid at the first stage out of whole compensation.  
(b) Remaining balance 50% amount will be paid as annuity.

**4.2.3.3 Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 30 Sept 2015, Revenue & Forest Department, Govt. of Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method**

The Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 12 May 2015 was amended on 30th September 2015 in view of difficulties faced in processing the land acquisition of private land for irrigation and other projects.

- a) Directive Principles: Sr. No. 2 was amended which are related to irrigation projects covering both new projects as well as incomplete projects.
- b) District level committee for deciding compensation:

In Sr. No (i) for invitee Member - Districts where Superintendent Engineer Post of Irrigation/ PWD Dept. is not available, the concerned Chief Engineer shall authorize the Superintendent Engineer of Adjacent District.

In Sr. No. (ii) Advocates on a panel of Acquiring institution has been added after through Govt. Pleader.

- c) Procedure for deciding compensation – “For Projects .....then 25% should be added on the above-calculated compensation” thereafter “while considering market value as per Land Acquisition Act article 26(1) the average of sale deeds for preceding 3 years shall be taken. In the column of purchase and Index-2 shall reflect all the components considered for deciding the compensation package independently (market rate, amount as per notified multiplying factor, compensation against assets connected with the land, solatium, 25% additional compensation due to consent for Direct Purchase Method etc) while deciding the market value for further purchases the amount of market value included in the compensation package as per Land Acquisition Act 2013 shall only be considered. Other components (Amount as per notified multiplying factor, compensation against assets connected with the land, solatium, 25% additional compensation due to consent for Direct Purchase) shall not be considered.

#### **4.2.3.4 The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra**

Various steps are required to be taken to ensure that in Scheduled Areas, tribal land alienation does not take place due to economic duress, fraud or forgery. Further, the Panchayats (Extension of Scheduled Areas) Act, 1996 recognizes the centrality of Gram Sabha in decision making about the various rights guaranteed under the said Act. PESA gives to the Gram Sabha the power to prevent alienation of land in the Scheduled Areas and to take appropriate action to restore any unlawfully alienated land of a Scheduled Tribe. However, the Governor may by public notification direct that any particular Act of Parliament or of the Legislature of the State shall not apply to a Scheduled Area or any part thereof in the State subject to the exceptions and modifications specified in the notification.

The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra dated 14th November 2017 modified the applicability of Maharashtra Land Revenue Code, 1966 to ensure that the projects are undertaken by the State Government or Central Government or their agencies are completed at the earliest without the same being adverse to the larger the above purposes.

The following notification came into effect from the date of its publication in the Official Gazette.

In exercise of powers conferred by sub-paragraph (1) of Paragraph 5 of the Fifth Schedule to the Constitution of India, the Governor of Maharashtra hereby directs that section 36A of the Maharashtra Land Revenue Code, 1966, in its application to the Scheduled Areas of the State of Maharashtra shall apply with the following modifications:

“after the second proviso in sub-section (1) of section 36A as modified by the said notification dated the 14th June 2016, the following proviso shall be inserted, namely:

“Provided also that, in villages in Scheduled Areas of the State of Maharashtra, no sanction for purchase of land by mutual agreement, shall be necessary, if, -

- (i) such land is required in respect of the implementation of the vital Government projects; and
- (ii) the amount of compensation to be paid for such purchase is arrived at in a fair and transparent manner.



Explanation – For the purpose of the second provision, the expression “vital Government project” means project undertaken by the Central or State Government relating to national or state highways, railways or other multi-modal transport projects, .....of similar nature, in respect of which the State Government has, by notification in the Official Gazette, declared its intention or the intention of the Central Government, to undertake such project either on its own behalf or through any statutory authority, an agency owned and controlled by the Central Government or State Government, or a Government company incorporated under the provisions of the Companies Act, 2013 or any other law relating to companies for the time being in force.”

In view of the above provisions, NHSRCL may request the State Government to notify the Mumbai-Ahmedabad High Speed Rail project as “vital Government project” for land alienation in Schedule Areas in the State of Maharashtra.

#### **4.2.3.5 The Gazette of India, Extraordinary, S.O 425(E), Ministry of Rural Development Notification dated 9<sup>th</sup> February 2016**

In exercise of the powers conferred by column no. 3 of serial no. 2 of the First Schedule read with sub-section (2) of section 30 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (No. 30 of 2013), the Central Government, hereby, notifies that in case of rural areas, the factor by which the market value is to be multiplied shall be 2.00 (two).

#### **4.2.3.6 The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996**

This Act, commonly known as PESA Act, 1996, came into being for extending the benefits of the 73rd Constitutional Amendment to the Schedule V Areas of the country. This Act accords statutory status to the Gram Sabhas in Schedule V areas with wide-ranging powers and authority to protect the economic, political and cultural interest of indigenous peoples. The Act has recognized the prevailing traditional practices and customary laws besides providing the management and control of all the natural resources - land, water, and forest in the hands of people living in the Schedule Areas. The Act empowers people in the tribal areas through self-governance. As per PESA, the Gram Sabha will be involved in approval of development plans and programs, all decisions related to land acquisition as well as rehabilitation of affected persons. Important provisions of the PESA 1996 are:

- Gram Sabha shall safeguard and preserve the traditions and customs of the people, their cultural identity, community resources and the customary mode of dispute resolution
- Gram Sabha shall be responsible for approval of plans, programs, and projects for social and economic development
- Gram Sabha shall be responsible for the identification or selection of persons as beneficiaries under the development programs
- Consultation with Panchayat prior to land acquisition and Rehabilitation & Resettlement activities in the scheduled areas
- Endows ownership of minor forest produces (MFPs) to Panchayats
- Gram Sabha has the power to prevent alienation of land in Scheduled areas and to take appropriate action to restore any unlawfully alienated land of Scheduled Tribes (STs).

### Provision of Land Acquisition is mentioned in section 4(i) of PESA Act, 1996

*The Gram Sabha or the Panchayats at the appropriate level shall be consulted before making the acquisition of land in the Scheduled Areas for development projects and before re-settling or rehabilitating persons affected by such projects in the Scheduled Areas; the actual planning and implementation of the projects in the Scheduled Areas shall be*

Recognizing the special needs of the STs, the Constitution of India has made certain special safeguards to protect the interest of these indigenous communities from all possible exploitation and injustice. The Fifth Schedule is the constitutional provision with reference to the administration and development of the Scheduled Areas and Scheduled Tribes in India. The Schedule has been framed to protect of the rights of the tribal peoples on their land, forest, and water as their natural rights. This provides for the administration and control of Scheduled Areas and Scheduled Tribes (areas and tribes needing special protection due to disadvantageous conditions). Two village in Navsari district, three village in Surat district, 12 villages in Valsad district is falling in Scheduled Area in Gujarat and all villages in Dhanahu & Talasari tehsil, some villages in Palghar, Vasai, and Bhiwandi tehsil in Maharashtra are affected due to the MA-HSR project. Thus, the PESA Act shall be applicable for these villages. Maharashtra government has exempted PESA from linear projects, however, it will be applicable in Gujarat.

#### **4.2.3.7 The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra**

The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra dated 14th November 2017 modified the applicability of Maharashtra Land Revenue Code, 1966 to ensure that the projects are undertaken by the State Government or Central Government or their agencies are completed at the earliest without the same being adverse to the larger the above purposes.

The following notification came into effect from the date of its publication in the Official Gazette.

In exercise of powers conferred by sub-paragraph (1) of Paragraph 5 of the Fifth Schedule to the Constitution of India, the Governor of Maharashtra hereby directs that section 36A of the Maharashtra Land Revenue Code, 1966, in its application to the Scheduled Areas of the State of Maharashtra shall apply with the following modifications:

“after the second provision in sub-section (1) of section 36A as modified by the said notification dated the 14th June 2016, the following proviso shall be inserted, namely:

“Provided also that, in villages in Scheduled Areas of the State of Maharashtra, no sanction for purchase of land by mutual agreement, shall be necessary, if, -

- (i) such land is required in respect of the implementation of the vital Government projects; and
- (ii) the amount of compensation to be paid for such purchase is arrived at in a fair and transparent manner.

Explanation – For the purpose of the second proviso, the expression “vital Government project” means project undertaken by the Central or State Government relating to national or state highways, railways or other multi-modal transport projects, .....of similar nature,

in respect of which the State Government has, by notification in the Official Gazette, declared its intention or the intention of the Central Government, to undertake such project either on its own behalf or through any statutory authority, an agency owned and controlled by the Central Government or State Government, or a Government company incorporated under the provisions of the Companies Act, 2013 or any other law relating to companies for the time being in force.”

As per the above-mentioned government order for villages in Scheduled Areas of the State of Maharashtra, the act is applicable if (i) such land is required in respect of the implementation of the vital Govt. projects<sup>5</sup> (MA-HSR project declared as vital government project as per the notification dated 18<sup>th</sup> of May 2018 (Appendix J); and (ii) the amount of compensation to be paid for such purchase is arrived at in a fair and transparent manner.

#### **4.2.3.8 The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006**

The Act is commonly known as FRA, 2006. The Act is applicable in case the MA-HSR project passes through forest areas inhabited by tribal or traditional forest dwelling community. This law protects their traditional livelihood rights and community rights over forest resources and commons.

The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, recognizes and vests the forest rights and occupation in forest land to Scheduled Tribes and other traditional forest dwellers who have been residing in such forests for generations but whose rights are not recorded.

This Act is for members or community of the Scheduled Tribes who primarily reside in forests or forest lands for their livelihood, including Scheduled Tribe pastoralist communities or the members or community of the Scheduled Tribes who have been residing in the forest for 75 years.

The Government of India (GoI) recognizes and vests forest rights with forest dwelling STs, where they are declared as STs, and other traditional forest dwellers. The Act provides a detailed list of rights to ST and forest dwellers. These rights can be broadly divided into the following:

- Title rights (ownership)- Refers to land that is being cultivated by tribal or forest dwellers as on December 13, 2005, subject to a maximum of 4 hectares; ownership is only for land that is being cultivated by the concerned family as on that date, meaning that no new lands are granted;
- User rights- Refers to minor forest produce (also including ownership), to grazing areas, ponds for fishing, to pastoralist routes, etc.
- Relief and development rights- Refers to rehabilitation in case of illegal eviction or forced displacement and to basic amenities, subject to restrictions for forest protection;
- Forest management rights- Refers to protect forests and wildlife;
- Rights to indigenous knowledge- Refers to biodiversity and community right to intellectual property and traditional knowledge related to biodiversity and cultural diversity; and
- Traditional rights- Refers to any other traditional rights enjoyed by forest dwellers except the right of hunting or trapping or extracting any part of any wild animal.

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<sup>5</sup> As per Notification dated 18 May 2018, the MAHSR has been declared as Vital Project.

Authority and Procedure for Vesting of Forest Rights: The Gram Sabhas (GS) will be the authority for determining the nature and extent of individual or community forest rights.

#### **4.2.3.9 The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989**

The communities like Scheduled Castes (SCs) and Scheduled Tribes (STs) are socio-economically excluded community and therefore more vulnerable to exploitation and atrocities caused by dominant community. To prevent various forms of atrocities this law was enacted by the Parliament in 1989. This is a stringent Act and the offenses under this Act are cognizable and non-bail able. In the process of possible resettlement– voluntary or involuntary due to MA-HSR project utmost care will be taken that any action or practice does contravene any provisions in the Act. Some of the atrocities specified in the Act are forcing an SC/ST person to drink or eat any inedible or obnoxious substances, dumping excreta, wastewater, carcasses or any other obnoxious substances in his/her premises or neighborhood; forcibly removing clothes; parading naked or with painted face; wrongfully occupying or cultivating any land owned by or allotted to SC/ST; compelling or enticing him to do begging, bonded labour, forcing or intimidating to take certain decision; instituting false, malicious, vexatious suit or criminal/legal proceeding against SC/ST person; intentionally insulting or intimidating with intent to humiliate in any place within public view; using derogatory language against SC/ST person; outraging the modesty of or committing rape on SC/ST woman; corrupting or fouling any sources of water used by members of SC/ST; and denying SC/ST people his right of passage and causing him to leave his house, village or other place of residence.

#### **4.2.3.10 Right to Information Act, 2005**

The Act provides for setting out the practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, the constitution of a Central Information Commission and State Information Commissions and for matters connected therewith or incidental thereto.

- Only citizens can apply for information
- All public authorities are answerable under the Act
- Nature of the information must be relevant to the administration of the State
- Applicant need not provide reasons
- The information must be disseminated within 30 days
- Reasons for rejection of an application to be provided
- First Appellate Authority and the Second Appellate Authority
- The limitation to file and dispose of the appeals
- Information is one which is already recorded in official records and published
- Information requested should not relate to any exempted matter under the Act.

#### 4.2.3.11 CSR activities under Companies Act 2013

As per Companies Act (2013), companies meeting financial criteria laid down in the Act are required to fulfill the Corporate Social Responsibility (CSR) mandate and spend 2% of their net profits on CSR activities broadly specified in Schedule VII of the Act. The Rules “Companies (Corporate Social Responsibility Policy) Rules, 2014” came into force since 1st April 2014.

Companies meeting the following criteria during any of last 3 financial years needs to undertake CSR activity

- The net worth of more than INR 5000mn (INR 500 Crores) or,
- Turn over more than INR 10,000mn (INR 1000 Crores) or,
- Net profit of more than INR 50mn (INR 5 Crores)

Types of activities permitted as per Schedule VII of Companies Act is provided below

**Table 4-1: Types of Activities as per Scheduled VII – Companies Act**

| SN | Categories   | List of activities   |
|----|--------------|--|
| 1  | Category i   | Eradication of extreme hunger and poverty<br>Supplementing government schemes like- mid-day meal by corporate through additional nutrition.<br>Promoting health care including preventive health care and sanitation including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation<br>Providing medical aid<br>Making safe drinking water available. |
| 2  | Category ii  | Promoting education of masses<br>Special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled.<br>Livelihood enhancement projects  |
| 3  | Category iii | Promoting gender equality<br>Women Empowerment<br>Setting up homes and hostels for women and orphans<br>Setting up old age homes, day care centers and such other facilities for senior citizens<br>Measures for reducing inequalities faced by socially and economically backward groups  |
| 4  | Category iv  | Environmental Sustainability<br>Ecological balance<br>5Protection of flora and fauna<br>Animal welfare, agroforestry, and conservation of natural resources<br>Maintaining quality of soil, air, and water including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga<br>Water Sprinklers for agricultural purpose                                  |
| 5  | Category v   | Protection of natural heritage, art, and culture<br>Restoration of buildings and sites of historical importance and works of art<br>Setting up public libraries<br>Promotion and development of traditional arts and handicrafts   |
| 6  | Category vi  | Measures for the benefit of<br>Armed-forces veterans<br>War Widows<br>And their dependents   |
| 7  | Category vii | Training to promote<br>Rural sports<br>Nationally recognized sports<br>Paralympic sports<br>Olympic sports   |

| SN | Categories    | List of activities  |
|----|---------------|---|
| 8  | Category viii | Contribution to Prime Minister's Relief Fund and Other Such State and Central Funds<br>Any other fund setup by the Central Government for socio-economic development and relief and welfare of the scheduled castes, the scheduled tribes, other backward classes, minorities, and women. |
| 9  | Category ix   | Contributions or funds provided to technology incubators located within academic institutions, which are approved by Central Government   |
| 10 | Category x    | Rural Development projects:<br>Rural Electrification<br>Enhancing rural connectivity<br>Installation of solar lights<br>Infrastructure development  |
| 11 | Category xi   | Slum Area Development<br>Housing for Economically Weaker Sections   |

#### 4.2.4 JICA Guidelines for Environmental and Social Considerations

The objectives of the guidelines are to encourage Project proponents to have appropriate consideration for environmental and social impacts, as well as to ensure that JICA's support for an examination of environmental and social considerations are conducted accordingly.

JICA has created clear requirements regarding environmental and social considerations, which project proponents must meet and recognizes the following seven principles to be very important.

1. A wide range of impacts must be addressed - entitlement framework will consider and factor in the wide range of project impacts, specifically socio-economic issues in the entitlement and compensation context
2. Measures for social considerations must be implemented from an early stage to a monitoring stage
3. Responsible for accountability when implementing projects
4. Stakeholders' participation - incorporates stakeholder opinions into decision-making processes regarding social considerations by ensuring the meaningful participation of stakeholders
5. Information disclosure from loan evaluation stage in collaboration with project proponents to ensure accountability and to promote the participation of various stakeholders
6. Enhancement of proponent's organizational capacity and operations to have consideration for social factors, appropriately and effectively
7. Serious attempts at promptness - prompt implementation of projects while undertaking environmental and social considerations.

The Resettlement Action Plan (RAP) including the entitlement framework and the matrix have been developed in accordance with the JICA policy on Involuntary Resettlement. Some of the key requiring provisions are:

1. The policy requires exploring of all alternatives to minimize involuntary resettlement and loss of livelihoods.
2. It further requires that resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported by project proponents in a timely manner. Prior compensation, at full replacement cost, will be provided. Support and compensation as recommended are in terms of land, money, supporting alternate means of sustainable livelihood etc.
3. Appropriate participation of affected people at all stages related to RAP.
4. Stakeholder consultation and sharing of information, answering queries and concerns of affected people, and transparency are encouraged for all such projects involving large-scale involuntary resettlements

5. The policy recommends for adequate coordination and stakeholder consultations to bring about the social acceptability of the project.
6. Due consideration for vulnerable social groups who might be the worst affected among the local community because of project activity will need to be provided.
7. Recommendation for following the World Bank OP 4.12 for preparation of RAP.

JICA recommends the World Bank policy OP 4.12 for RAP preparation and its implementation.

The key objective of the Bank's safeguard Policy 4.12 is to "ensure that project affected persons are assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher". The important clauses of the World Bank Policy in preparation of resettlement action plan and policy framework includes the following:

- a) Ensure that the displaced persons are informed about their options and rights pertaining to resettlement;
- b) Consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives;
- c) Prompt and effective compensation at full replacement cost for losses of assets;
- d) Provide assistance and allowances;
- e) Provide equivalent productive assets for the loss of residential house, agricultural land etc;
- f) Provide support for the transition period (between displacement and livelihood restoration);
- g) Provide land-related development assistance (credit facilities, training, and job opportunities);
- h) Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based;
- i) Cash compensation level should be sufficient to replace the lost land and assets at full replacement cost in local markets;
- j) Depreciation and salvage value will not be deducted from the compensation value.
- k) Eligibility of Benefits should include the PAPs who have formal legal rights to land (including customary and traditional land rights recognised under law), the PAPs who do not have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognisable legal right to the land they are occupying;
- l) Particular attention will be paid to the needs of vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc;
- m) The displaced persons and their communities will be provided timely and relevant information, consulted on resettlement options, and offered opportunities to participate in planning, implementing, and monitoring resettlement. Appropriate and accessible grievance mechanisms will be established for these groups;
- n) A Grievance Redressal Mechanism will be made functional to resolve all complaints and grievances of PAPs.

In addition to the above core measures, the Bank's policy also emphasizes on the need for a detailed resettlement policy inclusive of all the above points; a project-specific resettlement plan, an institutional framework for implementation, well-developed monitoring and evaluation mechanisms, a time schedule for implementation, and a detailed financial plan.

#### **4.2.5 Gaps between Indian Legal Frameworks and JICA Guidelines and Gap Filling Measures**

Table 4-2 summaries key deviations between the two sets of legal and policy frameworks i.e. JICA policies and the existing national & state laws and policies relevant to this project. It also provides measures for bridging the gaps.



Table 4-2: Gaps between Indian Legal Framework &amp; JICA guidelines

| SN | JICA's Guidelines  | RFCTLARR 2013 Act (applicable for Gujarat, Maharashtra & DNH)  | RFCT LARR Gujarat Amendment Act 2016 (applicable for Gujarat)  | Gap between JICA's Guidelines and RFCTLARR Act, 2013 & JICA Guidelines and RFCTLARR Gujarat Amendment Act 2016 (applicable for Gujarat)  | Gap filling measures   |
|----|--|--|--|--|--|
| 1  | Involuntary resettlement should be avoided wherever possible   | Aims to avoid irrigated multi-cropped land. Such land may be acquired under exceptional circumstances subject to a maximum limit as notified by the appropriate State. Also, whenever multi-crop irrigated land is acquired, an equivalent area of culturable wasteland shall be developed for agricultural purposes. Projects that are linear in nature are exempted. | None   | None   | None   |
| 2  | When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken  | If unavoidable, alternatives to be explored to minimize displacement. Schedule II of the RFCTLARR Act, 2013 provides compensation as well as R&R assistance to all families including those whose livelihood is impacted due to the acquisition of land.   | None   | None   | None   |
| 3  | People who must be settled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels. | Provision for resettlement and rehabilitation entitlements has been made for all families including those whose livelihood is primarily dependent of land acquired.  | Section 31A of RFCTLARR (Gujarat Amendment) Act, 2016 provides for "Payment of lump-sum amount by State Government for its linear projects" as Rehabilitation and Resettlement cost, which is equal to 50% of the amount of compensation as determined under Section | RFCTLARR 2013 as well as RFCTLARR (Gujarat Amendment 2016) Act is silent on non-titleholders (mainly encroachers and squatters, tenants, etc) who have encroached/occupied land belonging to government and similar entities and have been residing and or earning their livelihood. Non-titleholders are not eligible for entitlements as per existing laws governing land acquisition. | JICA recognizes both titleholders and non-titleholders (encroachers, squatters, tenants, etc) and considers them eligible for all compensation except for compensation for land. Other benefits are applicable for non-titleholder as well.<br><br>NHSRCL, Ministry of Railways, Govt. of India <b>recognizes</b> existence of such non-titleholders (encroachers, squatters, tenants, etc) for the Mumbai-Ahmedabad High Speed Rail Corridor Project and agrees to provide resettlement and rehabilitation assistance including cost of structure, trees, shifting allowance, one-time displacement allowance, subsistence grant, etc at par with titleholders in accordance with Schedule II of RFCTLARR Act, 2013. Non-titleholders (encroachers, squatters, tenants) will not be eligible for compensation for land encroached and or occupied or squatted upon. |

| SN | JICA's Guidelines   | RFCTLARR 2013 Act (applicable for Gujarat, Maharashtra & DNH)   | RFCT LARR Gujarat Amendment Act 2016 (applicable for Gujarat)   | Gap between JICA's Guidelines and RFCTLARR Act, 2013 & JICA Guidelines and RFCTLARR Gujarat Amendment Act 2016 (applicable for Gujarat) | Gap filling measures  |
|----|---|---|---|---|---|
|    |   |   | 27 to the affected families.  |   |   |
| 4  | Compensation must be based on the full replacement cost as much as possible       | <p>The method of determining the market value of land is as per Section 26, RFCTLARR Act, 2013. Assessment for determining the market value of land is based on the following criteria: (i) the market value, if any, specified in the Indian Stamp Duty Act, 1899 for the registration of sale deeds or agreements to sell, as the case may be, in the area, where the land is situated; or (ii) the average of sale price for similar type of land situated in the nearest village or nearest vicinity area; or (iii) consented amount of compensation as agreed upon under sub-section 2 of Section 2 in case of acquisition of lands for private companies or for public-private partnership projects, <b>whichever is higher</b>.</p> <p>Over and above, to meet the standard of compensation at full replacement cost, compensation as per Indian law is supplemented by additional measures like Multiplication Factor as per the RFCT-LARR 2013 Act (1 in urban and 2 in rural areas). Multiplication factor shall be applied on the base rate determined above. Plus 100% Solatium on Land Value, Structure Value and any other assets attached to the land shall also be provided. And also, the provision of the cost of transportation and reimbursement of registration/stamp duty is mentioned in Entitlement Matrix.</p> <p>The date for the determination of market value shall be the date on which the notification has been issued under Section 11.</p> | The date for the determination of market value in Gujarat State shall be the date on which the notification has been issued under Section 10A for exemption of SIA. | The laws governing land acquisition considers <b>the market value of the land as full replacement cost</b> .                            |   |
| 5  | Compensation and other kinds of assistance must be provided prior to displacement | RFCTLARR 2013 acts provide for the disbursement of compensation and R&R assistance prior to taking possession of land.  |   | None  | The resettlement and rehabilitation principles are a commitment by NHRCL in this respect. |

| SN | JICA's Guidelines   | RFCTLARR 2013 Act (applicable for Gujarat, Maharashtra & DNH)   | RFCT LARR Gujarat Amendment Act 2016 (applicable for Gujarat)              | Gap between JICA's Guidelines and RFCTLARR Act, 2013 & JICA Guidelines and RFCTLARR Gujarat Amendment Act 2016 (applicable for Gujarat) | Gap filling measures  |
|----|---|---|--|---|---|
| 6  | For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public  | The act governing land acquisition requires preparation of Rehabilitation and Resettlement Scheme (Section 16 of RFCTLARR Act, 2013).                   | SIA is exempted under section 10A of RFCTLARR (Gujarat Amendment act 2016) | No variation from JICA in RFCTLARR 2013<br><br>Exemption of SIA in RFCTLARR (Gujarat Amendment) 2016-different from JICA guidelines     | RAP has been prepared including the stakeholder consultation details for all districts of Gujarat and Maharashtra.<br><br>Stakeholder consultations were conducted for disclosure to the public on details pertaining to the project. |
| 7  | In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. | The act governing land acquisition covers publication of declaration and summary of rehabilitation and resettlement (Section 19 of RFCTLARR Act, 2013). |  | None  | Consultations with stakeholders including affected people have been conducted at various levels.<br><br>Consultations with stakeholders including PAPs and local community will continue during RAP preparation and implementation.   |
| 8  | When consultation held, an explanation must be given in a form, manner, and language that are understandable to the affected people   | The act governing land acquisition covers publication of the notification in a local language   |  | None  | Presentations to stakeholders and Consultations conducted in the local language with all requisite information.<br><br>FAQ and other details also made available to the public in the local language                                  |
| 9  | Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans  | The act governing land acquisition broadly covers participation of affected persons   |  | None  | Participation of affected persons is one of the principles of legal and policy framework  |
| 10 | Appropriate and accessible grievance mechanisms must be established for the affected people and their communities   | Has provision of grievance redressal  |  | None  | Institutional arrangement details Grievance Redressal Mechanism for affected persons  |
| 11 | Affected people are to be identified and recorded as early as possible in order to establish  | Provision of SIA requires conducting surveys of affected persons before notification under section 11.  | The cut-off date for the project is the date of                            | None  | Followed  |

| SN | JICA's Guidelines  | RFCTLARR 2013 Act (applicable for Gujarat, Maharashtra & DNH)  | RFCT LARR Gujarat Amendment Act 2016 (applicable for Gujarat)                              | Gap between JICA's Guidelines and RFCTLARR Act, 2013 & JICA Guidelines and RFCTLARR Gujarat Amendment Act 2016 (applicable for Gujarat) | Gap filling measures  |
|----|--|--|--|---|---|
|    | their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socio-economic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advantage of such benefit.                             | The cut-off date for the project is the date of section 4 notification   | section 10A notification for title holders and date of census survey for non-title holders |   |   |
| 12 | Eligibility of benefits includes, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under la), the PAPs who do not have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying | The act governing land acquisition does not recognize legal rights to encroachers and squatters. However, it recognizes affected families associated with land that is being acquired. |  | Yes   | NHSRCL, Ministry of Railways, GoI <b>recognizes</b> existence of such non-titleholders for the Mumbai-Ahmedabad High Speed Rail Corridor Project and agrees to provide resettlement and rehabilitation assistance including cost of structure, trees, shifting allowance, one-time displacement allowance, subsistence grant, etc at par with titleholders in accordance with Schedule II of RFCTLARR Act, 2013. Non-titleholders (encroachers, squatters, tenants) will not be eligible for compensation for land encroached and or occupied or squatted upon. |
| 13 | Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.   | The act governing land acquisition (Third Schedule) has the provision of infrastructure amenities in case of development of resettlement site.   |  | No  | Development of the resettlement site will be considered for selected areas. PAPs will be assisted by project authority in case of displacement from existing location. Shifting allowance and resettlement allowance will be applicable to all such persons.  |
| 14 | Provide support for the transition period (between displacement and livelihood restoration)  | The act governing land acquisition (Second Schedule) has provision for subsistence grant for displaced families for a period of one year for titleholders only.                        |  | Yes   | NHSRCL recognizes the existence of non-titleholders like encroachers and squatters, tenants, etc. All such families which will be displaced from the existing location due to   |

| SN | JICA's Guidelines   | RFCTLARR 2013 Act (applicable for Gujarat, Maharashtra & DNH)   | RFCT LARR Gujarat Amendment Act 2016 (applicable for Gujarat) | Gap between JICA's Guidelines and RFCTLARR Act, 2013 & JICA Guidelines and RFCTLARR Gujarat Amendment Act 2016 (applicable for Gujarat) | Gap filling measures  |
|----|---|---|---|---|---|
|    |   |   |   |   | project implementation shall be eligible for subsistence grant at par with titleholders.  |
| 15 | Attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc | The act governing land acquisition (Second Schedule) provides additional assistance to SC and ST displaced from Scheduled Areas only. |   | Yes   | JICA and NHSRCL recognizes other vulnerable groups in addition to SC & ST indicated in RFCTLARR, 2013. Entitlement matrix under the Legal and Policy Framework covers vulnerable groups which includes where head of the family is Scheduled Caste, Schedule Tribe (including the displacement in Schedule Areas), WHH (widow, separated woman, single woman, etc), disabled, BPL, person above 65 years of age with no immediate family members to support. Additional assistance has been provided to the vulnerable group in this project. |

## 4.2.6 Applicable Safeguard Policies for Mumbai Ahmedabad HSR Project

Safeguard policies applicable for the Mumbai Ahmedabad HSR Section are briefly discussed below:

| SN | Acts, Notifications, and policies  | Relevance to this project  | Applicability                                |
|----|--|--|--|
| 1  | The RFCTLARR Act, 2013   | The provisions of this Act relating to land acquisition, compensation, rehabilitation, and resettlement. The Act lays down procedures for land acquisition and providing resettlement & rehabilitation assistance.   | Applicable                                   |
| 2  | The RFCTLARR (Gujarat Amendment) Act, 2016   | The Act came into force on 15 <sup>th</sup> August 2016. The amendments deal with the exemption of SIA for infrastructure project under Section 10A. Further, Section 23 (A) of the said Act deals with consent award, and Section 31A of the Act deals with Payment of a lump-sum amount equal to fifty percent of the amount of compensation as determined under section 27 by State Government for its linear nature projects.  | Applicable for Gujarat                       |
| 3  | Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 12 May 2015, Revenue & Forest Department, Govt. of Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method  | This government decision recommends acquiring private land for various projects through negotiation by direct purchase method.   | Applicable for Maharashtra                   |
| 4  | Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 30 Sept 2015, Revenue & Forest Department, Govt. of Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method | As per this government decision, for deciding compensation, 25% should be added on the calculated compensation as per the RFCTLAAR act   | Applicable for Maharashtra                   |
| 5  | The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra   | The acquisition of land in the Scheduled area of Maharashtra, no sanction for purchase of land by mutual agreement is necessary<br>i) If the land is acquired in respect of the implementation of vital government project; and<br>ii) The amount of compensation to be paid for such purchase is to be arrived at in a fair and transparent manner.<br>Notification from the government of Maharashtra on 18 <sup>th</sup> May declares the project as a vital project and exempts it from PESA | Applicable for Maharashtra                   |
| 6  | The Gazette of India, Extraordinary, S.O 425(E), Ministry of Rural Development Notification dated 9th February 2016  | Notifies that market value of land shall be multiplied by a factor of 2 in the case of rural areas.  | Applicable for Maharashtra, Gujarat, and DNH |
| 7  | JICA Guidelines for Environmental and Social Considerations  | The Resettlement Action Plan (RAP) including the entitlement matrix required to be developed in accordance with the JICA guidelines on Involuntary Resettlement keeping in view the seven key principles of JICA.  | Applicable for Maharashtra, Gujarat, and DNH |
| 8  | World Bank OP 4.12 – Involuntary Resettlement  | The project entails land acquisition though, at a low scale for widening, realignments, junction improvements, bypass etc. It would also adversely affect structures used for various purposes,  | Applicable for Maharashtra, Gujarat, and DNH |

| SN | Acts, Notifications, and policies  | Relevance to this project  | Applicability          |
|----|--|--|------------------------|
|    |  | the livelihood of people (mainly earning their livelihood by means of petty shops and providing various services). Many of them have been operating from the government land. Thus, both title holders and non-title holders alike would be affected as a consequence of the project.  |                        |
| 9  | World Bank OP 4.10 – Indigenous  | The alignment passes through a scheduled area with tribal population, hence WB OP 4.10 will be applicable.<br>The World Bank's Operational Policy on Indigenous Peoples (OP 4.10) aims at ensuring that the development process fosters full respect for the dignity, human rights and cultures of indigenous peoples, thereby contributing to the Bank's mission of poverty reduction and sustainable development.  |                        |
| 10 | Govt. of Gujarat, Revenue Department Resolution No: LAO:22-2014/54/5- Accord/incentive to be paid to land owner in Consent award | The resolution deals with accord/incentive amount to be paid to landowners in Consent Award. As per the Act, for the public interest, in order that the farmers agree and come forward to give their land, the 80% amount of estimated compensation should be given as immediate disbursement at the time of possession. Balance amount should be given immediately after completion of the legal process. An encouragement amount of 25% on market value should be given has been declared by the state government. | Applicable for Gujarat |

## 5.0 RESETTLEMENT AND REHABILITATION FRAMEWORK

### 5.1 Resettlement and Rehabilitation Principles

The fundamental of resettlement and rehabilitation principle is that the project affected persons should improve their socio-economic conditions after the implementation of the project and also share the benefits of the project. Other resettlements and rehabilitation principles are as under:

- Resettlement and rehabilitation in Maharashtra and DNH will be as per the provisions of the RFCTTLARR Act, 2013 whereas in the state of Gujarat it will be as per the RFCTTLARR (Gujarat Amendment) Act, 2016,
- Avoid impacting land, structure, other assets, livelihood, settlements, tribal areas and places of cultural significance,
- Explore all viable alternatives to minimize adverse impacts as far as possible,
- Consult stakeholders (project affected persons, local community, others) meaningfully from the early stage of the project preparation regarding likely impacts of the land acquisition, loss of livelihood and take note of their concerns and suggestions,
- Seek broad community support through free, prior and informed consultations,
- Disburse entitlements to each category of PAPs (compensation and resettlement and rehabilitation assistance) as per entitlement matrix prepared for the project based on relevant laws, notifications, circulars, etc,
- Compensation for loss of land, structures and other assets will be based on replacement/ market value,
- Vulnerable groups will be identified and provided additional assistance as per the entitlement matrix,
- Ensure disbursement of compensation and R&R assistance to PAPs as per entitlements prior to taking over possession of land and start of civil construction works,
- Assist PAPs in improving their socio-economic conditions after RAP implementation or at least to restore them, in real terms, to pre-project level;
- Disclose information with stakeholders particularly, PAPs and local communities about project impacts, entitlements, and other relevant documents,
- Inform stakeholders about project implementation from time to time, consult and integrate their concerns and suggestions, wherever feasible during implementation,
- Assist displaced persons to integrate into host communities, if needed,
- Common Property Resources (CPRs) used by communities (such as temple, mosque, samadhi, graveyard, water sources, etc) affected due to the project will be reconstructed/ relocated or compensated by the project,
- Institutional arrangements will be established for implementation of RAP, grievance redressal, monitoring, and evaluation.

### 5.2 Eligibility Policy, Resettlement & Rehabilitation Framework

#### 5.2.1 Definitions

Following definitions that will be applicable unless otherwise stated specifically.

- **Affected area:** Means such area as may be notified by the appropriate government for the purposes of land acquisition;
- **Affected family:** Includes
  - (i) a family whose land or other immovable property has been acquired;
  - (ii) a family which does not own any land, but a member or members of such family may be agricultural labourers, tenants including any form of tenancy or holding right, share-croppers



- or artisans or who may be working in the affected area prior to the acquisition of the land, whose primary source of livelihood stand affected by the acquisition of land;
- (iii) the Scheduled Tribes and other traditional forest dweller who have lost any of their forest rights recognized under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Right) Act, 2006 (2 of 2007) due to the acquisition of land;
  - (iv) a family whose primary source of livelihood for prior to the acquisition of the land is dependent on forests or water bodies and includes gatherers of forest produce, hunters, fisher folk and boatmen and such livelihood are affected due to the acquisition of land;
  - (v) a member of the family who has been assigned land by the State Government or the Central Government under any of its schemes and such land is under acquisition;
  - (vi) a family residing on any land in the urban areas prior to the acquisition of the land or whose primary source of livelihood for three years prior to the acquisition of the land is affected by the acquisition of such land.
- **Agricultural labourer:** means a person primarily resident in the affected area immediately before the declaration of the affected area, who does not hold any land in the affected area but who earns his livelihood mainly by manual labour on agricultural land therein immediately before such declaration and who has been deprived of his livelihood;
  - **Agricultural land:** Means land used for (i) agriculture or horticulture; (ii) dairy farming, poultry farming, pisciculture, sericulture, seed farming, breeding of livestock or nursery growing medicinal herbs; (iii) raising of crops, trees, grass or garden produce; and (iv) land used for the grazing of cattle;
  - **Below poverty line (BPL) or BPL family:** means below poverty line families as defined by the Planning Commission of India, from time to time and those included in the BPL list by the State Government for the time being in force;
  - **Corridor of impact (COI):** Refers to the minimum land width required for construction of columns, laying of tracks, station, maintenance depot, the road for maintenance purpose, parking facilities, drains, utility ducts, working spaces etc. Additional land width would be acquired/purchased or taken on the temporary lease if the Corridor of Impact extends beyond the available Right of Way;
  - **Cut-off date:** The cut-off date for titleholders will be the date of publication of the notification under Section 10A of the (Gujarat Amendment) Act, 2016 i.e. exemption of SIA from State Government. The cut-off date for non-titleholders (who does not have legal rights, mainly encroachers and squatters of government land and likes), will be the start date of the census survey;
  - **Displaced family:** A family, who on account of acquisition of land has to be relocated and resettled from the affected area to the resettlement area;
  - **Encroacher:** A person/family, who transgresses into the public land (i.e., extended their building, agricultural lands, business premises or workplaces into public land), adjacent to his/her own land or other immovable assets and derives his/her additional source of shelter/livelihood;
  - **Entitled person (EP):** A person who is affected by the project and is entitled to compensation and assistance or only assistance as per the entitlement matrix;<sup>6</sup>
  - **Family:** Includes a person, his or her spouse, minor children, minor brothers and minor sister's dependent on him. Widows, divorcees, and women deserted by families shall be considered separate families;
  - **Holding of land:** Means the total land held by a person as an owner, occupant or tenant or otherwise;
  - **Kiosk:** A kiosk is a cubicle/booth/stall/cabin made of wood or iron or any other building material which could be shifted to another location as a single unit without much damage and is used for carrying out petty business, commercial activities and has been in operation/existence prior to cut off date;
  - **Land:** Includes benefits to arise out of the land, and things attached to the earth or permanently fastened to anything attached to the earth;

<sup>6</sup> Three years' requirement is included in the eligibility definitions as per the Indian legislation of RFCTLARR Act, 2013. However, for the purpose of this project three years' restriction has not been considered and the definition of the eligibility has been corrected and aligned as per JICA guidelines. Three years restriction is removed, and cut-off date is the start date of census survey.

- **Landless:** Means such persons or class of persons who may be (i) considered or specified as such under any State law for the time being in force or (ii) in a case of landless not being specified under clause (i), as may be specified by the appropriate Government;
- **Land acquisition" or "acquisition of land":** means the acquisition of land as per RFCTLARR, Act 2013 & RFCTLARR (Gujarat Amendment), Act 2016 for the time being in force;
- **Land owner:** Includes any person
  - (i) whose name is recorded as the owner of the land or building or part thereof, in the records of the authority concerned; or
  - (ii) any person who is granted forest rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007) or under any other law for the time being in force; or
  - (iii) who is entitled to be granted Patta rights on the land under any law of the State including assigned lands; or
  - (iv) any person who has been declared as such by an order of the court or Authority;
- **Marginal farmer:** Means a cultivator with an un-irrigated land holding upto one hectare or irrigated land holding upto one-half hectare;
- **Market value:** Means the value of land determined in accordance with Section 26 of RFCTLARR, Act 2013;
- **Non-agricultural labourer:** means a person who is not an agricultural labourer but is primarily residing in the affected area before the declaration of the affected area and who does not hold any land under the affected area but who earns his livelihood mainly by manual labour or as a rural artisan immediately before such declaration and who has been deprived of earning his livelihood mainly by manual labour or as such artisan in the affected area;
- **Non-titleholder:** Affected persons with no legal rights to the land, structures, and other assets. Non-titleholders include encroachers, squatters, tenants, etc;
- **Notification:** Notification: Means a notification published in the Gazette of India or, as the case may be, Gazette of a State and the expression "notify" shall be construed accordingly;
- **Occupier:** means a member of a Scheduled Tribes community in possession of forest land prior to the 13th day of December 2005;
- **Patta:** Shall have the same meaning as assigned to it in the relevant Central or State Acts or rules or regulations made thereunder;
- **Person interested:** Means (i) all persons claiming an interest in compensation to be made on account of the acquisition of land as per the Act; (ii) the Scheduled Tribes and other traditional forest dwellers, who have lost any forest rights recognized under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007); (iii) a person interested in an easement affecting the land; (iv) person having tenancy rights under the relevant State laws including share-croppers by whatever name they may be called; and (v) any person whose primary source of livelihood is likely to be adversely affected;
- **Project:** Means a project for which land is being acquired (Mumbai-Ahmedabad High Speed Rail Corridor Project), irrespective of the number of persons affected;
- **Project affected area:** Refers to the area of village or locality under a project for which land will be acquired under NH Act 1956 through a declaration by Notification in the Official Gazette by the appropriate Government or for which land belonging to the Government will be cleared from obstructions;
- **Project affected family:** includes a person, his or her spouse, minor sons, unmarried daughters, minor brothers, unmarried sisters, father, mother and other relatives residing with him or her and dependent on him or her for their livelihood; and includes "nuclear family" consisting of a person, his or her spouse and minor children;
- **Project affected person (PAP):** Any tenure holder, tenant, Government lessee or owner of other property, or non-titleholder who because of the project has been affected from such land including a plot in the abadi or other property in the affected area will be considered as PAP;
- **Project displaced person (PDP):** Any tenure holder, tenant, Government lessee or owner of other property, or non-titleholder who because of the project has been involuntarily displaced from such

land including a plot in the abadi or other property will be considered as PDP. A displaced will always be a PAP but all PAP may not be PDP;

- **Project affected household (PAH):** A social unit consisting of a family and or non-family members living together, and is affected by the project negatively and or positively;
- **Replacement cost:** A replacement cost/value of any land or other asset is the cost/value equivalent to or sufficient to replace/purchase the same land or other asset;
- **Resettlement area:** Means an area where the affected families who have been displaced because of land acquisition/ project;
- **Scheduled Areas:** Means the Scheduled Areas as defined in Section 2 of the Panchayats (Extension to the Scheduled Areas) Act, 1996;
- **Small farmer:** Means a cultivator with an un-irrigated land holding up to two (2) hectares or with an irrigated land holding up to one (1) hectare, but more than the holding of a marginal farmer;
- **Squatter:** A person/family who has settled on public land, land belonging to institutions, trust, etc and or someone else's land without permission for residential, business and or other purposes or has been occupying public building without authority prior to the cut-off date and is depending for his or her shelter or livelihood and has no other source of shelter or livelihood;
- **Tenant:** A person who holds/occupies land/structure of another person and (but for a special contract) would be liable to pay rent for that land/structure. This arrangement includes the predecessor and successor-in-interest of the tenant but does not include mortgage of the rights of a landowner or a person to whom holding has been transferred; or an estate/holding has been let in farm for the recovery of an arrear of land revenue; or of a sum recoverable as such an arrear or a person who takes from Government a lease of unoccupied land for subletting it;
- **Titleholder:** A person who has legal rights to the land acquired by the project;
- **Vulnerable group:** Includes Scheduled Caste, ST, WHH (widow, separated woman, single woman, etc), disabled, orphan, destitute, BPL, landless, person above 65 years of age no immediate family members to support. For such cases, the total land holding of the landowner in that revenue village will be considered in which land has been acquired;
- **Wage earner:** Wage earners are those whose livelihood would be affected due to the displacement of the employer. The person must be in continuous employment for at least six months prior to the cut-off date with the said employer and must have reliable documentary evidence to prove his/her employment.

## 5.2.2 Eligibility and Guidelines for Compensation and R&R Assistance

Eligibility for compensation, resettlement and rehabilitation assistance and is presented below:

**Table 5-1: Eligibility & Guidelines for Compensation and R&R Assistance**

| SN | Eligibility   |
|----|---|
| 1  | The cut-off date for titleholders will be the date of publication of the notification under Section 10A of the (Gujarat Amendment) Act, 2016 i.e. exemption of SIA from State Government and Section 4 for DNH and Namuna 1 for Maharashtra. The cut-off date for non-titleholders (who does not have legal rights, mainly encroachers and squatters of government land and likes), will be the start date of census survey                                     |
| 2  | Persons intentionally moving in the project area after the cut-off date will not be entitled to any compensation or assistance  |
| 3  | The unit of entitlement will be the family for both titleholders and non-titleholders   |
| 4  | Titleholders will be eligible for compensation and resettlement and rehabilitation assistance   |
| 5  | Non-titleholders affected families will not be eligible for compensation of land encroached or occupied by them. They will be eligible for cost of structures and other assets on the encroached/ occupied land at replacement/ market value (determined as per latest Schedule of Rates of the district) excepting Choice of Annuity or Employment. Besides, they will also be eligible for R&R assistance at par with titleholders as per entitlement matrix. |
| 6  | In case the affected families couldn't be enumerated during census survey due to non-availability at the site or other reasons but have valid evidence/ documents to establish his/her existence on or before the cut-off date in the affected area shall be considered as PAPs based on due diligence,   |
| 7  | Compensation and R&R assistance to different categories of affected families will be as per Entitlement Matrix.   |

| SN | Eligibility   |
|----|---|
| 8  | Project affected families will be entitled to salvage dismantled materials free of cost within 15 days from the date of dismantling of the structure after receiving the requisite notice for removal of the structure.   |
| 9  | In case a notice for eviction under applicable law has been served to affected person before the cut-off date and the case is pending in a court of law, for such cases the eligibility of affected family will be considered in accordance with the status determined by the court and accordingly he/she will be eligible for entitlements.   |
| 10 | Vulnerable person eligible for additional assistance (entitlements), for example elderly person without dependent, Woman Headed Household (WHH), orphan, destitute, widow, single lady, physically handicapped, etc will be verified based on verifiable documents or reliable process certified by local body or community, in case documentary evidence is not available.   |
| 11 | Valuation of structures and other immovable properties/assets will be determined based on the latest current market value by referring to current year Schedule of Rates (SOR), without applying depreciation, by the certified valuer. Valuation of items which are not covered in SOR shall be as per prevailing market price of such items. In case of non-availability of latest SOR, the suitable method will be adopted to bring the SOR to current year rate.  |
| 12 | Valuation of trees and standing crops will be determined by<br>District Horticulture Department – for Fruit bearing trees and plants<br>District Forest Department - for Timber trees<br>District Agriculture Department – for Standing crops   |
| 13 | In case of non-titleholders, the market value of the structure and other assets will be disbursed by project authority directly or in consultation with Collector by adopting suitable process.   |
| 14 | Project affected families (both titleholders and non-titleholders) shall be eligible for reimbursement of stamp duty paid for purchase of alternate land, structure (used for residential, commercial, residential cum commercial or other purpose), both land and structure within 16 months from the date of receipt of compensation or compensation and R&R assistance or R&R assistance amount, subject to a maximum of total amount received either as compensation and R&R assistance combined together or R&R assistance in the name of affected person or spouse or joint name of affected person & spouse. |

### 5.3 Entitlement Matrix

The entitlement matrix for this project has been developed based on the applicable laws, guidelines, government orders, policies, good practices followed in externally funded projects. Non-titleholders (encroachers and squatters) have been recognized and considered for resettlement and rehabilitation assistance at par with titleholders except for the choice of annuity or employment. Affected families will be eligible for compensation and R&R assistance or R&R assistance depending upon the nature of ownership rights of lost assets and other aspects. The entitlement matrix for Gujarat & Maharashtra and DNH is presented below in Table 5-2, Table 5-3 and Table 5-4.

Table 5-2: Entitlement Matrix Gujarat

| SN                 | Type of Loss   | Eligible Category | Entitlement (Compensation & R&R Assistance)   | Remarks   |                           |           |     |          |  |
|--------------------|--|-------------------|---|---|---------------------------|-----------|-----|----------|--|
| (1)                | (2)  | (3)               | (4)   | (5)   |                           |           |     |          |  |
| 1                  | Loss of Land [agricultural as well as non-agricultural (homestead/ commercial or otherwise)] | Title Holder (TH) | <p>a) The land will be acquired on payment of compensation as per RFCTLARR Act, 2013 (hereinafter referred as Act no 30 of 2013).</p> <p>I. Market value as per the India Stamp Act 1899 for the registration of sale deed or agreement to sell, in the area where land is situated;</p> <p>or</p> <p>The average sale price of similar types of land situated in the nearest vicinity area ascertained from the highest 50% of the sale deeds of the proceeding 3 years;</p> <p>or</p> <p>Consented amounts paid for PPPs or private Companies</p> <p><b>Whichever is higher.</b></p> <p>II. Plus 100% Solatium and 12% interest from the date of notification (Section 10 A),</p> <p>III. Multiplication Factor as per the Act (1 in urban and 2 in rural areas).</p> | <p>Compensation determination as per steps outlined under section 26 of RFCTLARR Act 2013. 12% interest shall be applicable from the date of First notification [Section 11 of RFCTLARR (Gujarat Amendment) Act, 2016 in Gujarat.</p>   |                           |           |     |          |  |
|                    |  |                   | <p>b) R&amp;R cost/ assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.<br/><b>(Minimum Rs Five Lakh)</b></p>   | <p>In Gujarat, R&amp; R amount/assistance shall be fifty percent (50%) of the amount of compensation (for <b>land</b>) as determined under RFCTLARR (Gujarat Amendment) Act, 2016.</p> <p>The lump-sum R&amp;R amount/ assistance shall not be less than the amount payable according to the Second Schedule of the Act No. 30 of 2013.</p> |                           |           |     |          |  |
|                    |  |                   | <p>c) The stamp duty and other fees payable for registration of the land or house purchased by the affected families (anywhere within the concerned state) in self-name or the joint name of the affected family member (spouse/ children), shall be reimbursed by NHRCL on the production of documentary evidence.</p> <p>Stamp duty and other fees shall be payable for property value equal to the total amount of Compensation &amp; R&amp;R disbursed or the actual amount paid by the affected family, whichever is less.</p>   | <p>The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families.</p>   |                           |           |     |          |  |
|                    |  |                   | <p>d) Partially Acquired Land Plot:<br/>One-time additional assistance to the affected land owner family will be paid based on the percentage of the land area acquired from each partially acquired land plot.</p> <table border="1"> <thead> <tr> <th>Land Area Acquired</th> <th>Additional R&amp;R assistance</th> </tr> </thead> <tbody> <tr> <td>Up to 50%</td> <td>Nil</td> </tr> <tr> <td>50% -75%</td> <td>15% of Compensation amount for balance land area</td> </tr> <tr> <td>More than 75%</td> <td>25% of Compensation amount for balance land area</td> </tr> </tbody> </table>   | Land Area Acquired  | Additional R&R assistance | Up to 50% | Nil | 50% -75% | 15% of Compensation amount for balance land area |
| Land Area Acquired | Additional R&R assistance  |                   |   |   |                           |           |     |          |  |
| Up to 50%          | Nil  |                   |   |   |                           |           |     |          |  |
| 50% -75%           | 15% of Compensation amount for balance land area   |                   |   |   |                           |           |     |          |  |
| More than 75%      | 25% of Compensation amount for balance land area   |                   |   |   |                           |           |     |          |  |

| SN  | Type of Loss  | Eligible Category | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|---|-------------------|--|---|
|     |   |                   | <p>e) In case of severance of land plot (division into two parts due to acquisition), the left-over plots on either side shall be treated independently as per the above clause [(d) for partially impacted land plots].</p> <p>f) One-time additional assistance equal to 25% of the market value of the land. (Govt. of Gujarat resolution no. LAQ - 22-2014/54/5 dated 4-04-2018).<br/> <u>Sample calculation for compensation is as under</u><br/> <i>i) Say total value of rural land as per market/Jantri/ consented amount as per clause 1(a) above - Rs100,000</i><br/> <i>ii) Multiplier factor - 2 for rural say Rs 2,00,000</i><br/> <i>iii) Solatium 100% of (ii) Rs 2,00,000</i><br/> <i>iv) Total Compensation (ii) +(iii) = Rs 4,00,000</i><br/> <i>v) Additional incentive for agreeing to consent i.e. 25% of (i) = Rs 25,000</i><br/> <b>Gross Amount including incentive for consent –Rs 4,25,000/-</b></p> | <p>For severed land plots also, the ownership of remaining land area on either side shall continue to remain with the land owner.</p> <p>This assistance shall be applicable for acquisition of private land through consent.</p>   |
| 2   | Families primarily dependent on land acquired Land (Agricultural) | Affected family   | <p>a) A onetime payment of Rs. 5 lakhs per affected family.</p> <p>b) Subsistence allowance of Rs. 3600/month for a period of one year (i.e. Rs 43,200).</p> <p>c) The stamp duty and other fees payable for registration of the land or house purchased by the affected families (anywhere within the concerned state) in self-name or the joint name of the affected family member (spouse/ children), shall be reimbursed by NHSRCL on the production of documentary evidence.</p>  | <p>Stamp duty and other fees shall be payable for property value equal to the total amount of Compensation &amp; R&amp;R disbursed or the actual amount paid by the affected family, whichever is less.</p> <p>The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families.</p> |
| 3.1 | Loss of Residential Structure                                     | Titleholder       | <p>a) Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium.<br/> Sample calculation as under<br/> i) Valuation of the structure Say Rs 100,000<br/> ii) Solatium @100% of (i) Say Rs 1,00,000<br/> iii) <b>Total Compensation for Structure (i) +(ii) = Rs 2,00,000</b></p> <p>b) Full compensation of structure payable in case of partial impact making unimpaired use of structure difficult.</p> <p>Or</p> <p>In case of partial impact of structure, provided that unimpaired continuous use of such structure is possible, and the owner/ occupier express willingness in writing to NHSRCL to retain the remaining part of the structure, an additional amount of 25% of the compensation amount of affected area of such structure without solatium shall be paid to owner as one-time ex-gratia amount for repairing and strengthening of such structure.</p>                        | <p>Valuation of the structure shall be based on applicable Schedule of Rates (SoR/Plinth area) duly updated without depreciation.</p>   |

| SN  | Type of Loss                  | Eligible Category      | Entitlement (Compensation & R&R Assistance)  | Remarks  |
|-----|-------------------------------|------------------------|--|--|
|     |                               |                        | <p>c) R&amp;R cost/assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.<br/> <u>(Assistance shall be fifty per cent (50%) of the amount of compensation (for structure and other assets) or Upto Rs 1,43,200 depending on the physical displacement = Rs 43,200 (Subsistence grant) + Rs 50,000 (transportation cost) + Rs 50,000 (Resettlement allowance) whichever is higher)</u></p> | <p>R&amp; R amount/assistance shall be fifty percent (50%) of the amount of compensation (for structure and other assets) as determined under section 27 of RFCTLARR (Gujarat Amendment) Act, 2016 for Gujarat.</p> <p>The lump-sum R&amp;R amount/ assistance shall not be less than the amount payable according to the Second Schedule of the Act No. 30 of 2013.</p> |
|     |                               |                        | <p><b>As an alternative to 3.1(a) and 3.1 (b), the following may be opted:</b></p> <p>d) An equivalent amount of money in lieu of the loss of structure (in case of displacement due to loss of housing unit), as per the specifications and rates of Pradhan Mantri Awas Yojana or similar scheme of State/ Central Governments in Rural and Urban areas.</p>   | <p>The amount for alternative housing unit shall not be less than Rs 70,000 in rural areas and Rs 1.5 lakhs in urban areas.</p>  |
|     |                               |                        | <p>e) The stamp duty and other fees payable for registration of the land or house purchased by the Titleholder shall be borne by NHSRCL on the production of documentary evidence as per point (c) of column 4 of Sl. No. 1.</p>   | <p>The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families.</p>  |
|     |                               |                        | <p>f) Right to salvage material from the affected structures without any cost.</p>   |  |
|     |                               |                        | <p>g) Two months' notice to vacate the structure.</p>  | <p>Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.</p> <p>Balance 20% will be paid after providing encumbrance free land.</p>   |
| 3.2 | Loss of Residential Structure | Encroachers, Squatters | <p>a) Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under</p> <ol style="list-style-type: none"> <li>Valuation of the structure Say Rs 70,000</li> <li>Solatium @100% of (i) Say Rs 70,000</li> <li><b>Total Compensation for Structure (i) + (ii) = Rs 140,000</b></li> </ol>  | <p>Valuation of the structure shall be based on applicable SoR/Plinth Area duly updated without depreciation.</p>  |
|     |                               |                        | <p>b) The one-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building materials, belongings, cattle, etc.</p>  | <p>Which requires physical displacement from the present location.</p>   |
|     |                               |                        | <p>c) Subsistence allowance of Rs. 3600/month for a period of one year (i.e. Rs 43,200)</p>  |  |
|     |                               |                        | <p>d) One-time resettlement allowance of Rs 50,000/-</p>   |  |

| SN  | Type of Loss                              | Eligible Category | Entitlement (Compensation & R&R Assistance)   | Remarks   |
|-----|---|-------------------|---|---|
|     |   |                   | <p><b>As an alternative to 3.2(a), the following may be opted:</b></p> <p>e) An equivalent amount of money in lieu of the loss of structure (in case of displacement due to loss of housing unit), as per the specifications and rates of Pradhan Mantri Awas Yojana or similar scheme of State/ Central Governments in Rural and Urban areas</p>   | The amount for alternative housing unit shall not be less than Rs 70,000 in rural areas and Rs 1.5 lakhs in urban areas. <sup>7</sup>   |
|     |   |                   | f) Right to salvage material from the affected structures without any cost.   |   |
|     |   |                   | g) Two months' notice to vacate the structure.  | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br>Balance 20% will be paid after providing encumbrance free land.   |
| 4.1 | Loss of Commercial / Industrial Structure | Titleholder       | <p>a) Compensation for structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under</p> <p>i. Valuation of the structure Say Rs 100,000</p> <p>ii. Solatium @100% of (i) Say Rs 1,00,000</p> <p>iii. <b>Total Compensation for Structure (i) + (ii) = Rs 1,00,000</b></p> <p>b) Full compensation of structure payable in case of partial impact making unimpaired use of structure difficult.</p> <p>Or</p> <p>In case of partial impact of structure, provided that unimpaired continuous use of such structure is possible without hazards, and the owner/occupier express willingness in writing to NHRCL to retain the remaining part of the structure, an additional amount of 25% of the compensation amount of affected area of such structure without solatium shall be paid to owner as one-time ex-gratia amount for repairing and strengthening of such structure.</p> <p>c) R&amp; R cost/assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.<br/><b><u>(Assistance shall be fifty per cent (50%) of the amount of compensation (for structure and other assets) or Upto Rs 1,43,200 depending on the physical displacement = Rs 43,200 (Subsistence grant) + Rs 50,000 (transportation cost) + Rs 50,000 (Resettlement allowance) whichever is higher)</u></b></p> <p>d) The stamp duty and other fees payable for registration of commercial/industrial registered by the titleholder shall be borne by NHRCL on the production of documentary evidence as per point (c) of column 4 of Sl. No. 1.</p> <p>e) Right to salvage material from the affected structures without any cost.</p> | <p>Valuation of structure shall be based on applicable SoR/Plinth Area duly updated without depreciation.</p> <p>R&amp; R amount/assistance shall be fifty percent (50%) of the amount of compensation (for structure and other assets) as determined under RFCTLARR (Gujarat Amendment) Act, 2016.<br/>The lump-sum R&amp;R amount/ assistance shall not be less than the amount payable according to the Second Schedule of the Act No. 30 of 2013.</p> |

<sup>7</sup> An alternative house as per IAY specifications in rural areas and a constructed house/flat of minimum 50 sq. in urban areas or cash in lieu of house if opted (the cash in lieu of house will be Rs.70,000/- in line with Gol IAY standards in rural areas and Rs.1,50,000 in case of urban areas), for those who do not have any homestead land and who have to relocate.



| SN  | Type of Loss                   | Eligible Category      | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|--------------------------------|------------------------|--|---|
|     |                                |                        | f) Two months advance notice to vacate commercial and 6 months advance notice to vacate industrial structure/unit.   | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br>Balance 20% will be paid after providing encumbrance free land. |
| 4.2 | Loss of Commercial Structure   | Encroachers, Squatters | a) Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium.<br><b>Sample calculation as under</b><br>i. Valuation of the structure Say Rs 1,00,000<br>ii. Solatium @100% of (i) Say Rs 100,000<br>iii. Total Compensation for Structure (i) + (ii) = Rs 2,00,000   | Valuation of structure shall be based on applicable SoR/Plinth area duly updated without depreciation.  |
|     |                                |                        | b) A one-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building materials, belongings, cattle, etc.   | Which requires physical displacement from the present location.   |
|     |                                |                        | c) Subsistence allowance of Rs. 3600/month for a period of one year (i.e. Rs 43,200)   | Balance 20% will be paid after providing encumbrance free land.   |
|     |                                |                        | d) One-time financial assistance of Rs 25,000 for loss of trade/ self-employment to the commercial squatter.   |   |
|     |                                |                        | e) Right to salvage material from the affected structures without any cost.  |   |
|     |                                |                        | f) Two months advance notice to vacate commercial and 6 months advance notice to vacate industrial   | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br>Balance 20% will be paid after providing encumbrance free land. |
|     |                                |                        | g) One-time resettlement allowances of Rs 50,000/-   |   |
| 5.1 | Loss of residential structures | Tenants                | <b>Residential:</b><br>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building material, belongings, cattle, etc.<br>b) Rental allowance of 4000/- per month in a rural area and 5000/- per month in urban areas for six (6) months.<br>c) Two months' advance notice to vacate structure.  |   |
| 5.2 | Loss of commercial structures  | Tenants                | <b>Commercial:</b><br>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of commercial and other items kept in the structure.<br>b) One-time financial assistance amount of Rs. 25,000/- for loss of trade/self-employment.<br>c) Rental allowance of Rs 5000/- per month in rural areas and Rs 7000/- per month in urban areas for a period of six (6) months.<br>d) Two months' advance notice to vacate structures. |   |

| SN  | Type of Loss                   | Eligible Category  | Entitlement (Compensation & R&R Assistance)   | Remarks   |
|-----|--------------------------------|--|---|---|
| 5.3 | Loss of other structures       | Tenants  | <p><b>Others:</b></p> <p>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of items kept in the structure affected.</p> <p>b) Rental allowance of Rs 5000/- per month in rural areas and Rs 7000/- per month in urban areas for a period of six (6) months.</p> <p>c) Two months' advance notice to vacate structures.</p>   |   |
| 6   | Loss of Employment             | Wage Earner (Workers/ Employees in non-agricultural establishment/ unit) | <p>a) Subsistence allowance of Rs 3600/- per month for a period of one year (i.e. Rs 43,200/-)</p>  |   |
| 7   | Trees, crops, plantations      | Titleholder, Encroacher, Squatter  | <p>a) Compensation for trees affected as per section 29 of Act 30 of 2013.</p> <p>Or</p> <p>NHSRCL shall/may allow the affected family to cut and take away the tree by providing 25% of timber value of the tree (fruit-bearing as well as non-fruit bearing) instead of full compensation of timber value.</p> <p><b>Sample calculation as under</b></p> <p><b>i. Valuation of the tree Say Rs 1000</b></p> <p><b>ii. Solatium @100% of (i) Say Rs 1000</b></p> <p><b>iii. Total Compensation for tree (i) + (ii) = Rs 2000</b></p> <p><b>In case affected families take the tree, then compensation = Rs 500</b></p> | <p>Valuation of trees, crops, and plants attached to the land acquired shall be carried out by concerned departments without applying depreciation factor.</p> <p>Valuation of timber trees – by Forest Department.</p> <p>Standing crops – by Agriculture Department.</p> <p>Fruit bearing trees, plants, etc- by Horticulture Department.</p> |
|     |                                |  | <p>b) Three (3) months' advance notice to affected persons to harvest fruits, standing crops etc.</p>   |   |
| 8   | Cattle shed/ Petty shops       | Title holder & non-title holder (Encroacher, Squatter)                   | <p>a) One-time financial assistance of such amount as the appropriate Government may, by notification, specify subject to a minimum of Rs. 25,000/- for relocation/shifting of cattle shed or small shop, as the case may be.</p>   | <p>Petty shops will include small shops, work shed commercial kiosk, shanties and other temporary shops (which can be relocated without damage) where business is carried out.</p> <p>Entitled parties receiving assistance under the 'petty shop' category shall not be entitled to payment of lumpsum amount</p>                              |
|     |                                |  | <p>b) Subsistence allowance of Rs. 3600/month for petty shops a period of three months (time period required to re-establish shop) i.e. Rs 10,800/-</p>   |   |
|     |                                |  | <p>c) Notice period of 15 days to shift/remove structure</p>  |   |
| 9   | Loss of land/ structure/ other | Vulnerable family belonging to title holder, squatter, encroacher        | <p>a) One-time additional financial assistance of Rs 100,000/- to all vulnerable families.</p>  | <p>Vulnerable includes where the head of the family is Scheduled Caste, Schedule Tribe (including the displacement in Schedule Areas), WHH (widow, separated woman, single woman, etc), disabled, BPL, the person above 65 years of age with no immediate family members to support.</p>  |

| SN | Type of Loss  | Eligible Category                       | Entitlement (Compensation & R&R Assistance)   | Remarks |
|----|---|---|---|---------|
| 10 | Loss of land/<br>structure/ other                                       | One member from<br>each affected family | a) Training in relevant skills/vocation to self or a family member as per his / her willingness (to the extent possible) in the areas such as dairy, poultry, computer, repair of electrical/electronic items, mechanical works etc. All cost related to training shall be borne by NHSRCL. |         |
| 11 | Loss of Community<br>Infrastructure and<br>Common Property<br>Resources | Affected<br>communities and<br>groups   | a) Compensation/ assistance for reconstruction/relocation of community structures and replacement of common property resources shall be done in consultation with the local community. All cost shall be borne by NHSRCL.   |         |

Table 5-3: Entitlement Matrix Maharashtra

| SN                 | Type of Loss   | Eligible Category | Entitlement (Compensation & R&R Assistance)   | Remarks   |                           |           |     |          |  |
|--------------------|--|-------------------|---|---|---------------------------|-----------|-----|----------|--|
| (1)                | (2)  | (3)               | (4)   | (5)   |                           |           |     |          |  |
| 1                  | Loss of Land [agricultural as well as non-agricultural (homestead/ commercial or otherwise)] | Title Holder - TH | <p>a) The land will be acquired on payment of compensation as per RFCTLARR Act, 2013 (hereinafter referred as Act no 30 of 2013).</p> <p>I. Market value as per the India Stamp Act 1899 for the registration of sale deed or agreement to sell, in the area where land is situated;</p> <p>or</p> <p>The average sale price of similar types of land situated in the nearest vicinity area ascertained from the highest 50% of the sale deeds of the proceeding 3 years;</p> <p>or</p> <p>Consented amounts paid for PPPs or private Companies<br/><b>whichever is higher.</b></p> <p>II. Plus 100% Solatium and 12% interest from the date of notification (Namuna 1 publication for various tehsil)</p> <p>III. Multiplication Factor as per the Act (1 in urban, 1.5 in areas under regional/development areas and 2 in rural areas).</p> | <p>Compensation determination as per steps outlined under section 26 of RFCTLARR Act 2013.</p> <p>12% interest shall be applicable from the date of First notification Namuna 1 in Maharashtra)].</p> |                           |           |     |          |  |
|                    |  |                   | <p>b) R&amp;R cost/ assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.<br/><b>(Minimum lump sum Rs 5,00,000)</b></p>   | <p>The R&amp;R amount/ assistance shall be payable according to the Second Schedule of the Act No. 30 of 2013.</p>  |                           |           |     |          |  |
|                    |  |                   | <p>c) The stamp duty and other fees payable for registration of the land or house purchased by the affected families (anywhere within the concerned state) in self-name or the joint name of the affected family member (spouse/ children), shall be reimbursed by NHSRCL on the production of documentary evidence.</p> <p>Stamp duty and other fees shall be payable for property value equal to the total amount of Compensation &amp; R&amp;R disbursed or the actual amount paid by the affected family, whichever is less.</p>  | <p>The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families.</p>                       |                           |           |     |          |  |
|                    |  |                   | <p>d) Partially Acquired Land Plot:<br/>NHSRCL shall pay one-time additional assistance to the affected land owner family based on the percentage of the land area acquired from each partially acquired land plot.</p> <table border="1"> <thead> <tr> <th>Land Area Acquired</th> <th>Additional R&amp;R assistance</th> </tr> </thead> <tbody> <tr> <td>Up to 50%</td> <td>Nil</td> </tr> <tr> <td>50% -75%</td> <td>15% of Compensation amount for balance land area</td> </tr> <tr> <td>More than 75%</td> <td>25% of Compensation amount for balance land area</td> </tr> </tbody> </table>   | Land Area Acquired  | Additional R&R assistance | Up to 50% | Nil | 50% -75% | 15% of Compensation amount for balance land area |
| Land Area Acquired | Additional R&R assistance  |                   |   |   |                           |           |     |          |  |
| Up to 50%          | Nil  |                   |   |   |                           |           |     |          |  |
| 50% -75%           | 15% of Compensation amount for balance land area   |                   |   |   |                           |           |     |          |  |
| More than 75%      | 25% of Compensation amount for balance land area   |                   |   |   |                           |           |     |          |  |

| SN  | Type of Loss   | Eligible Category             | Entitlement (Compensation & R&R Assistance)  | Remarks  |
|-----|--|-------------------------------|--|--|
|     |  |                               | e) In case of severance of land plot (division into two parts due to acquisition), the left-over plots on either side shall be treated independently as per the above clause [(d) for partially impacted land plots].  | For severed land plots also, the ownership of remaining land area on either side shall continue to remain with the land owner.   |
|     |  |                               | f) One-time additional assistance equal to 25% of the Compensation amount in terms of Govt. of Maharashtra Govt. decision No. SANKIRNA -03/2015/Para.Kra.34/A-2 dtd. 12/5/2015.<br><b>Sample calculation as under</b><br>i) <b>Total value of rural land as per market/Jantri/ Consented amount as per clause 1(a) above say Rs100,000</b><br>ii) <b>Multiplier factor -2 for rural say Rs 2,00,000</b><br>iii) <b>Solatium 100% of (ii) Rs 2,00,000</b><br>iv) <b>Total Compensation (ii) +(iii) = Rs 4,00,000</b><br>v) <b>Additional incentive for agreeing to consent – 25% of (iv) = Rs 1,00,000</b><br><b>Gross Amount including incentive for consent –Rs 5,00,000/</b> | This assistance shall be applicable for acquisition of private land through consent.   |
| 2   | Families primarily dependent on acquired land (Agricultural) | Affected family               | d) A onetime payment of Rs. 5 lakhs per affected family.   |  |
|     |  |                               | e) Subsistence allowance of Rs. 3600/month for a period of one year (i.e. Rs 43,200).  |  |
|     |  |                               | f) The stamp duty and other fees payable for registration of the land or house purchased by the affected families (anywhere within the concerned state) in self-name or the joint name of the affected family member (spouse/ children), shall be reimbursed by NHSRCL on the production of documentary evidence.  | Stamp duty and other fees shall be payable for property value equal to the total amount of Compensation & R&R disbursed or the actual amount paid by the affected family, whichever is less.<br><br>The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families. |
| 3.1 | Loss of Residential Structure                                | Affected family (Titleholder) | a) Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium.<br><b>Sample calculation as under</b><br>i) <b>Valuation of the structure Say Rs 100,000</b><br>ii) <b>Solatium @100% of (i) Say Rs 1,00,000</b><br><b>Total Compensation for Structure (i) +(ii) = Rs 2,00,000</b>  | Valuation of structure by approved Valuer based on applicable Schedule of Rates (SoR)/ Plinth area, without depreciation.  |
|     |  |                               | a) Full compensation of structure payable in case of partial impact making unimpaired use of structure difficult.<br><br>Or  |  |

| SN  | Type of Loss                  | Eligible Category      | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|-------------------------------|------------------------|--|---|
|     |                               |                        | An in case of partial impact of structure, provided that unimpaired continuous use of such structure is possible, and the owner/ occupier express willingness in writing to NHRCL to retain the remaining part of the structure, an additional amount of 25% of the compensation amount of affected area of such structure without solatium shall be paid to owner as one-time ex-gratia amount for repairing and strengthening of such structure. |   |
|     |                               |                        | b) R&R cost/assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.<br>Sample calculation as under<br><b><u>(Upto Rs 1,43,200 depending on the physical displacement = Rs 43,200 (Subsistence grant) + Rs 50,000 (transportation cost) + Rs 50,000 (Resettlement allowance)</u></b>  | The R&R amount/ assistance shall be payable according to the Second Schedule of the Act No. 30 of 2013.   |
|     |                               |                        | <b>As an alternative to 3.1(a) and 3.1 (b), the following may be opted:</b><br>c) An equivalent amount of money in lieu of the loss of structure (in case of displacement due to loss of housing unit), as per the specifications and rates of Pradhan Mantri Awas Yojana or similar scheme of State/ Central Governments in Rural and Urban areas.  | The amount for alternative housing unit shall not be less than Rs 70,000 in rural areas and Rs 1.5 lakhs in urban areas. <sup>8</sup>                                       |
|     |                               |                        | d) The stamp duty and other fees payable for registration of the land or house purchased by the Titleholder shall be borne by NHRCL on the production of documentary evidence as per point (c) of column 4 of SI. No. 1.   | The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families.    |
|     |                               |                        | e) Right to salvage material from the affected structures without any cost.  |   |
|     |                               |                        | f) Two months' notice to vacate the structure.   | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br><br>Balance 20% will be paid after providing encumbrance free land. |
| 3.2 | Loss of Residential Structure | Encroachers, Squatters | h) Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium.<br>Sample calculation as under<br>i) Valuation of the structure Say Rs 70,000<br>ii) Solatium @100% of (i) Say Rs 70,000<br><b>Total Compensation for Structure (i) + (ii) = Rs 140,000</b>  | Valuation of the structure shall be based on applicable SoR duly updated without depreciation.  |
|     |                               |                        | i) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building materials, belongings, cattle, etc.   | Upto Rs 1,43,200 in case of physical displacement from the present location.  |
|     |                               |                        | j) Subsistence allowance of Rs.3600/month for a period of one year (i.e. Rs 43,200)  |   |

<sup>8</sup> An alternative house as per IAY specifications in rural areas and a constructed house/flat of minimum 50 sq. m. in urban areas or cash in lieu of house if opted (the cash in lieu of house will be Rs.70,000/- in line with Gol IAY standards in rural areas and Rs.1,50,000 in case of urban areas), for those who do not have any homestead land and who have to relocate.

| SN  | Type of Loss                            | Eligible Category | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|---|-------------------|--|---|
|     |   |                   | k) One-time Resettlement allowance of Rs 50,000/   |   |
|     |   |                   | <b>As an alternative to 3.2(a), the following may be opted:</b>  |   |
|     |   |                   | l) An equivalent amount of money in lieu of the loss of structure (in case of displacement due to loss of housing unit), as per the specifications and rates of Pradhan Mantri Awas Yojana or similar scheme of State/ Central Governments in Rural and Urban areas  | The amount for alternative housing unit shall not be less than Rs 70,000 in rural areas and Rs 1.5 lakhs in urban areas.  |
|     |   |                   | m) Right to salvage material from the affected structures without any cost.  |   |
|     |   |                   | n) Two months' advance notice to vacate the structure.   | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br>Balance 20% will be paid after providing encumbrance free land. |
| 4.1 | Loss of Commercial/Industrial Structure | Titleholder       | a) Compensation for structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under<br>(i) Valuation of the structure Say Rs 100,000<br>(ii) Solatium @100% of (i) Say Rs 1,00,000<br><b>Total Compensation for Structure (i) + (ii) = Rs 2,00,000</b>   | Valuation of structure shall be based on applicable SoR/ Plinth area without depreciation.  |
|     |   |                   | b) Full compensation of structure payable in case of partial impact making unimpaired use of structure difficult.<br>Or<br>In case of partial impact of structure, provided that unimpaired continuous use of such structure is possible without hazards, and the owner/occupier express willingness in writing to NHSRCL to retain the remaining part of the structure, an additional amount of 25% of the compensation amount of affected area of such structure without solatium shall be paid to owner as one-time ex-gratia amount for repairing and strengthening of such structure. |   |
|     |   |                   | c) R& R cost/assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.<br><b><u>(Upto Rs 1,43,200 depending on the physical displacement = Rs 43,200 (Subsistence grant) + Rs 50,000 (transportation cost) + Rs 50,000 (Resettlement allowance)</u></b>  | The lump-sum R&R amount/ assistance shall not be less than the amount payable according to the Second Schedule of the Act No. 30 of 2013.                               |
|     |   |                   | d) The stamp duty and other fees payable for registration of commercial/industrial registered by the titleholder shall be borne by NHSRCL on the production of documentary evidence as per point (c) of column 4 of Sl. No. 1.   |   |
|     |   |                   | e) Right to salvage material from the affected structures without any cost.  |   |

| SN  | Type of Loss                   | Eligible Category  | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|--------------------------------|--|--|---|
|     |                                |  | f) Two months advance notice to vacate commercial and 6 months advance notice to vacate industrial structure/unit.   | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br>Balance 20% will be paid after providing encumbrance free land. |
| 4.2 | Loss of Commercial Structure   | Affected family (Non-titleholder – Encroachers, Squatters) | a) Compensation for structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under<br>i) Valuation of the structure Say Rs 1,00,000<br>iii) Solatium @100% of (i) Say Rs 100,000<br><b>Total Compensation for Structure (i) + (ii) = Rs 2,00,000</b>  | Valuation of structure shall be based on applicable SoR/ Plinth area, without depreciation.   |
|     |                                |  | b) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building materials, belongings, cattle, etc.   | Which requires physical displacement from the present location.   |
|     |                                |  | c) Subsistence allowance of Rs. 3600/month for a period of one year (i.e. Rs 43,200)   | Balance 20% will be paid after providing encumbrance free land.   |
|     |                                |  | d) One-time financial assistance of Rs 25,000 for loss of trade/ self-employment to the commercial squatter.   |   |
|     |                                |  | e) Right to salvage material from the affected structures without any cost.  |   |
|     |                                |  | f) Two months' advance notice to vacate the commercial structure and 6 months advance notice to vacate the industrial structure<br>g) One-time resettlement allowance of Rs. 50,000  | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br>Balance 20% will be paid after providing encumbrance free land. |
| 5.1 | Loss of residential structures | Tenants  | <b>Residential:</b><br>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building material, belongings, cattle, etc.<br>b) Rental allowance of 4000/- per month in a rural area and 5000/- per month in urban areas for six (6) months.<br>c) Two months' advance notice to vacate structure.  |   |
| 5.2 | Loss of commercial structures  | Tenants  | <b>Commercial:</b><br>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of commercial and other items kept in the structure.<br>b) One-time financial assistance amount of Rs. 25,000/- for loss of trade/self-employment.<br>c) Rental allowance of Rs 5000/- per month in rural areas and Rs 7000/- per month in urban areas for a period of six (6) months.<br>d) Two months' advance notice to vacate structures. |   |
| 5.3 | Loss of other structures       | Tenants  | <b>Others:</b>   |   |



| SN | Type of Loss                   | Eligible Category  | Entitlement (Compensation & R&R Assistance)   | Remarks  |
|----|--------------------------------|--|---|--|
|    |                                |  | a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of items kept in the structure affected.<br>b) Rental allowance of Rs 5000/- per month in rural areas and Rs 7000/- per month in urban areas for a period of six (6) months.<br>c) Two months' advance notice to vacate structures.  |  |
| 6  | Loss of Employment             | Wage Earner (Workers/ Employees in non-agricultural establishment/ unit) | a) Subsistence allowance of Rs 3600/month for a period of one year (i.e. Rs 43200/-)  |  |
| 7  | Trees, crops, plantations      | Titleholder, Encroacher, Squatter  | c) Compensation for trees affected as per section 29 of Act 30 of 2013.<br>Or<br>NHSRCL shall/may allow the affected family to cut and take away the tree by providing 25% of timber value of the tree (fruit-bearing as well as non-fruit bearing) instead of full compensation of timber value.<br><b>Sample calculation as under</b><br>(i) <b>Valuation of the tree Say Rs 1000</b><br>(ii) <b>Solatium @100% of (i) Say Rs 1000</b><br><b>Total Compensation for tree (i) + (ii) = Rs 2000</b><br><b>In case affected families take the tree, then compensation = Rs 500</b> | Valuation of trees, crops, and plants attached to the land acquired shall be carried out by concerned departments without applying depreciation factor.<br>Valuation of timber trees – by Forest Department.<br>Standing crops – by Agriculture Department.<br>Fruit bearing trees, plants, etc- by Horticulture Department. |
|    |                                |  | d) Three (3) months' advance notice to affected persons to harvest fruits, standing crops etc.  |  |
| 8  | Cattle shed/ Petty shops       | Titleholder, Encroacher, Squatter  | a) One-time financial assistance of such amount as the appropriate Government may, by notification, specify subject to a minimum of Rs. 25,000/- for relocation/shifting of cattle shed or small shop, as the case may be.<br>b) Subsistence allowance of Rs. 3600/month for petty shops a period of three months (time period required to re-establish shop) i.e. Rs 10,800/-<br>c) Notice period of 15 days to shift/remove structure   | Petty shops will include small shops, work shed commercial kiosk, shanties and other movable shops (which can be relocated without damage) where business is carried out.<br>Entitled parties receiving assistance under the 'petty shop' category shall not be entitled to payment of lump sum amount                       |
| 9  | Loss of land/ structure/ other | Vulnerable family belonging to title holder, squatter, encroacher        | a) One-time additional financial assistance of Rs 100,000/- to all vulnerable families.   | Vulnerable includes where the head of the family is Scheduled Caste, Schedule Tribe (including the displacement in Schedule Areas), WHH (widow, separated woman, single woman, etc), disabled, BPL, the  |

| SN | Type of Loss   | Eligible Category                    | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|----|--|--------------------------------------|--|---|
|    |  |                                      |  | person above 65 years of age with no immediate family members to support. |
| 10 | Loss of land/ structure/ other                                 | One member from each affected family | a) Training in relevant skills/vocation to self or a family member as per his / her demand (to the extent possible) in the areas such as dairy, poultry, computer, repair of electrical/electronic items, mechanical works etc. All cost related to training shall be borne by NHSRCL. |   |
| 11 | Loss of Community Infrastructure and Common Property Resources | Affected communities and groups      | a) Compensation/ assistance for reconstruction/relocation of community structures and replacement of common property resources shall be done in consultation with the local community. All cost shall be borne by NHSRCL.  |   |

Table 5-4: Entitlement Matrix DNH

| SN  | Type of Loss   | Eligible Category | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|--|-------------------|--|---|
| (1) | (2)  | (3)               | (4)  | (5)   |
| 1   | Loss of Land [agricultural as well as non-agricultural (homestead/ commercial or otherwise)] | Title Holder - TH | <p>a) The land will be acquired on payment of compensation as per RFCTLARR Act, 2013 (hereinafter referred as Act no 30 of 2013).</p> <p>I. Market value as per the India Stamp Act 1899 for the registration of sale deed or agreement to sell, in the area where land is situated;</p> <p>or</p> <p>The average sale price of similar types of land situated in the nearest vicinity area ascertained from the highest 50% of the sale deeds of the proceeding 3 years;</p> <p>or</p> <p>Consented amounts paid for PPPs or private Companies</p> <p><b>whichever is higher.</b></p> <p>II. Plus 100% Solatium and 12% interest from the date of notification (Section 4 notification)</p> <p>III. Multiplication Factor as per the Act (1 in urban and 2 in rural areas).</p> | <p>Compensation determination as per steps outlined under section 26 of RFCTLARR Act 2013.</p> <p>12% interest shall be applicable from the date of First notification Section 4 in DNH].</p> |
|     |  |                   | <p>b) R&amp;R cost/ assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.</p> <p><b>(Minimum lump sum Rs 5,00,000)</b></p>   | <p>The R&amp;R amount/ assistance shall be payable according to the Second Schedule of the RFCTLARR 2013</p>  |
|     |  |                   | <p>c) The stamp duty and other fees payable for registration of the land or house purchased by the affected families (anywhere within the concerned state) in self-name or the joint name of the</p>   | <p>The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families.</p>               |

| SN                 | Type of Loss                                     | Eligible Category | Entitlement (Compensation & R&R Assistance)  | Remarks   |                           |           |     |           |  |               |  |  |
|--------------------|--|-------------------|--|---|---------------------------|-----------|-----|-----------|--|---------------|--|--|
|                    |  |                   | <p>affected family member (spouse/ children), shall be reimbursed by NHSRCL on the production of documentary evidence.</p> <p>Stamp duty and other fees shall be payable for property value equal to the total amount of Compensation &amp; R&amp;R disbursed or the actual amount paid by the affected family, whichever is less.</p>   |   |                           |           |     |           |  |               |  |  |
|                    |  |                   | <p>d) Partially Acquired Land Plot:<br/>NHSRCL shall pay one-time additional assistance to the affected land owner family based on the percentage of the land area acquired from each partially acquired land plot.</p> <table border="1"> <thead> <tr> <th>Land Area Acquired</th> <th>Additional R&amp;R assistance</th> </tr> </thead> <tbody> <tr> <td>Up to 50%</td> <td>Nil</td> </tr> <tr> <td>50% - 75%</td> <td>15% of Compensation amount for balance land area</td> </tr> <tr> <td>More than 75%</td> <td>25% of Compensation amount for balance land area</td> </tr> </tbody> </table> | Land Area Acquired  | Additional R&R assistance | Up to 50% | Nil | 50% - 75% | 15% of Compensation amount for balance land area | More than 75% | 25% of Compensation amount for balance land area | <p>The additional one-time R&amp;R assistance for partially acquired land plot shall be <b>without solatium, multiplication factor and interest @12%</b>.</p> <p>The ownership of the balance area of the partially acquired land plot shall continue to remain with the land owner.</p> |
| Land Area Acquired | Additional R&R assistance                        |                   |  |   |                           |           |     |           |  |               |  |  |
| Up to 50%          | Nil  |                   |  |   |                           |           |     |           |  |               |  |  |
| 50% - 75%          | 15% of Compensation amount for balance land area |                   |  |   |                           |           |     |           |  |               |  |  |
| More than 75%      | 25% of Compensation amount for balance land area |                   |  |   |                           |           |     |           |  |               |  |  |
|                    |  |                   | <p>e) In case of severance of land plot (division into two parts due to acquisition), the left-over plots on either side shall be treated independently as per the above clause [(d) for partially impacted land plots].</p>   | <p>For severed land plots also, the ownership of remaining land area on either side shall continue to remain with the land owner.</p> |                           |           |     |           |  |               |  |  |
|                    |  |                   | <p>f) One-time additional assistance equal to 25% of the Compensation amount</p>   | <p>This assistance shall be applicable for acquisition of private land through consent.</p>   |                           |           |     |           |  |               |  |  |

| SN  | Type of Loss   | Eligible Category             | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|--|-------------------------------|--|---|
|     |  |                               | <p><i>Sample calculation as under</i></p> <p>i) <i>Total value of rural land as per market/Jantri/ Consented amount as per clause 1(a) above say Rs100,000</i></p> <p>ii) <i>Multiplier factor -2 for rural say Rs 2,00,000</i></p> <p>iii) <i>Solatium 100% of (ii) Rs 2,00,000</i></p> <p>iv) <i>Total Compensation (ii) +(iii) = Rs 4,00,000</i></p> <p>v) <i>Additional incentive for agreeing to consent – 25% of (iv) = Rs 1,00,000</i></p> <p><i>Gross Amount including incentive for consent –Rs 5,00,000/</i></p> |   |
| 2   | Families primarily dependent on acquired land (Agricultural) | Affected family               | <p>a) A onetime payment of Rs. 5 lakhs per affected family.</p> <p>b) Subsistence allowance of Rs. 3600/month for a period of one year (i.e. Rs 43,200).</p> <p>c) The stamp duty and other fees payable for registration of the land or house purchased by the affected families (anywhere within the concerned state) in self-name or the joint name of the affected family member (spouse/ children), shall be reimbursed by NHSRCL on the production of documentary evidence.</p>                                      | <p>Stamp duty and other fees shall be payable for property value equal to the total amount of Compensation &amp; R&amp;R disbursed or the actual amount paid by the affected family, whichever is less.</p> <p>The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families.</p> |
| 3.1 | Loss of Residential Structure                                | Affected family (Titleholder) | <p>a) Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium.</p> <p><i>Sample calculation as under</i></p> <p>iii) <i>Valuation of the structure Say Rs 100,000</i></p>  | Valuation of structure by approved Valuer based on applicable Schedule of Rates (SoR)/ Plinth area, without depreciation.   |

| SN | Type of Loss | Eligible Category | Entitlement (Compensation & R&R Assistance)   | Remarks   |
|----|--------------|-------------------|---|---|
|    |              |                   | <p>iv) <b><u>Solatium @100% of (i) Say Rs 1,00,000</u></b></p> <p><b><u>Total Compensation for Structure (i) + (ii) = Rs 2,00,000</u></b></p>   |   |
|    |              |                   | <p>b) Full compensation of structure payable in case of partial impact making unimpaired use of structure difficult.</p> <p>Or</p> <p>In case of partial impact of structure, provided that unimpaired continuous use of such structure is possible, and the owner/ occupier express willingness in writing to NHRCL to retain the remaining part of the structure, an additional amount of 25% of the compensation amount of affected area of such structure without solatium shall be paid to owner as one-time ex-gratia amount for repairing and strengthening of such structure.</p> |   |
|    |              |                   | <p>c) R&amp;R cost/assistance shall be as per Second Schedule of the RFCTLARR Act, 2013. Sample calculation as under</p> <p><b><u>(Upto Rs 1,43,200 depending on the physical displacement = Rs 43,200 (Subsistence grant) + Rs 50,000 (transportation cost) + Rs 50,000 (Resettlement allowance)</u></b></p>   | The R&R amount/ assistance shall be payable according to the Second Schedule of the Act No. 30 of 2013.                               |
|    |              |                   | <p><b>As an alternative to 3.1(a) and 3.1 (b), the following may be opted:</b></p> <p>d) An equivalent amount of money in lieu of the loss of structure (in case of displacement due to loss of housing unit), as per the specifications and rates of Pradhan Mantri Awas Yojana or</p>   | The amount for alternative housing unit shall not be less than Rs 70,000 in rural areas and Rs 1.5 lakhs in urban areas. <sup>9</sup> |

<sup>9</sup> An alternative house as per PMAY specifications in rural areas and a constructed house/flat of minimum 50 sq. m. in urban areas or cash in lieu of house if opted (the cash in lieu of house will be Rs.70,000/- in line with GoI IAY standards in rural areas and Rs.1,50,000 in case of urban areas), for those who do not have any homestead land and who have to relocate.

| SN  | Type of Loss                  | Eligible Category   | Entitlement (Compensation & R&R Assistance)   | Remarks  |
|-----|-------------------------------|---|---|--|
|     |                               |   | similar scheme of State/ Central Governments in Rural and Urban areas.  |  |
|     |                               |   | e) The stamp duty and other fees payable for registration of the land or house purchased by the Titleholder shall be borne by NHSRCL on the production of documentary evidence as per point (c) of column 4 of Sl. No. 1.   | The reimbursement of stamp duty and other fees can be claimed within a period of three (3) years from the date of disbursement of the last payment to affected families. |
|     |                               |   | f) Right to salvage material from the affected structures without any cost.   |  |
|     |                               |   | g) Two months' notice to vacate the structure.  | Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br>Balance 20% will be paid after providing encumbrance free land.  |
| 3.2 | Loss of Residential Structure | Encroachers, Squatters  | <p>a) Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under</p> <p>iv) Valuation of the structure<br/>Say Rs 70,000</p> <p>v) Solatium @100% of (i) Say<br/>Rs 70,000</p> <p><b>Total Compensation for Structure (i) + (ii) = Rs 140,000</b></p> | Valuation of the structure shall be based on applicable SoR duly updated without depreciation.   |
|     |                               |   | b) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building materials, belongings, cattle, etc.  | Upto Rs 1,43,200 in case of physical displacement from the present location.   |
|     |                               | c) Subsistence allowance of Rs.3600/month for a period of one year (i.e. Rs 43,200) |   |  |
|     |                               | d) One-time Resettlement allowance of Rs 50,000/                                    |   |  |
|     |                               |   | <b>As an alternative to 3.2(a), the following may be opted:</b>   | The amount for alternative housing unit shall not be less than Rs 70,000 in rural areas and Rs 1.5 lakhs in urban areas.   |

| SN  | Type of Loss                            | Eligible Category | Entitlement (Compensation & R&R Assistance)   | Remarks   |
|-----|---|-------------------|---|---|
|     |   |                   | <p>e) An equivalent amount of money in lieu of the loss of structure (in case of displacement due to loss of housing unit), as per the specifications and rates of Pradhan Mantri Awas Yojana or similar scheme of State/ Central Governments in Rural and Urban areas</p> <p>f) Right to salvage material from the affected structures without any cost.</p> <p>g) Two months' advance notice to vacate the structure.</p>   | <p>Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.<br/>Balance 20% will be paid after providing encumbrance free land.</p> |
| 4.1 | Loss of Commercial/Industrial Structure | Titleholder       | <p>a) Compensation for structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under</p> <p>(i) Valuation of the structure Say Rs 100,000</p> <p>(ii) Solatium @100% of (i) Say Rs 1,00,000</p> <p><b>Total Compensation for Structure (i) + (ii) = Rs 2,00,000</b></p> <p>b) Full compensation of structure payable in case of partial impact making unimpaired use of structure difficult.</p> <p>Or</p> <p>In case of partial impact of structure, provided that unimpaired continuous use of such structure is possible without hazards, and the owner/occupier express willingness in writing to NHSRCL to retain the remaining part of the structure, an additional amount of 25% of the compensation amount of affected area of such structure without solatium shall be paid to owner as one-time ex-gratia amount for repairing and strengthening of such structure.</p> | <p>Valuation of structure shall be based on applicable SoR/ Plinth area without depreciation.</p>   |



| SN  | Type of Loss                 | Eligible Category  | Entitlement (Compensation & R&R Assistance)   | Remarks  |
|-----|------------------------------|--|---|--|
|     |                              |  | <p>c) R&amp; R cost/assistance shall be as per Second Schedule of the RFCTLARR Act, 2013.</p> <p><u>(Upto Rs 1,43,200 depending on the physical displacement = Rs 43,200 (Subsistence grant) + Rs 50,000 (transportation cost) + Rs 50,000 (Resettlement allowance)</u></p>                           | The lump-sum R&R amount/ assistance shall not be less than the amount payable according to the Second Schedule of the Act No. 30 of 2013.  |
|     |                              |  | <p>d) The stamp duty and other fees payable for registration of commercial/industrial registered by the titleholder shall be borne by NHSRCL on the production of documentary evidence as per point (c) of column 4 of Sl. No. 1.</p>   |  |
|     |                              |  | <p>e) Right to salvage material from the affected structures without any cost.</p>  |  |
|     |                              |  | <p>f) Two months advance notice to vacate commercial and 6 months advance notice to vacate industrial structure/unit.</p>   | <p>Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.</p> <p>Balance 20% will be paid after providing encumbrance free land.</p> |
| 4.2 | Loss of Commercial Structure | Affected family (Non-titleholder – Encroachers, Squatters) | <p>a) Compensation for structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under</p> <p>j) Valuation of the structure Say Rs 1,00,000</p> <p>vi) Solatium @100% of (i) Say Rs 100,000</p> <p><b>Total Compensation for Structure (i) + (ii) = Rs 2,00,000</b></p> | Valuation of structure shall be based on applicable SoR/ Plinth area, without depreciation.  |
|     |                              |  | <p>b) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building materials, belongings, cattle, etc.</p>   | Which requires physical displacement from the present location.  |

| SN  | Type of Loss                   | Eligible Category | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|--------------------------------|-------------------|--|---|
|     |                                |                   | <ul style="list-style-type: none"> <li>c) Subsistence allowance of Rs. 3600/month for a period of one year (i.e. Rs 43,200)</li> <li>d) One-time financial assistance of Rs 25,000 for loss of trade/ self-employment to the commercial squatter.</li> <li>e) Right to salvage material from the affected structures without any cost.</li> <li>f) Two months' advance notice to vacate the commercial structure and 6 months advance notice to vacate the industrial structure</li> <li>g) One-time resettlement allowance of Rs. 50,000</li> </ul> | <p>Balance 20% will be paid after providing encumbrance free land.</p> <p>Advance payment of 80% of the total compensation shall be paid on/before serving the advance notice.</p> <p>Balance 20% will be paid after providing encumbrance free land.</p> |
| 5.1 | Loss of residential structures | Tenants           | <p><b>Residential:</b></p> <ul style="list-style-type: none"> <li>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building material, belongings, cattle, etc.</li> <li>b) Rental allowance of 4000/- per month in a rural area and 5000/- per month in urban areas for six (6) months.</li> <li>c) Two months' advance notice to vacate structure.</li> </ul>  |   |
| 5.2 | Loss of commercial structures  | Tenants           | <p><b>Commercial:</b></p> <ul style="list-style-type: none"> <li>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of commercial and other items kept in the structure.</li> <li>b) One-time financial assistance amount of Rs. 25,000/- for loss of trade/self-employment.</li> <li>c) Rental allowance of Rs 5000/- per month in rural areas and Rs 7000/- per month in urban areas for a period of six (6) months.</li> </ul>  |   |

| SN  | Type of Loss              | Eligible Category  | Entitlement (Compensation & R&R Assistance)  | Remarks   |
|-----|---------------------------|--|--|---|
|     |                           |  | d) Two months' advance notice to vacate structures.  |   |
| 5.3 | Loss of other structures  | Tenants  | <p><b>Others:</b></p> <p>a) One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of items kept in the structure affected.</p> <p>b) Rental allowance of Rs 5000/- per month in rural areas and Rs 7000/- per month in urban areas for a period of six (6) months.</p> <p>c) Two months' advance notice to vacate structures.</p>  |   |
| 6   | Loss of Employment        | Wage Earner (Workers/ Employees in non-agricultural establishment/ unit) | a) Subsistence allowance of Rs 3600/month for a period of one year (i.e. Rs 43200/-)   |   |
| 7   | Trees, crops, plantations | Titleholder, Encroacher, Squatter  | <p>a) Compensation for trees affected as per section 29 of Act 30 of 2013.</p> <p>Or</p> <p>NHSRCL shall/may allow the affected family to cut and take away the tree by providing 25% of timber value of the tree (fruit-bearing as well as non-fruit bearing) instead of full compensation of timber value.</p> <p><b>Sample calculation as under</b></p> <p><b>(i) Valuation of the tree Say Rs 1000</b></p> <p><b>(ii) Solatium @100% of (i) Say Rs 1000</b></p> <p><b>Total Compensation for tree (i) + (ii) = Rs 2000</b></p> <p><b>In case affected families take the tree, then compensation = Rs 500</b></p> | <p>Valuation of trees, crops, and plants attached to the land acquired shall be carried out by concerned departments without applying depreciation factor.</p> <p>Valuation of timber trees – by Forest Department.</p> <p>Standing crops – by Agriculture Department.</p> <p>Fruit bearing trees, plants, etc- by Horticulture Department.</p> |

| SN | Type of Loss   | Eligible Category   | Entitlement (Compensation & R&R Assistance)   | Remarks  |
|----|--|---|---|--|
|    |  |   | b) Three (3) months' advance notice to affected persons to harvest fruits, standing crops etc.  |  |
| 8  | Cattle shed/ Petty shops                                       | Titleholder, Encroacher, Squatter                                 | a) One-time financial assistance of such amount as the appropriate Government may, by notification, specify subject to a minimum of Rs. 25,000/- for relocation/shifting of cattle shed or small shop, as the case may be.  | Petty shops will include small shops, work shed commercial kiosk, shanties and other movable shops (which can be relocated without damage) where business is carried out.<br>Entitled parties receiving assistance under the 'petty shop' category shall not be entitled to payment of lump sum amount |
|    |  |   | b) Subsistence allowance of Rs. 3600/month for petty shops a period of three months (time period required to re-establish shop) i.e. Rs 10,800/-  |  |
|    |  |   | c) Notice period of 15 days to shift/remove structure   |  |
| 9  | Loss of land/ structure/ other                                 | Vulnerable family belonging to title holder, squatter, encroacher | a) One-time additional financial assistance of Rs 100,000/- to all vulnerable families.   | Vulnerable includes where the head of the family is Scheduled Caste, Schedule Tribe (including the displacement in Schedule Areas), WHH (widow, separated woman, single woman, etc), disabled, BPL, the person above 65 years of age with no immediate family members to support.                      |
| 10 | Loss of land/ structure/ other                                 | One member from each affected family                              | a) Training in relevant skills/vocation to self or a family member as per his / her demand (to the extent possible) in the areas such as dairy, poultry, computer, repair of electrical/electronic items, mechanical works etc. All cost related to training shall be borne by NHRCL. |  |
| 11 | Loss of Community Infrastructure and Common Property Resources | Affected communities and groups                                   | a) Compensation/ assistance for reconstruction/relocation of community structures and replacement of common property resources shall be done in consultation with the local community. All cost shall be borne by NHRCL.  |  |



## Note 1: Determination of Compensation of Land

1. Compensation would be determined by LA Collector as per provisions stated in RFCTLARR, Act 2013, Section 26, which specifies the following criterion for assessing and determining the market value of the land:
  - a. the market value, if any, specified in the Indian Stamp Act, 1899 for the registration of sale deeds or agreements to sell, as the case may be, in the area where the land is situated; or
  - b. the average of the sale price for the similar type of land situated in the nearest village or nearest vicinity ascertained from not less than 50% of the sale deeds registered during the last three years; or
  - c. consented amount of compensation as agreed upon under sub-section (2) of Section 2 in case of acquisition of lands for private companies or for public-private partnership projects;

Whichever is higher

The date for the determination of market value shall be the date on which notification under 10A of RFCTLARR (Gujarat Amendment), Act 2016 or Section 11 of RFCTLARR, Act 2013 has been issued.

Explanation 1 - The average sale price referred to in clause (b) shall be determined to take into account the sale deeds or the agreements to sell registered for similar type of area in the near village or near vicinity area during immediately preceding three years of the year in which such acquisition of land is proposed to be made.

Explanation 2 -For determining the average sale price referred to in Explanation I, one-half of the total number of sale deeds of the agreements to sell in which the highest sale price has been mentioned shall be taken into account.

Explanation 3 -While determining the market value under this section and the average sale price referred to in Explanation I or Explanation 2, any price paid as compensation for land acquired under the provisions of this Act on an earlier occasion in the district shall not be taken into consideration.

Explanation 4 - While determining the market value under this section and the average sale price referred to in Explanation I or Explanation 2, any price paid, which in the opinion of the Collector is not indicative of actual prevailing market value may be discounted for the purposes of calculating market value.

2. The market value calculated as per (1) above shall be multiplied by a factor of one or two based on the distance from the urban area as may be notified by the appropriate Government.
3. Where the market value as per (1) or (2) above cannot be determined for the reason that-
  - a. the land is situated in such an area where the transactions in land are restricted by or under any other law for the time being in force in that area; or
  - b. the registered sale deeds or agreements to sell as mentioned in the clause. (a) of sub-section (1) for similar land are not available for the immediately preceding three years; or
  - c. the market value has not been specified under the Indian Stamp Act, 1899 by the appropriate authority,

The State Government concerned shall specify the floor price or minimum price per unit area of the said land based on the Price calculated in the manner specified in sub-section (I) irrespective of similar types of land situated in the immediate adjoining areas:

4. In determining the amount of compensation to be awarded for land acquired under the LARR Act

2013, the provision under Section 28 of the Act shall be taken into consideration.

5. Those occupying village common lands/abadi lands prior to 1961 shall be eligible to be treated as "regularized land holders" as permitted by law and shall be provided with alternative land or site allowance equivalent to land compensation
6. In addition to the market value of the land awarded, in every case the competent authority will award an amount at the rate of 12% per annum on such market value for the period commencing on and from the date of publication of the gazette notification u/s 10A for exemption of SIA in Gujarat , publication of Namuna 1 in Maharashtra and Section 4 notification in DNH till the date of consent award; or the date of the date of publication of the gazette notification (u/s 10A in Gujarat, Namuna 1 publication in Maharashtra and section 4 publication for DNH) till the date of award of the Collector, in case consent award fails or the date of taking possession, whichever is earlier.

### **Note 2: Determination of Replacement/Market Value of Structure**

The compensation for houses, buildings and other immovable properties will be determined on the basis of 2018 market value by referring to relevant Basic Schedule of Rates (B.S.R)/ plinth area/ load bearing rate as on date without depreciation, which will be determined by the LAO as per provision of law. Valuation of the structure will be carried out by registered valuer with the Government.

### **Note 3: Valuation of Trees/Crops**

Compensation for trees will be based on their market value. Loss of timber trees will be compensated at their replacement cost while the compensation for the loss of fruit-bearing trees will be calculated as annual produce value calculated for the number of years (as per standard procedure followed by concerned department) depending on the nature of trees/crops.

## **5.4 Revision/ Modification of the Legal & Policy Framework**

This Legal and Policy Framework will be an "up-to-date" or a "live document" enabling revision, as and when necessary. Unexpected situations or changes in the RAP implementation would be assessed and appropriate changes will be incorporated by updating the LPF for better implementation of RAP. Such revisions will also cover and update any changes/modifications introduced in the legal/ regulatory regime of the country/state, which will be in compliance with JICA guidelines.

## 6.0 RESETTLEMENT SITE DEVELOPMENT FOR RELOCATION

The fundamental of resettlement and rehabilitation principle is that the project affected persons should improve their socio-economic conditions after the implementation of the project and also share the benefits of the project. Based on the census survey, villages, where large number of structures are impacted, have been identified and the requirement of the people that will be subject to relocation has been assessed. Table 6-1 presents details on the number of PAH, identified during RAP Preparation and updated during implementation as on August'2021.

**Table 6-1: No. of PAHs to be relocated to a resettlement site or self-relocation**

| S.N.                   | District Name | Village Name      | Number of PAH to be relocated (As per RAP) | Number of PAH which identified for relocation upto August' 2021 |
|------------------------|---------------|-------------------|--|---|
| 1                      | Ahmedabad     | Ropara            | 68   | 44  |
| 2                      |               | Asarva            | 26   | 108   |
| 3                      |               | Sabarmati         | 29   | 0   |
| 4                      |               | Vatva             | 26   | 0   |
| 5                      |               | Devdi             |  | 6   |
| 6                      |               | Vinzol            |  | 3   |
| 7                      |               | Ghodasar          |  | 0   |
| 8                      |               | Dariyapur         |  | 18  |
| 9                      |               | Acher             |  | 4   |
| 10                     |               | Chenpur           |  | 7   |
| <b>Ahmedabad Total</b> |               |                   | <b>149</b>                                 | <b>190</b>  |
| 11                     | Anand         | Ramanagar         | 25   | 20  |
| 12                     |               | Mogar             |  | 3   |
| 13                     |               | Anklawadi         |  | 10  |
| 14                     |               | Samarkha          |  | 9   |
| 15                     |               | Boriyavi          |  | 17  |
| 16                     |               | Adas              |  | 7   |
| 17                     |               | Chikhodara        |  | 7   |
| 18                     |               | Vasad             |  | 1   |
| 19                     |               | Vaghasi           |  | 1   |
| <b>Anand Total</b>     |               |                   | <b>25</b>                                  | <b>75</b>   |
| 20                     | Kheda         | Dumral            | 25   | 9   |
| 21                     |               | Vadadla           |  | 1   |
| 22                     |               | Katakpura         |  | 4   |
| 23                     |               | Bavra             |  | 1   |
| 24                     |               | Zarol             |  | 2   |
| 25                     |               | Viol              |  | 1   |
| 26                     |               | Dantali           |  | 2   |
| 27                     |               | Degam             |  | 3   |
| 28                     |               | Bhumel            |  | 17  |
| 29                     |               | Chhapra           |  | 9   |
| 30                     |               | Uttarsanda        |  | 20  |
| 31                     |               | Davda             |  | 7   |
| 32                     |               | Kanij             |  | 5   |
| 33                     |               | Piplag            |  | 13  |
| 34                     |               | Chaklasi          |  | 9   |
| 35                     |               | Tundel            |  | 18  |
| <b>Kheda Total</b>     |               |                   | <b>25</b>                                  | <b>121</b>  |
| 36                     | Vadodara      | Vadsar            | 215  | 57  |
| 37                     |               | Vadodara Kasba    | 231  | 286   |
| 38                     |               | Akota             |  | 16  |
| 39                     |               | Rayka             |  | 3   |
| 40                     |               | Dashrath          |  | 14  |
| 41                     |               | Ajod              |  | 2   |
| 42                     |               | Sankarda          |  | 45  |
| 43                     |               | Padamala          |  | 2   |
| 44                     |               | Shihor            |  | 1   |
| 45                     |               | Thikariya Mubarak |  | 3   |
| 46                     |               | Manjalpur         |  | 24  |
| 47                     |               | Chhani            |  | 19  |
| 48                     |               | Gorwa             |  | 1   |
| <b>Vadodara Total</b>  |               |                   | <b>446</b>                                 | <b>473</b>  |
| 49                     | Bharuch       | Kohli Vantarsa    | 29   | 25  |



| S.N.                 | District Name         | Village Name         | Number of PAH to be relocated (As per RAP) | Number of PAH which identified for relocation upto August' 2021 |
|----------------------|-----------------------|----------------------|--|---|
| 50                   |                       | Aloonj               |  | 13  |
| 51                   |                       | Telod                |  | 13  |
| 52                   |                       | Amboli               |  | 2   |
| 53                   |                       | Vatarsa              |  | 1   |
| 54                   |                       | Tham                 |  | 3   |
| <b>Bharuch Total</b> |                       |                      | <b>29</b>                                  | <b>57</b>   |
| 55                   | Navsari               | Nandarkha            | 153  | 14  |
| 56                   |                       | Ghetki               | 25   | 12  |
| 57                   |                       | Undach Vaniya Faliya | 36   | 3   |
| 58                   |                       | Vankal               |  | 7   |
| 59                   |                       | Kesli                |  | 8   |
| 60                   |                       | Pati                 |  | 13  |
| 61                   |                       | Khergam              |  | 10  |
| 62                   |                       | Vadsangal            |  | 8   |
| 63                   |                       | Dhanori              |  | 4   |
| 64                   | Amodpore              |                      | 8  |   |
| <b>Navsari Total</b> |                       |                      | <b>214</b>                                 | <b>87</b>   |
| 65                   | Surat                 | Tarsadi              | 49   | 1   |
| 66                   |                       | Kathor               |  | 67  |
| 67                   |                       | Mohini               |  | 7   |
| 68                   |                       | Kimmali              |  | 12  |
| 69                   |                       | Niyol                |  | 1   |
| 70                   |                       | Vakhtana             |  | 6   |
| 71                   |                       | Kuwarda              |  | 6   |
| 72                   |                       | Sheikpur             |  | 1   |
| 73                   |                       | Kholvad              |  | 1   |
| 74                   |                       | Kosmada              |  | 2   |
| <b>Surat Total</b>   |                       |                      | <b>49</b>                                  | <b>104</b>  |
| 75                   | Valsad                | Chanvai              | 42   | 59  |
| 76                   |                       | Jujwa                | 31   | 17  |
| 77                   |                       | Karvad               | 30   | 6   |
| 78                   |                       | Dungra               | 273  | 139   |
| 79                   |                       | Pathri               |  | 6   |
| 80                   |                       | Ghadoi               |  | 7   |
| 81                   |                       | Gorwada              |  | 10  |
| 82                   |                       | Endergota            |  | 5   |
| 83                   |                       | Vaghaldhara          |  | 5   |
| 84                   |                       | Achchhari            |  | 3   |
| 85                   |                       | Zaroli               |  | 12  |
| 86                   |                       | Nagwas               |  | 10  |
| 87                   |                       | Dungri               |  | 1   |
| 88                   |                       | Khumbhariya          |  | 3   |
| 89                   |                       | Daswada              |  | 2   |
| 90                   |                       | Sukhlav              |  | 2   |
| 91                   |                       | Velparva             |  | 7   |
| 92                   |                       | Khajurdi             |  | 3   |
| 93                   |                       | Kocharva             |  | 15  |
| 94                   |                       | Rata                 |  | 9   |
| 95                   | Borigaon              |                      | 5  |   |
| 96                   | Paria                 |                      | 41   |   |
| 97                   | Balda                 |                      | 2  |   |
| <b>Valsad Total</b>  |                       |                      | <b>376</b>                                 | <b>369</b>  |
| 98                   | DNH                   | Naroli               | 29   | 45  |
| 99                   |                       | Dapsa                | 30   | 0   |
| <b>DNH Total</b>     |                       |                      | <b>59</b>                                  | <b>45</b>   |
| 100                  | Palghar/ Vasai Taluka | Gokhiware            | 76   | 674   |
| 101                  |                       | More                 | 188  | 642   |
| 102                  |                       | Bilalpada            | 42   | 177   |
| 103                  |                       | Mori gaon            | 47   | 111   |
| 104                  |                       | Ponam                | 38   | 9   |
| 105                  |                       | Tiwari               |  | 139   |
| 106                  |                       | Chandrapada          |  | 138   |
| 107                  |                       | Chandansar           |  | 92  |
| 108                  |                       | Nagale               |  | 9   |
| 109                  |                       | Rajawali             |  | 5   |
| 110                  |                       | Shilottar            |  | 2   |
| 111                  |                       | Virar                |  | 17  |
| 112                  |                       | Kevla Road           | 67   | 125   |

| S.N. | District Name                  | Village Name              | Number of PAH to be relocated (As per RAP) | Number of PAH which identified for relocation upto August' 2021 |    |
|------|--------------------------------|---------------------------|--|---|----|
| 113  | Palghar/<br>Palghar Taluka     | Navali                    | 27   | 15  |    |
| 114  |                                | Vevoor                    |  | 9   |    |
| 115  |                                | Nandore                   |  | 22  |    |
| 116  |                                | Morewali                  |  | 1   |    |
| 117  |                                | Varkhunti                 |  | 1   |    |
| 118  |                                | Gholwira                  |  | 13  |    |
| 119  |                                | Tembhikhodave             |  | 38  |    |
| 120  |                                | Jalsar                    |  | 1   |    |
| 121  |                                | Makunsar                  |  | 6   |    |
| 122  |                                | Ambadi                    |  | 1   |    |
| 123  |                                | Rothe                     |  | 10  |    |
| 124  |                                | Maan                      |  | 24  |    |
| 125  |                                | Betegaon                  |  | 3   |    |
| 126  |                                | Kamare                    |  | 12  |    |
| 127  |                                | Padghe                    |  | 25  |    |
| 128  |                                | Kamare                    |  | 12  |    |
| 129  |                                | Palghar/<br>Dahanu Taluka | Chari                                      |   | 15 |
| 130  |                                |                           | Kotabi                                     |   | 1  |
| 131  | Vanai                          |                           |  | 10  |    |
| 132  | Govane                         |                           |  | 8   |    |
| 133  | Sakhare                        |                           |  | 14  |    |
| 134  | Dehane                         |                           |  | 2   |    |
| 135  | Ambesari                       |                           |  | 38  |    |
| 136  | Vasantwadi                     |                           |  | 21  |    |
| 137  | GanganGaon                     |                           |  | 16  |    |
| 138  | Jitgaon                        |                           |  | 16  |    |
| 139  | DhamanGaon                     |                           |  | 16  |    |
| 140  | Zadigaon                       |                           |  | 7   |    |
| 141  | Aptol                          |                           |  | 6   |    |
| 142  | Asave                          |                           |  | 12  |    |
| 143  | Palghar/<br>Talasari<br>Taluka | Uplat                     |  | 59  |    |
| 144  |                                | Varvada                   |  | 2   |    |
| 145  |                                | Kawada                    |  | 9   |    |
| 146  |                                | Zari                      |  | 24  |    |
| 147  |                                | Manpada                   |  | 4   |    |
|      | <b>Palghar Total</b>           |                           | <b>485</b>                                 | <b>2613</b>   |    |
| 148  | Thane/Thane                    | Shil                      | 30   | 107   |    |
| 149  |                                | Dawale                    |  | 1   |    |
| 150  |                                | Padale                    |  | 7   |    |
| 151  |                                | Desai                     |  | 3   |    |
| 152  |                                | Agasan                    |  | 4   |    |
| 153  |                                | Betawade                  |  | 3   |    |
| 154  | Thane/Bhivandi                 | Mathardi                  |  | 64  |    |
| 155  |                                | Malodi                    |  | 13  |    |
| 156  |                                | Kharbav                   |  | 8   |    |
| 157  |                                | Dive Anjur                |  | 12  |    |
| 158  |                                | Anjur                     |  | 69  |    |
| 159  |                                | Bharodi                   |  | 25  |    |
|      | <b>Thane Total</b>             |                           | <b>30</b>                                  | <b>316</b>  |    |
|      | <b>Gujarat</b>                 |                           | <b>1313</b>                                | <b>1476</b>   |    |
|      | <b>DNH</b>                     |                           | <b>59</b>                                  | <b>45</b>   |    |
|      | <b>Maharashtra</b>             |                           | <b>515</b>                                 | <b>2929</b>   |    |
|      | <b>Grand Total</b>             |                           | <b>1887</b>                                | <b>4450</b>   |    |

The number of PAH identified for relocation has been increased to 4450 (as on August' 2021) during RAP implementation from 1887 (as per survey on Dec.2017-July 2018) identified during RAP preparation. The main reason for increase is that, during RAP preparation, Land Acquisition Plan (LAP) were prepared to identify plots falling in alignment for publication of preliminary notification for land acquisition and to get the permission on ground for survey and marking. Accordingly Socio-Economic and Census Surveys of the affected PAH have been conducted.

Thereafter, during RAP Implementation, Joint Measurement Surveys (JMS) were conducted, wherein actual ROW & Central Line were marked on ground. Based on actual demarcation on

ground, actual affected structures, assets and plots etc. were determined. Thus, based on the actual impacts after JMS and objection hearing & claims considered by LAO under section 15 & 22 of Act, the no. of PAH have been varied from the no. identified during the RAP preparation stage which is presented in Table 6-1 above.

Further, it can be observed from Table 6-1 above the no. of PAH identified for relocation have slightly increased in Gujarat and DNH mainly due to revision of ROW and slight shifting of alignment in vadodara section. While there is drastically increase in no.s in Maharashtra section mainly due to more than one PAH identified in one structure (majority NTH/Gola Plots) / compensation and JMS results. The main reason for increase of PAH are given in Table below.

| S.No.   | PAHs who need to be relocated   | Number of PAHs |
|---|---|----------------|
| 1   | Number of increased PAH based on Actual Impact after JMS  | 1625           |
| 2   | Number of increased PAH based on JMS & Multiple PAH's in One Structure  | 559            |
| 3   | Number of PAH based on JMS, objection hearing by LAO and the PAH of partially affected structures (Multiple PAH's in One Structure) | 2051           |
| 4   | Number of increased PAH based on change in alignment (Fresh JMS)  | 215            |
| Total Number of PAHs who need to be relocated as of August 2021 |   | 4450           |
| Total No. of PAHs who need to be relocated as per RAP (in 2018) |   | 1887           |
| Increase of PAHs who need to be relocated                       |   | 2563           |

### 6.1 Approach followed for identification of R&R sites

The relocation sites were identified after discussion with concerned LAOs in the same or adjoining villages. The following steps were followed to identify these resettlement sites.

1. Identified the likely displace households
2. Preliminary discussion with PAH to understand their preference
3. The preference location was discussed with the Land Acquisition Officer
4. Identification of likely available sites available for resettlement.

Tentative locations in Gujarat and Maharashtra have been identified for relocation of for the likely displaced PAHs. These locations will be further assessed and finalized after obtaining consent from the stakeholders during detail planning and implementation. In the future, more locations will be identified, if required. Individual Gram Sabhas were also approached for land, so as to ensure relocation is closure to the impacted areas. Details of the locations identified in Gujarat and Maharashtra are provided in Table 6-2 and Table 6-3.

At present, relocation sites/ plots have been identified to initiate the process with other administrative authorities but the actual planning will only be done during the implementation after due consultation with all stakeholders. Also, the actual number of PAH who wish to be relocated will only be confirmed after stakeholder consultation during the project implementation stage. The detailed planning will be done as per the requirement of displaced PAH's.

People will be informed regarding relocation sites in sufficient advance time. Relocation sites will be developed and then only affected families will be asked to relocate.

NHSRCL have initiated the process and district administration will be supported continuously. The cost for development of relocation site will be borne by NHSRCL.

**Table 6-2: Details of tentative resettlement sites in Gujarat**

| SN | Name of Village      | District | Available land   |          | Gouchar or Govt. Land |
|----|----------------------|----------|------------------|----------|-----------------------|
|    |                      |          | Survey no/ block | Area     |                       |
| 1  | Vadsar               | Vadodara | 2                | 11.91.09 | Gouchar               |
| 2  | Dungra               | Valsad   | 55/4A            | 1.12.30  | Govt. Land            |
|    |                      |          | 225              | 2.15.10  | Govt. Land            |
|    |                      |          | 379              | 0.36.42  | Govt. Land            |
| 3  | Ram Nagar            | Anand    | 373A             | 10.20.04 | Gouchar               |
| 4  | Kohil Vantarsa       | Bharuch  | 253              | 2.00.32  | Gouchar               |
| 5  | Dumral               | Kheda    | 97               | 1.51.76  | Govt. Land            |
|    |                      |          | 222              | 0.25.29  | Govt. Land            |
|    |                      |          | 96/2             | 0.10.09  | Govt. Land            |
| 6  | Ghetki               | Navsari  | 58B              | 0.26.30  | Govt. Land            |
|    |                      |          | 137              | 0.05.06  | Govt. Land            |
| 7  | Undach Variya Faliya | Navsari  | 398              | 0.19.23  | Govt. Land            |
|    |                      |          | 621              | 0.28.10  | Govt. Land            |
|    |                      |          | 893              | 0.28.10  | Govt. Land            |
| 8  | Chanvai              | Valsad   | 268              | 1.12.30  | Govt. Land            |
|    |                      |          | 300              | 1.61.88  | Govt. Land            |
|    |                      |          | 208              | 0.71.83  | Govt. Land            |
| 9  | Jujwa                | Valsad   | 538              | 1.19.38  | Govt. Land            |
|    |                      |          | 607              | 1.20.39  | Govt. Land            |
|    |                      |          | 706              | 0.22.26  | Govt. Land            |
| 10 | Karvad               | Valsad   | 42               | 2.05.38  | Govt. Land            |
|    |                      |          | 44               | 1.67.95  | Govt. Land            |
|    |                      |          | 38               | 2.38.77  | Govt. Land            |

**Table 6-3: Details of Tentative Resettlement Sites in Maharashtra**

| SN | Village   | Survey Number | Area (ha) | Ownership          |
|----|-----------|---------------|-----------|--------------------|
| 1. | Gokhiware | 266           | 0.05.00   | Gaucher            |
|    |           | 282/A/1/1     | 3.22.70   | Government         |
| 2. | Bilalpada | 127/2         | 0.45.50   | Revenue Department |
|    |           | 128/2         | 0.57.00   | Revenue Department |
|    |           | 130/1         | 0.10.60   | Government land    |
|    |           | 130/3         | 0.14.70   | Government land    |
| 3. | More      | 651/1         | 24.96     | Government land    |

**Way Forward**

The above identified sites will be formally submitted to the district administration for planning and allotment for resettlement.

On allotment and approval from District Administration, it will again discussed in detail with the PAH to get their confirmation regarding relocation on the approved site.

On confirmation of PAH numbers those want to relocate, the detail relocation plan will be developed based on the provision of PMAY and further submitted to district administration for the arrangement of associate facilities.

Application will be invited for the development of the resettlement sites.

Allotment of the units to the PAH

Physical relocation of PAH to the newly developed side

All the resettlement sites will have all the existing utilities and facilities currently available to the PAHs. In addition, additional facilities and infrastructure will also be provided which include proper access roads, electricity, streetlights, water and sanitation facilities.

Since majority PAH out of total 4450 PAHs have opted for cash compensation for Self Relocation over Project based relocation. Thus, the budget detailed below is sufficient for relocation activities as on August' 2021.

**Table 6-4: Estimated Budget of Resettlement Sites**

| SN | Particulars   | Units           |
|----|---|-----------------|
| 1  | No. of units constructed                                  | 1887            |
| 2. | Type of construction                                      | Multiple floors |
| 3. | Total number of PAH                                       | 1887            |
| 4. | Area each Unit  | As per PMAY     |
| 5. | Estimated Cost per unit (lakhs)                           | 5 lacs          |
| 6  | Total Cost (Crore)  | 94.35 Cr        |
| 7  | Contingencies (25%) units (in Crores)                     | 23.58 Cr        |
| 8  | Rent provision for PAH (7000/- PAH for 6 months) (Crores) | 9.90 Cr         |
| 9  | <b>Total Budget (Crores)</b>                              | <b>127.83</b>   |

The above-estimated budget has been prepared on the basis of the initial discussion held with PAPs and LAO during census survey and field activities. This would be revised as per the final consent by the PAPs during detail planning and implementation. In case, the PAHs is required to displace before completion of relocation sites, provision of rent @ Rs. 7000/- per PAH for 6 months has been proposed for the interim period.

**Table 6-5: Details about the activities and timeline for Resettlement activities**

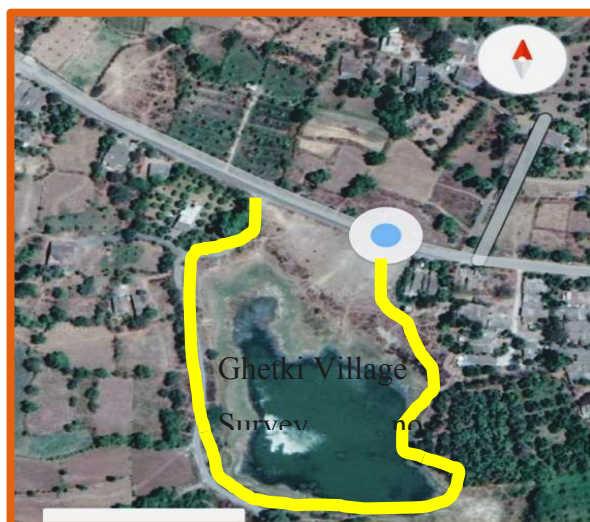
| SN | Activities  | Estimated Time to complete |
|----|---|----------------------------|
| 1  | Identified the likely displace Households.  | Completed                  |
| 2  | Preliminary discussion with PAH to understand their preference  | Completed                  |
| 3  | The preference location was discussed with the Land Acquisition Officer   | Completed                  |
| 4  | Identification of likely available sites available for resettlement   | Completed                  |
| 5  | The above-identified sites will be formally submitted to the district administration for planning and allotment for resettlement. | 30/08/2018                 |

| SN | Activities   | Estimated Time to complete |
|----|--|----------------------------|
| 6  | On allotment and approval from District Administration, it will again be discussed in detail with the PAH to get their confirmation regarding relocation on the approved site.   | 15/09/2018                 |
| 7  | On confirmation of PAH numbers, those want to relocate, the detail relocation plan will be developed based on the provision of PMAY and further submitted to the district administration for the arrangement of associated facilities. | 30/09/2018                 |
| 8  | The application will be invited for the development of the resettlement sites  | 15/10/2018                 |
| 9  | Allotment of the units to the PAH  | 30/09/2019                 |
| 10 | Physical relocation of PAH to the newly developed side   | 31/10/2019                 |

The location and development of the resettlement site as well as the movement of PAHs from their current structure to rented accommodation and further from rented to resettlement site will be as per the consent of PAHs. As per the Master Implementation Plan (MIP) prepared by general consultants, the land for construction would be required from March-April of 2019. The concerned PAHs will be shifted to leased/ rented accommodation as per the location of their choice on a temporary basis till the complete development of resettlement sites till October 2019. The following section provides photographs and google image of the tentative sites selected for resettlement.

**Figure 6-1: Photograph & Google images of identified government land for rehabilitation**

Ghetki Village

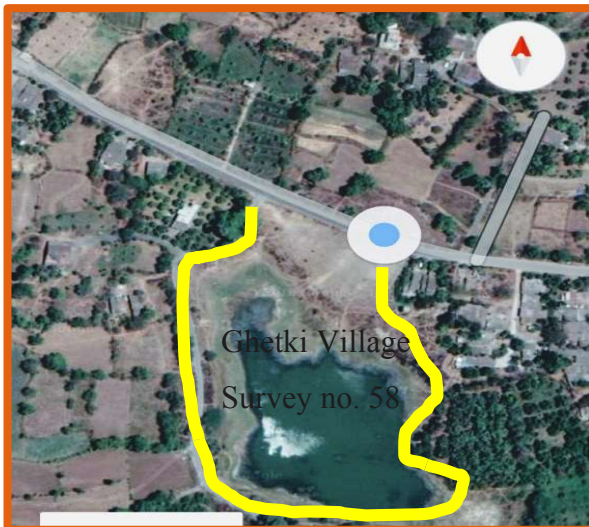


Ghetki Village

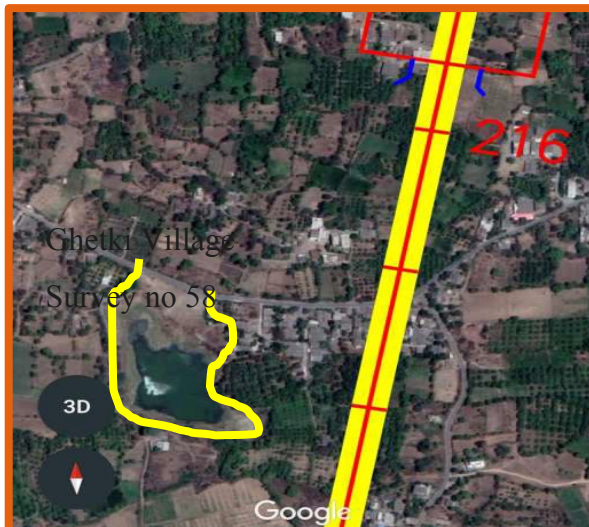
Ghetki Village



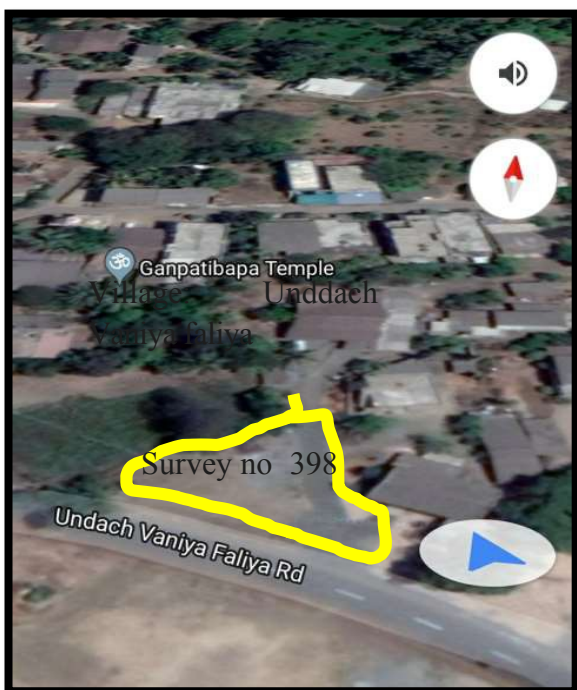
Ghetki Village



Unddach Vaniya Faliya Village



Jujwa Village



Jujwa Village



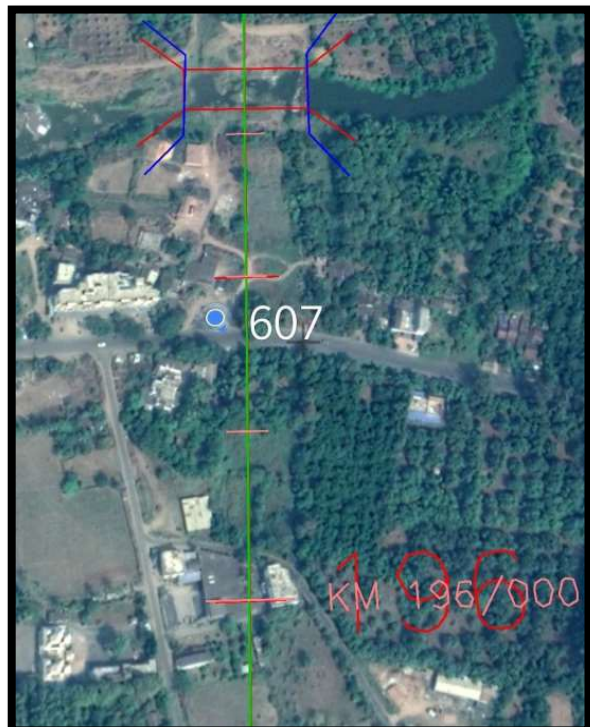
Jujwa Village



Jujwa Village



Jujwa Village



Jujwa Village



Jujwa Village





Chanvai Village



Chanvai Village



Chanvai Village



## 7.0 INCOME RESTORATION PLAN (IRP)

The basic objective of income restoration activities is that no project affected person shall be worse off than before the project. Income generation is not limited to payment of compensation, R&R assistance etc; but also includes skill development training enhancement for income restoration and development of livelihood restoration and income generation opportunities for the project affected persons.

The key objectives of the income restoration plan are as follows:

- Supporting project affected persons in their efforts to improve, or at least restore, their livelihood and living standards higher to pre-project levels or to levels prevailing prior to the beginning of Project implementation.
- Implementing livelihood restoration activities as a part of sustainable development programs and providing adequate investment resources to enable project affected persons to benefit directly from the Project.
- To compensate economically displaced persons and communities equitably and transparently.
- To offer transitional support to affected persons required for them to recover from their losses and subsequently restore their livelihoods.
- Providing special assistance for the vulnerable and poor households affected by the Project
- To ensure that IRP activities are planned and implemented with proper disclosure of information, meaningful consultation, and informed participation of those affected people.

The sustainable approach to income restoration is based on the following principles:

- Active participation of PAH in planning and decision making to ensure proposed IRP reflects local conditions/priorities.
- Provide a wide range of income restoration including training choices so that they can select the best training and income restoration opportunity.
- Vulnerable households shall be provided targeted support during implementation of income restoration plan.
- Capacity building and training will be incorporated as part of income restoration activities to develop PAHs skills. Capacity building acknowledges the different needs of women, men, youth and vulnerable groups with respect to skills development.

Disclosure of IRP activities will happen at the following three levels:

|                       |   |
|-----------------------|---|
| District Level        | District level disclosure will involve dissemination of information on livelihood restoration options to the PAHs, community leaders, NGOs, government agencies and all other stakeholders. Stakeholder feedback from these activities will be incorporated into the detailed development of the IRP programme. |
| Village Levels        | At the village levels, community meetings and focus group discussions will be held to explain components of the IRP.  |
| Individual Disclosure | Individual disclosure will involve engagement with individual PAPs so that the livelihood interventions address the specific needs of each household.   |

## 7.1 Income and Livelihood Restoration Measures (ILRP)

The project affected persons losing their livelihood or place of generating income due to NHSRCL project will be supported with Short-term and Long-term ILRP measures:

### 7.1.1 Short-term Income and Livelihood Restoration Plan

Short-term ILRP will cover all PAP losing their livelihood resources or place of generating income due to planned MAHSR project. The PAPs will be well supported by NHSRCL for subsistence during the transitional period. The Entitlement Matrix has adequate provisions for short-term income and livelihood restoration of the project affected household. Provisions provided in the entitlement matrix intended to restore PAP's income focusing on one-time financial assistance to affected PAPs, subsistence and financial assistance for transportation cost for shifting etc. The Short-term ILRP provisions for immediate assistance are detailed below:

| Eligibility Category  | Income and Livelihood Restoration Assistance |   |
|---|--|---|
| Title holder and Non-title holder (Encroachers, Squatters)                          | Transportation cost for Shifting             | One-time Financial assistance of Rs. 50,000/-   |
|   | Subsistence allowance                        | Rs. 3600/month * 1 Year = Rs. 43,200  |
|   | One-time Financial Assistance                | One-time Financial assistance of Rs. 25,000/-   |
| Tenants/ Lease holders  | Transportation cost for Shifting             | One-time Financial assistance of Rs. 50,000/-   |
|   | One-time Financial Assistance                | One-time Financial assistance of Rs. 25,000/-   |
|   | Rental allowance                             | For a period of six (6) months.<br>Rs 5000/- per month in rural areas<br>Rs 7000/- per month in urban areas |
| Wage Earner <sup>10</sup>   | Subsistence allowance                        | Rs. 3600/month * 1 Year = Rs. 43,200  |
| Affect families non-title holders (Loss of cattle shed / petty shop <sup>11</sup> ) | One-time Financial Assistance                | One-time Financial assistance Rs. 25,000/-  |
|   | Subsistence allowance                        | Rs. 3600/month * 3 Months = Rs. 10,800  |
| Vulnerable Group  | One-time Financial Assistance                | One-time Financial assistance Rs. 1,00,000/-  |

### 7.1.2 Long-term Income and Livelihood Restoration Plan

Long-Term NHSRCL ILRP measure will ensure PAPs income and livelihood restoration through Skill Development Training, Land-based livelihood support, and providing special provision for the vulnerable group. These will be designed through identification of target group beneficiaries and after assessing the needs and feasibility of potential income-generating activities.

#### 7.1.2.1 Skill Mapping & Training

One of the aspects for long-term ILRP income restoration activities involves skill mapping of PAPs whose livelihood is getting affected. RAP consultant has done preliminary discussion during stakeholder consultations and Socio-Economic survey, in detail with the Project affected households during RAP implementation for identification of target group beneficiary for skill development and training. At this level based in the initial discussion during Census Survey following type of training were identified for PAPs in various districts, which will be further finalized during the implementation stage.

<sup>10</sup> Workers/ Employees in non-agricultural establishment/ unit

<sup>11</sup> Petty shops will include small shops, work shed commercial kiosk, shanties and other movable shops (which can be relocated without damage) where business is carried out.

**Table 7-1: Key Training programme identified for the Project**

| District  | Training Programs Identified   | Rational for Training Selection   |
|-----------|--|---|
| Ahmedabad | <ul style="list-style-type: none"> <li>• Computer operation</li> <li>• Service sector related training (customer support, hospitality services, call center, etc.)</li> <li>• Repair of electrical/electronic items</li> <li>• Typing (Local Language and English)</li> <li>• Vocational training</li> </ul>   | <ul style="list-style-type: none"> <li>• During the consultations with project affected persons, the younger group wanted training in vocational training including training in hospitality service, call center and other vocational training.</li> <li>• Middle age and with low educational levels were interested in repair training for electronic items</li> </ul>  |
| Anand     | <ul style="list-style-type: none"> <li>• Establishment of a poultry farm</li> <li>• Dairy/poultry works</li> <li>• Manufacture of “Agarbatti” and matches</li> </ul>   | <ul style="list-style-type: none"> <li>• The training area request from stakeholder was on dairy and poultry works, manufacturing of Agarbatti etc.</li> </ul>  |
| Bharuch   | <ul style="list-style-type: none"> <li>• Handicraft and handloom training</li> <li>• Establishment of a poultry farm</li> <li>• Training in dairy/poultry works</li> </ul>   | <ul style="list-style-type: none"> <li>• PAH in Bharuch insisted on handloom and handicraft training, specially quilt making.</li> <li>• Some of the respondents even requested training for dairy and poultry.</li> </ul>  |
| Kheda     | <ul style="list-style-type: none"> <li>• Sanitary pad manufacturing</li> <li>• Catering</li> <li>• Wood-based training</li> <li>• Jute product related</li> </ul>  | <ul style="list-style-type: none"> <li>• PAH in Kheda suggested for training wood crafting and jute product. Further, the requirement for manpower in Catering was also suggested by a few stakeholders. A unit for sanitary pad manufacturing was also highlighted in the meeting.</li> </ul>  |
| Surat     | <ul style="list-style-type: none"> <li>• Garment manufacturing</li> <li>• Computer training</li> <li>• Service sector related training (customer support, hospitality services, call center, etc.)</li> <li>• Repair of electrical/electronic items</li> <li>• Vocational training</li> <li>• Computer operation</li> <li>• Typing (Local Language and English)</li> </ul>                                       | <ul style="list-style-type: none"> <li>• There were also request related to vocational training and hospitality training and computer-related training.</li> </ul>  |
| Navsari   | <ul style="list-style-type: none"> <li>• Motor driving for men</li> <li>• Sewing for women</li> <li>• Catering</li> <li>• Dairy/poultry works</li> <li>• Warli painting</li> <li>• Ball pen manufacturing</li> </ul>   | <ul style="list-style-type: none"> <li>• Navsari the request was on motor driving, sewing, and catering unit. in additional PAP also showed an inclination towards dairy and poultry farming.</li> <li>• There is demand for Warli painting, so it was also identified as a training area,</li> <li>• In some of the tribal areas of Navsari, PAP informed that already lot of training under different programmes is being provided to them and youth do not specifically require training.</li> </ul> |
| Valsad    | <ul style="list-style-type: none"> <li>• Warli painting</li> <li>• Barber and motor driving training</li> <li>• Button &amp; Stonework on garments</li> <li>• Sewing units</li> <li>• Establishment of a poultry farm</li> <li>• Dairy/poultry works</li> </ul>  | <ul style="list-style-type: none"> <li>• Valsad training on the Warli painting was considered owing to high demand.</li> <li>• In addition, sewing training for getting employment in the units in Valsad and DNH was requested primarily by women in Valsad.</li> <li>• Daily and poultry work related training was also identified.</li> </ul>  |
| Vadodara  | <ul style="list-style-type: none"> <li>• Button manufacturing</li> <li>• Computer training</li> <li>• Service sector related training (customer support, hospitality services, call center, etc.)</li> <li>• Masonry training</li> <li>• Computer operation</li> <li>• Plumbing</li> <li>• Vocational training</li> <li>• Repair of electrical/electronic items</li> <li>• Sanitary pad manufacturing</li> </ul> | <ul style="list-style-type: none"> <li>• In Vadodara, major training sector was identified as computer training and other service sector training</li> <li>• Masonry training and plumbing unit were also considered for Vadodara.</li> <li>• In addition, the sanitary pad manufacturing unit was also considered for Vadodara.</li> </ul>   |
| Palghar   | <ul style="list-style-type: none"> <li>• Agarbatti manufacturing</li> <li>• Warli painting</li> </ul>  | <ul style="list-style-type: none"> <li>• In Palghar, the training identified included agarbatti manufacturing, Warli painting</li> </ul>  |

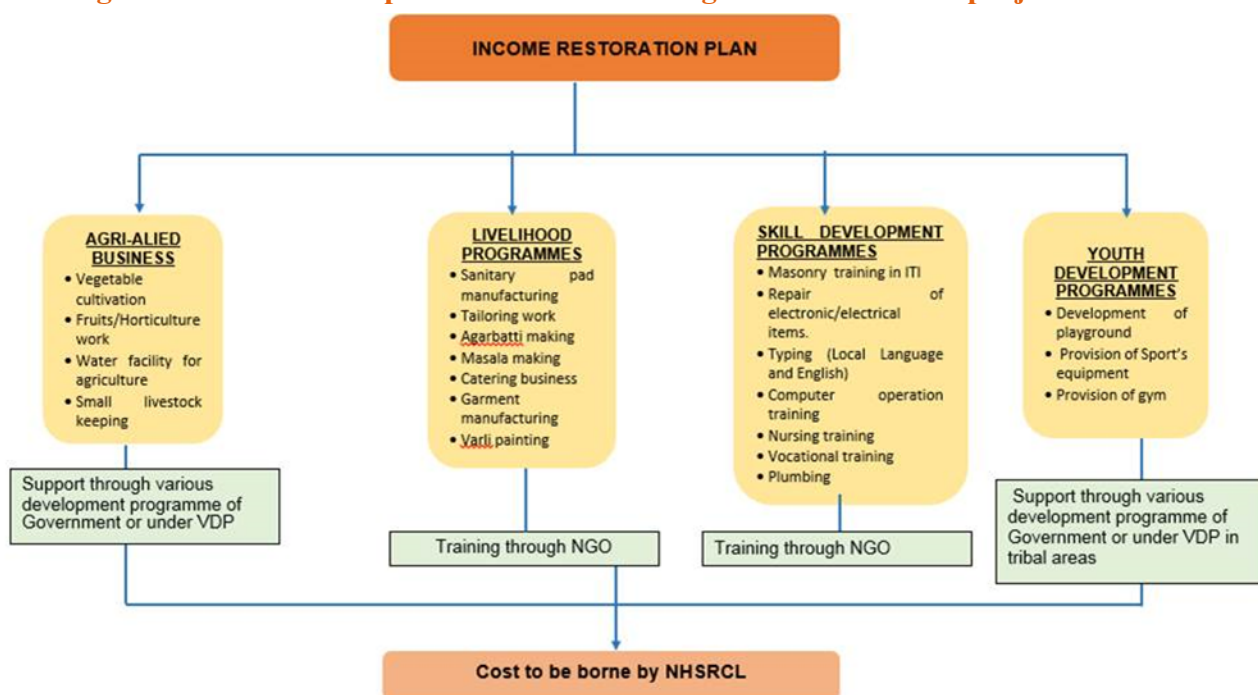
| District | Training Programs Identified  | Rational for Training Selection   |
|----------|---|---|
|          | <ul style="list-style-type: none"> <li>Masonry training</li> <li>Catering</li> <li>Button manufacturing</li> </ul>  | <ul style="list-style-type: none"> <li>Masonry training and catering training have been identified as other training areas.</li> </ul>  |
| Thane    | <ul style="list-style-type: none"> <li>Motor driving</li> <li>Catering</li> <li>Vocational training</li> <li>Computer operation</li> <li>Typing (Local Language and English)</li> <li>Sanitary pad manufacturing</li> <li>Plumbing</li> <li>Masonry training</li> </ul> | <ul style="list-style-type: none"> <li>Major training areas have been identified based on discussion and consultation with the PAPs.</li> <li>In Thane, the request was on vocational training including computer training.</li> <li>Other training suggested from our side to give them livelihood support included Plumbing, masonry training and sanitary pad manufacturing unit.</li> </ul> |
| DNH      | <ul style="list-style-type: none"> <li>Sewing units</li> <li>Stonework on garments</li> <li>Dairy/poultry works</li> <li>Ballpoint pen unit</li> </ul>  | <ul style="list-style-type: none"> <li>In DNH, the PAPs primarily requested for sewing training, stone works, and ballpoint pen unit. Few requests were on dairy and poultry training as well.</li> </ul>   |

The equipment and machinery for imparting the training and setting up small units will be facilitated by NHSRCL. The training beneficiary will be identified by RAP consultant and the entire training programme will be conducted with support from an NGO and training institutes in the region.

The training may be provided at the local ITIs and other training institute, where the cost of the training will be completely borne by NHSRCL. A budgetary amount of Rs. 40,000/- per candidate, one from each PAH has been provided in the budget which includes training fees, expenditure on candidates for attending training, and purchase of equipment & assets for starting income generation activities.

Following chart highlights the mode of implementation of various training scheduled for the project.

In total 15341 PAH have been surveyed for training need assessment. 2174 PAH have shown interest in training till August' 2021. About 14% PAH are interested in Training. Majority of PAH are not interested in training as a narrow strip of land has been acquired and land acquisition is not leading to loss of livelihood. Family member of PAH are also not interested in training as they are already engaged in formal education and services. Further, due to pandemic situation PAH have become reluctant towards such programmes. NHSRCL, has also uploaded details related to training programme under IRP in public domain/website for further information.

**Figure 7-1: Mode of implementation of training scheduled for the project**

| Roles and Responsibilities of NGO  |
|--|
| Strengthen participation of PAPs in livelihood and income restoration through capacity building support for family and group-based income activities |
| Identify training needs of PAPs for income generating activities   |
| Ensure that PAP is adequately supported during the post-training period on respective income generating activities                                   |
| Assist in identification and verification of the PAPs for Training   |
| Assist in inter-agency coordination for placement  |

Different training modules will be identified for PAPs of different education levels. This selection of final training module and the trainee will be done during project implementation. Skill development options and training programmes will also be linked to the resource base of the area and availability of market, which shall be discussed with PAPs and substantially finalized. Based on the identification of the skill development programs, a proposal on training module will be submitted to NHSRCL for review and approval. Suitable institutes in the local area will be identified for imparting training to candidates in respective areas of interest. In case of upgrading agriculture productivity, the training on technical know-how will be arranged with agriculture extension department or similar agency.

- Training in relevant skills/vocation to self or a family member as per his / her demand (to the extent possible) in the areas such as dairy, poultry, computer, repair of electrical/electronic items, mechanical works etc. All cost related to training shall be borne by NHSRCL. The eligibility criteria for the same would be one member from each affected family (Title holder and Non-Title Holder). For the purpose of compensation and assistance to be provided to Vulnerable households, socio-economic parameters like education, and workforce participation rate etc. will be considered.
- NHSRCL also understands the issue of tribal, disability and women's development in the process of socio-economic uplift within the scope of the RAP for the project. Therefore, suggest suitable training to one adult member of each affected vulnerable household for skill development.

- Selected training programmes have been identified for the project affected persons based on the consultations and discussion held with the project affected persons. In the tribal areas, the training and skill development programmes will be linked with the Tribal development programmes active in the area.

The need for training was discussed with PAPs while doing Census Survey to understand the need in the area. The preliminary analysis of the Survey data shows the following:

- 63% (approx.) of the PAPs are falling in the age group of 19 years to 65 years
- 40% (approx.) of the PAP have an education level of high school
- Majority of the people want cash compensation
- 12 % of people were interested in training
- 3% were interested in both training and cash compensation.
- Identified two target group (Target group will be further suggested by NGOs)
  - The first group will comprise of PAPs below the age of 30 yrs., which will be provided skill training or capacity building.
  - Second Group will comprise of PAPs falling in the age group of 30 - 65 yrs., which will be engaged in “Land-based livelihood support”

However, during the project implementation, this will be again discussed in detail with the PAPs and their requirement for training will be analyzed in detail by NGO. Also, NHSRCL representative will do the needful assessment based on the qualification and training programme suggested.

#### **7.1.2.2 Development of Employment Opportunities and livelihood support**

NHSRCL will facilitate the development of employment opportunities for PAPs. PAPs can form a cooperative or a group and approach NHSRCL for setting up small units such as poultry unit, cattle rearing unit, sewing units, and units for fixing stones.

Land-based livelihood support will target dairy, poultry, sheep/goat rearing, bamboo cultivation etc. PAPs who are agriculturist can take up any of these options. These will require training, which can be imparted by Khadi Village Industries Commission (KVIC) & District Dairy Development Authority (DDDA), etc. Land-based livelihood programming will focus on improved production through support for the preparation of new fields, improved inputs, and good agricultural practices.

NHSRCL can support the capital cost for setting up of land-based livelihood units like

- Poultry (approximate cost Rs 1,50,000 per unit for a unit of 1000 birds),
- Cattle rearing units (Rs 6,25,000 for a unit of 10 cows including shed and other infrastructure cost),
- Ballpoint pen manufacturing unit (Rs 50,000 for machine only, other infrastructure cost separate)
- Papad making unit (Rs 1,50,000 for an automatic machine, other infrastructure cost separate)

For availing benefits of setting up an employment unit, PAPs can form a cooperative and approach NHSRCL for the establishment of various income generation unit. NHSRCL will provide financial support to PAPS in the establishment of these units. The land for these units has to be arranged by the cooperatives.

In addition, measure for livelihood support include providing preference to all unskilled PAPs during the construction stage of the project. The project will generate employment opportunity and people can apply based on their respective skill and PAPs can get benefit from this opportunity. This will be applicable to all PAPs including vulnerable groups.

#### **7.1.2.3 Provision for Vulnerable Groups**

Vulnerable groups are defined as those who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status are more likely to be adversely affected by the impacts of land acquisition. Vulnerability will be considered at a household rather than individual level. This is because it is expected that where potentially vulnerable people are present within a household with people who are not vulnerable, these other members will continue to provide support to the potentially vulnerable member and include them in household decision making to the degree possible. Where an individual is vulnerable because they live alone, they also then constitute a vulnerable household.

As per the RFCTLARR Act, 2013, SC & ST displaced from Scheduled Areas are entitled to the one-time additional financial assistance of Rs 50,000/- which has been increased to Rs 1,00,000/- (100% increase) and made applicable to all vulnerable PAPs without limiting it to Scheduled Areas. Further, vulnerable PAPs will be provided priority in selection for training and other livelihood support programme. The training for the vulnerable will be organized in their vicinity as far as possible. Vulnerable PAHs will be monitored separately to see that their livelihoods are improved or at least restored to pre-project level and that they are receiving the transitional support outlined above.

#### **7.1.2.4 Community Social Responsibility**

As per Section 135 of the Companies Act, 2013 companies having net worth of INR 500 crore or more; or Turnover of INR 1000 crore or more; or Net Profit of INR 5 crore or more are liable to constitute a CSR policy, and are expected to spend 2% of their net profits on CSR activities.

NHSRCL will also implement CSR policy and under the policy identify activities to uplift the underprivileged section of society by imparting skill development training, the establishment of Self-Help Groups as per local requirement, other activities as identified by CSR implementing agency. NHSRCL will give priority to PAPs as a beneficiary under CSR, further industry linkage will also be established for end placement of beneficiary.



## 7.2 Budget for livelihood enhancement training & capacity building

Although, only 12% of PAHs showed interest for the training programmes during census survey but keeping the project objective, budget provision for training at least one member from each affected household has been considered. The tentative budget for livelihood enhancement training and capacity building has been provided in Table 7.2.

**Table 7-2: Budget for livelihood enhancement training and capacity building**

| SN | District Name                       | No. of PAH      | Budget for Training/PAH (in Rs.) | Total (in Rs. Cr.) |
|----|-------------------------------------|-----------------|----------------------------------|--------------------|
| 1  | Ahmedabad                           | 928             | 40, 000                          | 3.71               |
| 2  | Kheda                               | 783             | 40, 000                          | 3.13               |
| 3  | Anand                               | 901             | 40, 000                          | 3.60               |
| 4  | Vadodara                            | 1828            | 40, 000                          | 7.31               |
| 5  | Bharuch                             | 1015            | 40, 000                          | 4.06               |
| 6  | Surat                               | 639             | 40, 000                          | 2.56               |
| 7  | Navsari                             | 1045            | 40, 000                          | 4.18               |
| 8  | Valsad                              | 2046            | 40, 000                          | 8.18               |
| 9  | Dadra & Nagar Haveli                | 137             | 40, 000                          | 0.55               |
| 10 | Palghar                             | 4396            | 40, 000                          | 17.58              |
| 11 | Thane                               | 1362            | 40, 000                          | 5.45               |
| 12 | Mumbai                              | 0               | -                                | -                  |
|    | <b>Sub total</b>                    | <b>15,080</b>   |                                  | <b>60.32</b>       |
| 13 | <b>Support for Livelihood Units</b> | <b>Lump-sum</b> |                                  | <b>40.00</b>       |
| 14 | <b>Grand Total</b>                  |                 |                                  | <b>100.32</b>      |

## **8.0 LAND ACQUISITION AND RESETTLEMENT COSTS AND FUND ALLOCATION**

### **8.1 Resettlement Budget**

The resettlement budget constitutes the estimated value of compensation of land and structures and resettlement and rehabilitation assistance to project affected households (based on survey data), cost of CPRs, contingency, etc. The resettlement budget is indicative and has been estimated as per the present rate. The unit costs would be updated and adjusted to the Consumer Price Index as the project continues.

#### **Compensation**

Land: The compensation amount for land acquisition had been estimated as per First Schedule of The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. The prevailing Jantri rate of land has been collected for all Project affected villages for Gujarat and Ready Reckoner for the state of Maharashtra & DNH. Jantri rate of individual land plots are available online for Gujarat and ready reckoner rate for Maharashtra & DNH were collected from the revenue department in the State. Along with the district wise compensation of private lands, the cost for procurement of government land, Indian Railways land, and Forest land has also been calculated and presented in Table 8-1. Detailed Tehsil wise calculation of compensation amount for land acquisition is provided in **Appendix B**.

**Table 8-1: District wise summary of Compensation**

| District   | Area of Land to be acquired (Ha) | Land Compensation amount including multiplication factor and 100% Solatium (INR crores) | Compensation for structure including 100% Solatium (INR crores) | * R&R assistance (INR crores) | ** Incentive for consent-25% (INR crores) | Compensation for trees and crops @ 2.5% of land cost (INR crores) | Balance land and other misc. cost @ 10% of land cost (INR crores) | Total in INR crores |
|--|----------------------------------|---|---|-------------------------------|---|---|---|---------------------|
| <b>Gujarat</b>   |                                  |   |   |                               |   |   |   |                     |
| Ahmedabad  | 27.22                            | 462.53  | 26.43   | 237.19                        | 28.91                                     | 11.57   | 46.25   | 812.88              |
| Kheda  | 99.07                            | 97.35   | 18.99   | 77.48                         | 6.09                                      | 2.43  | 9.73  | 212.07              |
| Anand  | 47.60                            | 64.97   | 85.10   | 18.25                         | 5.59                                      | 1.13  | 4.53  | 179.56              |
| Vadodara   | 106.68                           | 752.34  | 164.72  | 20.44                         | 27.95                                     | 93.86   | 35.60   | 1094.91             |
| Bharuch  | 127.17                           | 278.03  | 18.47   | 38.61                         | 2.55                                      | 1.02  | 56.61   | 395.29              |
| Surat  | 144.04                           | 1197.23   | 23.92   | 32.33                         | 27.13                                     | 10.85   | 49.81   | 1341.27             |
| Navsari  | 81.16                            | 525.02  | 57.46   | 44.84                         | 6.33                                      | 5.68  | 49.94   | 689.27              |
| Valsad   | 107.40                           | 87.42   | 232.29  | 72.66                         | 1.77                                      | 0.71  | 2.85  | 397.70              |
| <b>Total private land</b>  | <b>740.34</b>                    | <b>3464.88</b>  | <b>627.38</b>   | <b>541.80</b>                 | <b>106.31</b>                             | <b>127.25</b>   | <b>255.32</b>   | <b>5122.94</b>      |
| Cost of private land (after applying 52.17% indexation on jantri rate) | 740.34                           | 5272.51   | 954.68  | 541.80                        | 161.77                                    | 193.64  | 388.52  | <b>7512.92</b>      |
| Govt. land + Indian Railways land + Forest                             | 215.56                           | 221.33  |   |                               |   |   |   | 221.33              |
| <b>Grand Total Gujarat</b>   |                                  |   |   |                               |   |   |   | <b>7734.25</b>      |
| <b>Maharashtra</b>   |                                  |   |   |                               |   |   |   |                     |
| Dadra and Nagar Haveli   | 7.26                             | 47.36   | 86.25   | 8.81                          | 11.84                                     | 1.18  | 4.74  | 160.18              |
| Palghar  | 187.81                           | 832.37  | 210.88  | 282.66                        | 208.09                                    | 20.81   | 87.38   | 1642.19             |
| Thane  | 81.87                            | 549.42  | 199.49  | 74.97                         | 137.36                                    | 13.74   | 54.94   | 1029.92             |
| Mumbai   | 3.92                             | 288.97  |   |                               | 72.24                                     | 7.22  | 28.90   | 397.33              |
| <b>Total private land</b>  | <b>280.86</b>                    | <b>1718.12</b>  | <b>496.62</b>   | <b>366.44</b>                 | <b>429.53</b>                             | <b>42.95</b>  | <b>175.96</b>   | <b>3229.62</b>      |
| Bandra Kurla Complex (BKC)   | 0.90                             | 3513.36   |   |                               |   |   |   | 3513.36             |
| Govt. land+Indian Railways+Forest                                      | 158.71                           | 340.79  |   |                               |   |   |   | 340.79              |

| District  | Area of Land to be acquired (Ha) | Land Compensation amount including multiplication factor and 100% Solatium (INR crores) | Compensation for structure including 100% Solatium (INR crores) | * R&R assistance (INR crores) | ** Incentive for consent-25% (INR crores) | Compensation for trees and crops @ 2.5% of land cost (INR crores) | Balance land and other misc. cost @ 10% of land cost (INR crores) | Total in INR crores |
|---|----------------------------------|---|---|-------------------------------|---|---|---|---------------------|
| <b>Grand Total Maharashtra</b>                                      |                                  |   |   |                               |   |   |   | <b>7083.77</b>      |
| <b>Grand Total Gujarat, DNH &amp; Maharashtra</b>                   |                                  |   |   |                               |   |   |   | <b>14818.02</b>     |
| Administrative cost @ 10% of Total Cost                             |                                  |   |   |                               |   |   |   | 1481.39             |
| Interest @ 12% of Total Cost  |                                  |   |   |                               |   |   |   | 167.44              |
| R&R site development budget (Details provided in Chapter 6)         |                                  |   |   |                               |   |   |   | 127.83              |
| Livelihood development & IRP budget (Details provided in chapter 7) |                                  |   |   |                               |   |   |   | 100.32              |
| <b>Total including administrative cost and Interest</b>             |                                  |   |   |                               |   |   |   | <b>16695.00</b>     |

Note:

\* R&R assistance 50% of Land & Structure Compensation in Gujarat as per RFCTLARR 2013 (Gujarat Amend. 2016) and as per Schd.II of RFCT-LARR 2013 in Maharashtra

\*\* Incentive for consent is 25% of the basic land cost in Gujarat and 25% of total compensation in Maharashtra.

The total cost for land acquisition for the project has increased to INR 16695 crores mainly due to application of Indexation on Jantri Rates in Gujarat. The administrative cost of INR 1481.39 crore and interest of INR 167.44 crore is added in the total cost. The cost includes R&R assistance of 50% for land & Structure in Gujarat (RFCTLARR Gujarat Amendment Act, 2016); 25% of the basic land cost for consent award in the state of Gujarat and 25% of total land compensation in Maharashtra for acquisition by negotiation through direct purchase method (Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 30 Sept 2015).

The cost were calculated at prevailing Jantri/ Ready Reckoner rate as applicable, and actual compensation have varied during implementation.

## Resettlement and Rehabilitation Assistance

Resettlement and rehabilitation assistance to PAPs will be as per the Entitlement Matrix of the project which is based on the RFCTLARR (Gujarat Amendment) Act, 2016. It has been estimated at INR 541.80 crores.

In Maharashtra and DNH, the R&R assistance shall be payable according to the Entitlements Matrix (based on the Second Schedule of the RFCTLARR Act, 2013) of the project. It has been estimated at INR 366.44 crores.

R&R site development budget is estimated at 127.83 crores and Livelihood development & IRP budget is estimated at 100.32 crores.

## 8.2 Compensation of Structure Affected

The real cost of structure affected would be known after measurement and valuation of the structure as per Schedule of Rates (SoR), Govt. of Gujarat. The measurement of the structure will be conducted at the time of joint measurement and thereafter valuation of the structure will be carried by certified valuer of RAP consultant. However, for estimation of market value of the structure, the unit cost of different categories (pucca, semi-pucca and kutcha) of structures is based on the discussions with a few valuers in Gujarat. The compensation amount of structure will be calculated without depreciation.

Table 8-2 below provides the compensation amount of structures affected. About Rs. 1157.5 crores would be required for compensation of structures which includes solatium @ 100% of compensation amount determined.

**Table 8-2: Estimated Compensation Amount of Structure**

| District  | Area of different type of Structure |            |        | Unit Rate (Rs / sq. m) |            |        | Compensation (Rs) | Solatium @ 100% of compensation amount (Rs.) | Addition @25% of compensation assumed-strengthening of partially broken & non-usable structure | Total compensation amount including solatium and additional payment (Rs.) |
|-----------|-------------------------------------|------------|--------|------------------------|------------|--------|-------------------|--|--|---|
|           | Pucca                               | Semi pucca | Kutcha | Pucca                  | Semi pucca | Kutcha |                   |  |  |   |
| Ahmedabad | 8776.0                              | 5062.4     | 1744.0 | 15000                  | 9400       | 5750   | 18.93             | 18.93  | 2.37   | 40.22   |
| Kheda     | 6726.3                              | 3561.9     | 272.4  | 15000                  | 9400       | 5750   | 13.59             | 13.59  | 1.70   | 28.89   |
| Anand     | 6687.1                              | 4885.5     | 1306.7 | 15000                  | 9400       | 5750   | 15.37             | 15.37  | 1.92   | 32.67   |
| Vadodara  | 36010.9                             | 1921.7     | 1131.6 | 15000                  | 9400       | 5750   | 56.47             | 56.47  | 7.06   | 120.01  |
| Bharuch   | 3201.0                              | 227.8      | 425.0  | 15000                  | 9400       | 5750   | 5.26              | 5.26   | 0.66   | 11.18   |
| Surat     | 1230.0                              | 0.0        | 0.0    | 15000                  | 9400       | 5750   | 1.85              | 1.85   | 0.23   | 3.92  |
| Navsari   | 18059.6                             | 6459.8     | 34.0   | 15000                  | 9400       | 5750   | 33.18             | 33.18  | 4.15   | 70.51   |
| Valsad    | 102456.0                            | 9935.2     | 5772.3 | 15000                  | 9400       | 5750   | 166.34            | 166.34                                       | 20.79  | 353.48  |

| District                 | Area of different type of Structure |                 |                | Unit Rate (Rs / sq. m) |            |         | Compensation (Rs) | Solatium @ 100% of compensation amount (Rs.) | Addition @25% of compensation assumed-strengthening of partially broken & non-usable structure | Total compensation amount including solatium and additional payment (Rs.) |
|--------------------------|-------------------------------------|-----------------|----------------|------------------------|------------|---------|-------------------|--|--|---|
|                          | Pucca                               | Semi pucca      | Kutchha        | Pucca                  | Semi pucca | Kutchha | INR Crores        | INR Crores                                   | INR Crores   | INR Crores  |
| Palghar                  | 5120.0                              | 97400.0         | 0.0            | 15000                  | 9400       | 4760    | 99.24             | 99.24  | 12.40  | 210.88  |
| Thane                    | 62586.5                             | 0.0             | 0.0            | 15000                  | 9400       | 6160    | 93.88             | 93.88  | 11.73  | 199.49  |
| DNH                      | 26319.9                             | 762.4           | 680.0          | 15000                  | 9400       | 5750    | 40.59             | 40.59  | 5.07   | 86.25   |
| Total (Excluding Mumbai) | <b>277173.4</b>                     | <b>130216.6</b> | <b>11365.9</b> |                        |            |         | <b>544.7</b>      | <b>544.7</b>                                 | <b>68.1</b>  | <b>1157.5</b>   |

### 8.3 Compensation for Trees, Standing Crops & CPR

Compensation for trees in private land will be in accordance with the prevailing Act. Valuation of trees will be determined by the Land Acquisition Collector through Forest Department for timber trees, Horticulture Department for fruit-bearing trees and Agriculture Department for loss of standing crops, in case notice of 3 months is not given to land owners for harvesting their crops. Determination of market value of timber trees will take into consideration the species and a girth size of the timber tree whereas valuation of fruit-bearing trees will be based on annual produce value calculated for the number of years (as per procedure adopted by the concerned department) and species of fruit-bearing trees. A lump sum amount of 2.5% of the compensation amount of land (INR 106.78 Crores) without incentives has been considered as compensation amount for trees and standing crops. At the time of joint measurement, inventory of trees will be prepared, and market value determined for consent award.

## **9.0 INSTITUTIONAL ARRANGEMENT FOR RAP**

Institutional arrangements are crucial for a project involving involuntary resettlement. Establishment of institutional arrangements is needed for smooth implementation of RAP which encompasses several activities that require the involvement of several agencies for resolving issues quickly in the interest of the project and affected persons. The implementation of Resettlement Action Plan requires making institutional arrangements at Head Office and Site Offices for planning, coordination, and implementation.

### **9.1 Ministry of Railways (MOR)/ National High-Speed Railway Corporation Limited (NHSRCL)**

The Ministry of Railways is one of the vital ministries in the Government of India, responsible for the country's rail transport. The ministry operates the state-owned Indian Railways. The Railway Board is the apex body of the Indian Railways. The Chairman of the Indian Railway Board is the administrative head of the Indian Railways, which functions under the overall control of the Parliament of India through the Minister for railways.

NHSRCL, a Joint Venture of Government of India and Participating State Governments under the Ministry of Railways (MoR) is responsible for planning and execution including social, environmental aspects of Mumbai-Ahmedabad High Speed Rail project. Implementation of RAP requires institutional arrangements at NHSRCL's Head Office and Site Offices in Gujarat, Maharashtra, and DNH. Besides, it requires the setting engagement of RAP consultant, constituting Grievance Redressal Mechanism, engagement of Monitoring and Evaluation agency.

The section below provides the institutional arrangement for the implementation of RAP and describes the roles and responsibilities of various agencies/institutions. The key elements of institutional arrangements are co-operation/ support, collaboration and sharing of responsibilities with clearly defined roles, the involvement of key stakeholders and vertical and horizontal linkages amongst different agencies. The institutional arrangement is presented in Figure 9-1.

### **9.2 Project Implementation Unit (Resettlement and Rehabilitation)**

#### **9.2.1 At the Headquarter Level**

At Head Office, Managing Director, NHSRCL as head of the organization is overall responsible for successful implementation of the project including RAP. Managing Director is supported by Director (Project), Officer on Special Duty (OSD), General Managers (Contract), Dy. General Managers, and several technical and secretarial staffs. OSD is also the project monitoring officer for regular monitoring of RAP component and coordination with other agencies (RITES for land acquisition purpose) and Chief Project Manager (CPM) offices. Head Office will have overall responsibility for policy guidance, planning, coordination, internal monitoring and overall reporting of the Project.

The institutional arrangement at Head Office will include augmenting the capacity of NHSRCL related to resettlement and rehabilitation. NHSRCL will set up a Social & Environment Management Unit (SEMU) at Head Office to look after social and environmental components of the project on a constant basis. A General Manager will be designated as the head of SEMU, who will be assisted by a team of officers and Secretarial Staff. The head of SEMU will be

monitoring the implementation and progress of RAP in direct coordination with CPMs and RAP consultant and report to OSD/MD. The main responsibility of SEMU is monitoring and implementing all resettlement and rehabilitation activities, including land acquisition. The GM, SEMU will ensure that all resettlement and rehabilitation issues are complied with as outlined in the RAP covering national/ state laws, and JICA guidelines. The responsibilities of this unit broadly include the following:

- Responsible for all land acquisition activities and facilitate necessary help needed at the site,
- Provide guidance to the CPM office and RAP consultant as per applicable laws, guidelines, and entitlements
- Liaison with respective CPM offices and RAP consultant to resolve issues/glitches related to RAP implementation,
- Ensure disbursement of entitlements to PAHs/ PAPs through CPMs,
- Oversee a grievance redress process, actively monitor RAP implementation, and conduct monitoring and evaluation,
- Ensure dedicated staff at CPM office with respect to RAP implementation,
- Compile data related to land acquisition and resettlement and rehabilitation received from CPM's offices as part of the internal monitoring process and suggest suitable measures to be taken, if required,
- Undertake site visit and interact with RAP consultant and PAHs/ PAPs for actual understanding of the RAP implementation process and status,
- Ensure timely budget allocation for resettlement and rehabilitation and relocation/ reconstruction of common property resources (CPRs) and common facilities to be provided in villages, if required,
- Conduct third-party monitoring and evaluation of RAP implementation.

### **9.2.2 At the Field Level**

Site offices of NHSRCL have been set up Mumbai, Ahmedabad, Surat and Vadodara to act as Project Management Unit (PMU) for execution of the project. Site office will be headed by Chief Project Manager (CPM). There are three site offices in Gujarat at Ahmedabad, Surat, and Vadodara. The project including RAP will be implemented by the CPM Offices located at Mumbai, Ahmedabad, Surat and Vadodara.

CPMs at Mumbai, Ahmedabad, Surat and Vadodara will be responsible for RAP implementation at the site with support from RAP consultant, Dy. CPM, Project Managers (PM), Assistant Project Managers (APMs) and other support staff. RAP consultant has been appointed for carrying out all requisite activities in close coordination with affected persons and concerned agencies mainly, Collector Office. One officer (PM/APM) will be made in charge of resettlement and rehabilitation component for every 15-20 villages and work in close coordination with RAP consultant. Besides, a Retired Dy. Collector has been appointed to assist CPM to facilitate land acquisition process with respective Collector office; Revenue Department, at State Head Quarter and other agencies involved. CPM will have all delegated administrative and financial powers regarding RAP implementation.

CPM, District Administration, local bodies and RAP implementation consultant will remain involved for identification and development of relocation sites.

The roles and responsibilities of CPM offices are the following:

- Facilitate land acquisition for the project,



- Ensure RAP implementation with assistance from implementation agency and approve micro plan prepared as per the entitlements,
- Ensure distribution of resettlement and rehabilitation principles and entitlement matrix to PAPs,
- Ensure preparation and distribution of photo identity cards by RAP consultant,
- Ensure inclusion of PAPs who could not be enumerated during census but have reasonable evidence to be included in the list of PAPs
- Seek guide from SEMU, Head Office wherever required regarding RAP implementation
- Guide and supervise RAP consultant, as required
- Interact with RAP consultant and undertake field visits for first-hand information,
- Compile data on LA progress and RAP implementation activities and update Head Office,
- Facilitate RAP consultant for necessary help from concerned government departments, whenever needed for RAP implementation,
- Participate in consultations to be conducted by RAP implementation to understand the PAP's concerns and issues and their integration, if possible in the project,
- Randomly check the implementation of RAP carried out by the agency,
- Take possession of land only after disbursement of compensation and R&R assistance to PAPs,
- Ensure rehabilitation or reconstruction of CPRs affected, as required before dismantling,
- Ensure disbursement of due entitlements to vulnerable families and their participation during implementation,
- Provide necessary help to M&E agency for land acquisition data, R&R status, and collection of information/ data from PAPs,
- Convene and participate in Grievance Redressal Committee meeting for resolution of grievances of PAPs at the district level,
- Decide on the requirement of developing relocation site, if required any.

### **9.2.3 RAP Consultant**

Requirement and responsibility of the RAP consultant are most important as it is the main link between the project proponent and the PAPs. The RAP preparation and implementation agency has already been engaged and the majority of staffs are mobilized. It will work in close coordination with NHSRCL head office and also report to the CPM office. Financial matters related to services of RAP consultant is also linked with CPM office. Broad roles and responsibilities of implementation agency would be as:

- RAP consultant will be responsible for verification of PAPs as enumerated during RAP preparation,
- Develop rapport with PAPs and collect all required papers required for disbursement of compensation and R&R assistance as needed by Collector office and project authority,
- Prepare and distribute handbills/ leaflets in local language covering entitlement matrix to PAPs, local community, Panchayats, Govt. Offices, etc,
- Prepare and distribute project specific identity card of PAPs for receiving entitlements,
- Initiate necessary activities for the inclusion of PAP, who couldn't be enumerated during census survey for some reasons based on certification through CPM office,
- Get land demarcation pillars fixed as per BOQ on ground based on joint measurement survey,
- Prepare micro-plan of individual PAP as per entitlement and submit to CPM office for scrutiny/ checking and approval,
- Provide a copy of the individual approved micro plan to PAPs for maintaining transparency and their understanding about their entitlements,
- Organize consultations with PAPs for making them aware of the R&R aspects, entitlements and other related aspects,
- Help PAPs in the opening of bank account, if not available,

- Assist CPM office in convening GRC meeting,
- Assist and facilitate aggrieved PAPs (for compensation and assistance) by bringing their cases to GRC and putting their viewpoints before GRC, if needed
- Generate awareness about the alternative economic livelihood and enable PAPs to make an informed choice,
- Identify training needs of PAPs for income generation and institutions for imparting training,
- Undertake consultations with villagers regarding rehabilitation or reconstruction of affected CPRs as well as the additional provision of common facilities needed in the village,
- Submit monthly progress report for RAP implementation covering physical and financial aspects,
- Undertake all such activities required for RAP,
- Conduct training for CPM office staff on land acquisition, resettlement and rehabilitation before implementation of RAP on the ground.

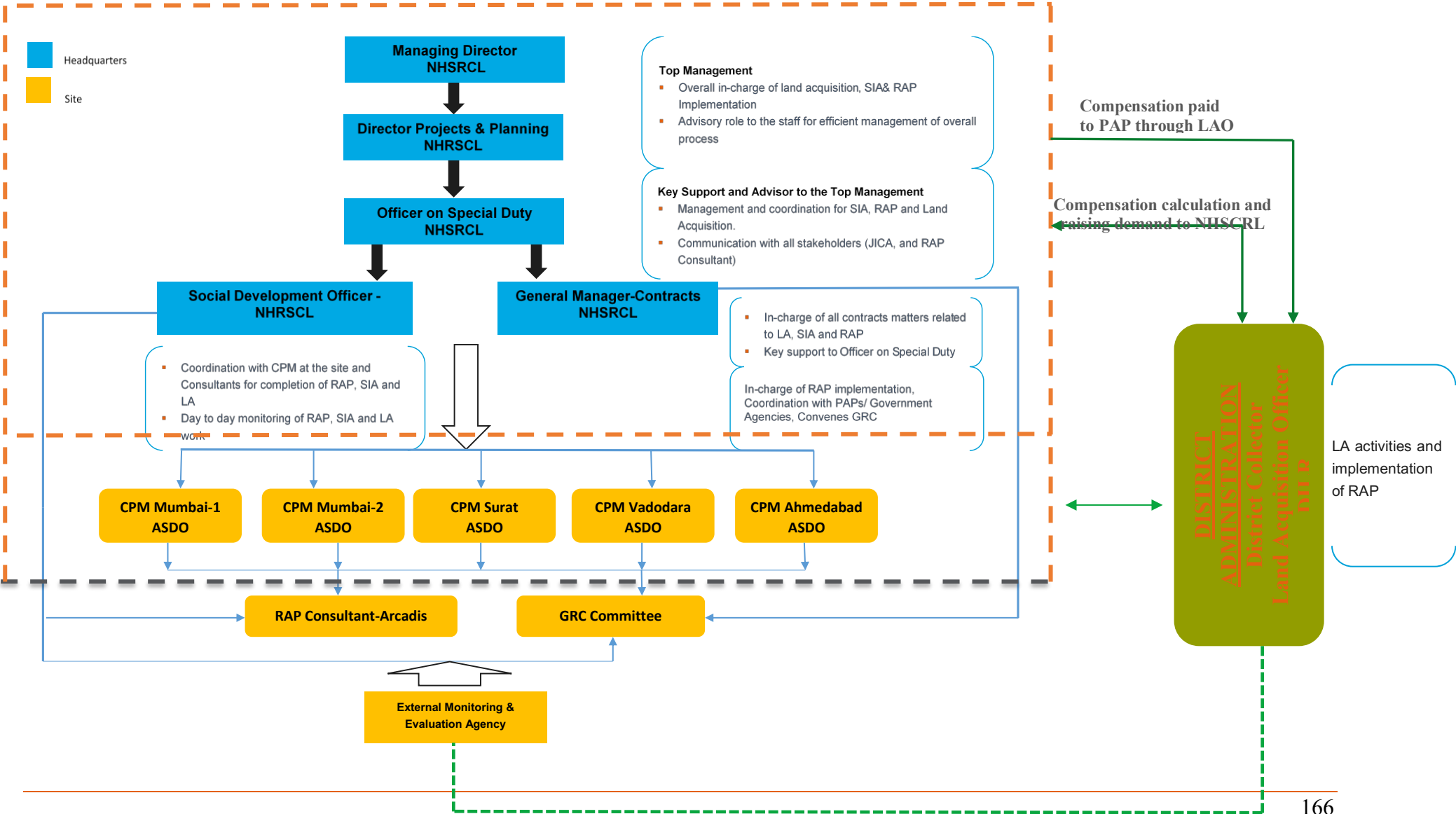
NHSRCL is working closely with District Administration (Land Acquisition Officer and District Collector) for land acquisition and will remain in close coordination for RAP implementation including relocation sites.

The Institutional arrangement for RAP has been revised and the role of District Administration in land acquisition and resettlement process has been added in the project implementation unit. The specific role of district administration has been included in the following section.

- A. District Collector will be involved in assigning, coordinating & monitoring all the Land Acquisition, Compensation Disbursement, and GRC related activities at the district level.
- B. Land Acquisition officer (LAO) will be directly responsible for the following activities.
  1. Coordinating and monitoring of field activities including demarcation of affected land, JMS, and other verification work
  2. Publication of related Gazette notifications
  3. Approval of JMS report
  4. Determination of Land value and calculation of compensation including R&R Assistance
  5. Receiving and resolving the Grievance of PAP's
  6. Demand and receipt of compensation funds from NHSRCL
  7. Disbursement of compensation to PAP's
  8. Monitoring and coordinating of R&R work
  9. Handing over the encumbrance free land to NHSRCL
- C. District Inspector of Land Records (DILR) will be responsible for conducting JMS survey, preparation of JMS report for each affected plot and submission to LAO office to proceed with preparation of compensation amount.

Talati will be responsible for providing documentary information to Land Acquisition Officer (LAO) and DILR during JMS and calculation/ Disbursement of compensation.

Figure 9-1: Institutional Arrangement for Land Acquisition Implementation



### **9.3 Grievance Redress Mechanism**

The Resettlement Action Plan includes the formation of Grievance Redressal Mechanism which is required to resolve grievances of PAPs quickly and effectively. Compensation and R&R assistance will be delivered to PAPs as per entitlement matrix. Grievances of PAPs such as land measurement, eligibility, non-inclusion in the list of PAPs, valuation of structures, trees, etc will be brought to the grievance redress committee for redressal.

#### **9.3.1 Grievance Redressal Committee**

There will be Grievance Redressal Committees (GRC) to hear and redress the grievances, if any, of the PAHs & PAPs at District, Field Head Office (Regional) and Head Quarter levels.

##### **Level 1 – District Level Committee**

Grievance Redressal Committee (GRC) will be constituted by NHRCL at the district level with the aim to settle disputes as possible through consultations. The GRC will comprise of four members headed by Resident Additional Collector (RAC)/LAOs of the concerned district. Other members of the GRC will include, Chief Project Manager (CPM) or Dy. CPM of NHRCL and representative of PAPs (elected Head of concerned village/ urban areas) and Asst. Social Development Officer. Grievances in writing will be brought to GRC for redressal by RAP consultant. The RAP consultant will provide all necessary help to PAPs in presenting his/her case before the GRC. The GRC will respond to the grievance within 15 days. The GRC will meet once in a month after convening the first meeting of GRC. However, it may meet twice in a month, if the number of grievance cases is more. Grievances of PAPs will be resolved in two months from the date of receiving the grievance.

A register shall be maintained by the RAP consultant which will record the following:

- date of receipt of the grievance
- date on which grievance was taken up
- further action required
- next date of the grievance hearing
- date of redressal of grievance
- date of intimation to PAPs

PAP can approach to GRC, LAO, RAP Consultation for Grievance Redressal. RAP Consultant will facilitate the registering the grievance and taking it to the appropriate level. In case the PAP is not satisfied by the decision of the GRC, he/she would be free to take recourse in the court of law. Broad functions of GRC are as under:

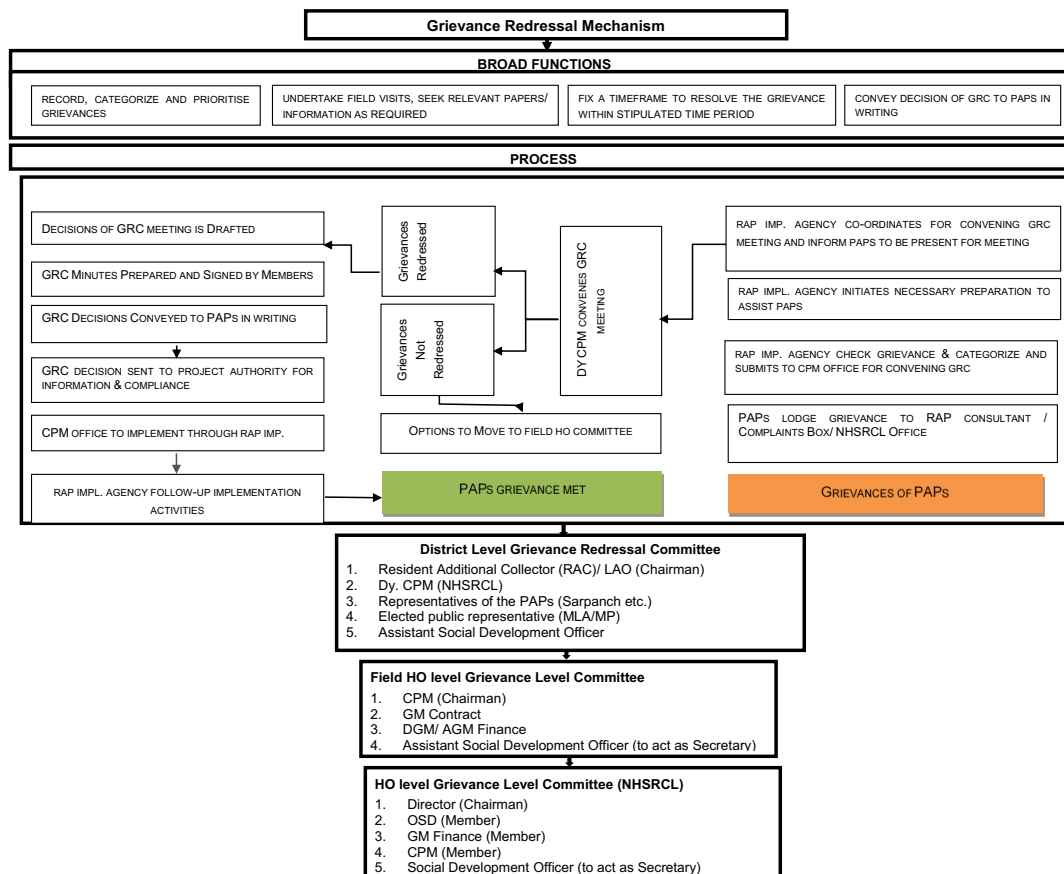
- Hear and record grievances of PAPs, collect requisite papers from concerned agencies (project authority, land acquisition office, District Inspector of Land Revenue, RAP consultant, etc), undertake site visit, if needed and resolve grievances within the stipulated timeline,
- Inform PAPs through RAP consultant GRC's decision to PAPs and project authority for compliance.
- PAPs are being informed during each consultation (individual, group and public) about GRC, the institutional arrangement for grievance redressal of PAPs.

The GRC constituted at the district level will have a representative of the PAP and elected public representative for effectively addressing the grievances. The GRC will be constituted by an executive order from the competent authority (State) based on a request from NHRCL.

GRC will be convened by the CPM in consultation with RAC and elected head of concerned villages/ urban areas from where grievances have been brought. Facilities for undertaking site visits with regard grievances, secretarial assistance, etc will be provided by concerned CPM office. All Grievances of PAPs will be documented by RAP consultant and submitted before the GRC for redressal. PAPs will be assisted by the RAP consultant for presenting their grievances before the GRC. PAPs will be able to take help from Gram Panchayat & village leaders for representing their grievances.

The flow diagram in Figure 9-2 shows the entire process of grievance redressal.

**Figure 9-2: Grievance Redressal Mechanism**



The RAP consultant will conduct an awareness program with PAPs for effective and amicable resolution of grievances/ complaints. The awareness campaign will be conducted in each village/ urban area. Information brochure (in local language) explaining procedures for grievance redressal will be distributed among PAPs and explained in village meetings held by RAP consultant. The RAP consultant will assist PAPs from bringing their grievance to a possible resolution. The RAP consultant will document all cases brought to GRC and maintain the records of the proceedings of the grievance redressal committee meetings.

## Level 2: Regional Level Committee

At Field Head Office also, there will be a Grievance Redress Committee to hear and redress the grievances of PAPs, if not resolved at the district level. Grievances received by Field Head Office directly shall be sent to concerned CPM office for resolution. The Field Head Office level Grievance Committee shall comprise CPM, GM (Contracts), DGM/AGM (Finance) and Asst. Social Development Officer. The meeting will be convened by CPM.

### **Level 3: Head Office Level Committee**

If the Grievance is not resolved at field level, then the grievance will be received by the grievance committee in the corporate office to be headed by Director (Chairman), OSD and the committee will comprise of GM Finance, CPM and Social Development Officer as members. The aggrieved PAPs may be asked if required to be present in the meeting through video conferencing for presenting their cases.

## 10.0 MONITORING AND EVALUATION

Monitoring and Evaluation (M&E) is an essential activity of projects involving land acquisition, causing displacement, impacting livelihood as it helps to make suitable changes if required during RAP implementation and resolve problems faced by the PAPs. Periodic checking or monitoring of various activities related to RAP implementation provides inputs to project proponent for course correction and implementation. Assessment of resettlement effectiveness, impact, and sustainability of R&R activities forms part of the evaluation. In other words, evaluation aims at assessing whether the activities carried out have achieved their intended goals and purposes. Thus M&E of RAP implementation is critical to measuring the project performance and fulfillment of project objectives.

The monitoring and evaluation of RAP implementation will ensure monitoring of key indicators of project processes and compliance and evaluation of impact indicators. Monitoring will keep track of the implementation processes and progress, achievement of targets, learning lessons and taking corrective measures to deal with emerging issues.

### 10.1 Internal Monitoring and Reporting

The internal monitoring of RAP implementation will be the responsibility of GM, SEMU through CPM Office. This will help monitor project activities closely. Internal monitoring will cover the physical and financial progress of RAP implementation including resettlement activities. Monthly progress report submitted by RAP consultant will cover various aspects of RAP implementation and resettlement activities and form the base for progress monitoring. Project Manager/ Assistant Project Manager for concerned section/contract packages will update data on monitoring indicators and submit a report to SEMU through CPM. Internal monitoring would enable NHSRCL to assess whether the due processes are being followed or not. It will also provide the necessary guidance and inputs for suitable changes if required during the implementation. A list of indicators is presented below in Table 10-1.

**Table 10-1: Monitoring for RAP and Resettlement Activity Implementation**

| SN | Indicators  | Scope | Status | Achievement (in %) | Remarks |
|----|---|-------|--------|--------------------|---------|
| 1  | Private land area to be acquired (Ha)   |       |        |                    |         |
|    | Notification published u/s 10A of RFCTLARR (Gujarat Amendment) Act, 2016 – No of villages |       |        |                    |         |
|    | Consent award declared for landowners in terms of land owners (No.)                       |       |        |                    |         |
|    | Consent award declared for landowners in terms of Area (Ha)                               |       |        |                    |         |
|    | Compensation amount disbursed to land owners (Rs.)  |       |        |                    |         |
|    | Compensation amount disbursed to land owners (No.)  |       |        |                    |         |
|    | Possession of land area taken (Ha)  |       |        |                    |         |
|    | Govt. land transferred (ha)   |       |        |                    |         |
| 2  | Forest land transferred (ha)  |       |        |                    |         |
| 3  | Verification of identified PAPs completed (No.)   |       |        |                    |         |
| 4  | PAPs added if any (who could not be enumerated at the time of survey)                     |       |        |                    |         |
| 5  | Valuation of affected properties completed (No.)  |       |        |                    |         |
| 6  | Project-specific identity card prepared and handed over to PAPs (No.)                     |       |        |                    |         |

| SN | Indicators  | Scope | Status | Achievement (in %) | Remarks |
|----|---|-------|--------|--------------------|---------|
| 7  | Micro plan prepared and submitted for THs for approvals to CPM Office (No.)                               |       |        |                    |         |
| 8  | The micro plan approved by CPM Office (No.)   |       |        |                    |         |
| 9  | Approved Micro plan was given to PAPs (No.)   |       |        |                    |         |
| 10 | R&R assistance disbursed to PAPs (Rs.)  |       |        |                    |         |
| 11 | R&R assistance disbursed to PAPs (No.)  |       |        |                    |         |
| 12 | R&R assistances disbursed to PAPs (THs& NTHs) - No.   |       |        |                    |         |
| 13 | Consultations held with local community regarding relocation or rehabilitation of CPRs (No.)              |       |        |                    |         |
| 14 | Estimate submitted for relocation/ rehabilitation of CPRs for approval                                    |       |        |                    |         |
| 15 | CPRs relocated/ rehabilitated (No.)   |       |        |                    |         |
| 16 | PAPs re-established their shops/ business (No.)   |       |        |                    |         |
| 17 | Consultations held regarding RAP (dissemination of information, awareness generation, entitlements) – No. |       |        |                    |         |
| 18 | Consent provided by PAP for income restoration training   |       |        |                    |         |
| 19 | PAPs actually receiving training for alternate livelihood (No.)/ income restoration                       |       |        |                    |         |
| 20 | PAPs able to start or get alternative employment  |       |        |                    |         |
| 21 | PAP groups that took the benefit of setting up the livelihood restoration unit provided under the project |       |        |                    |         |
| 22 | Grievance/ complaints brought to GRC for redressal (No.)  |       |        |                    |         |
| 23 | GRC meeting held and cases resolved (No.)   |       |        |                    |         |
| 24 | Consent provided by displaced families for self-relocation to rental/ transitional accommodation          |       |        |                    |         |
| 25 | Consent provided by displaced families for assisted relocation to rental/ transitional accommodation      |       |        |                    |         |
| 26 | No of families Shifted to rented / transitional accommodation   |       |        |                    |         |
| 27 | No of families shifted to Resettlement sites  |       |        |                    |         |
| 28 | Structures dismantled (No.)   |       |        |                    |         |
| 29 | PAPs relocated (No.)  |       |        |                    |         |

Monthly progress report covering above-mentioned indicators and progress of RAP implementation of the project would be submitted by RAP consultant to CPM office by 7<sup>th</sup> of next month. Based on the monthly report of RAP consultant, CPM office will prepare a summary report covering the progress of land acquisition in terms of area, consent award declared in terms of villages and individual land owners, compensation and R&R amount awarded and disbursed, etc for submission to SEMU.

## 10.2 Independent External Monitoring, Evaluation and Reporting

### Monitoring

External monitoring and evaluation will be carried by a third-party agency which will be hired by the SEMU, NHRCL before the start of the RAP implementation. The objectives of external monitoring are to assess the project's compliance with the stated legal and policy framework including disbursement of due entitlements to PAPs. The monitoring would cover review of relevant documents, site visits, consultations with PAPs, interactions with CPM office, SEMU



and other concerned agencies (contractor, project control agencies etc). Quarterly monitoring will verify the progress of the RAP implementation activities, identify issues, concerns, delays and reasons thereof, problems faced in the implementation and recommend corrective measures for implementation. A draft Terms of Reference for Monitoring of RAP consultant is provided as Appendix G.

Monitoring and evaluation will constitute the following:

- Progress monitoring (physical and financial aspects)
- Process monitoring (compliance with legal and policy framework and lessons learned)
- Impact evaluation based on a sample survey and consultations; and
- Thematic studies.

The monitoring and review of RAP implementation will combine quantitative and qualitative data. The results of the draft quarterly progress/monitoring report (QPR) will be presented to SEMU which will also be attended by CPM/ Dy. CPM. Final QPR will be submitted incorporating the observation during the presentation. Summarizing, process monitoring would enable NHRCL to assess whether the due processes are being followed or not, whereas performance monitoring would mainly relate to achievement in measurable terms against the set targets. QPR will also provide the necessary guidance and inputs for any changes if required during the implementation.

## **Evaluation**

The external agency engaged by SEMU, NHRCL would conduct evaluation twice during the RAP implementation period. The first evaluation would be conducted after one year i.e., mid-way during the RAP implementation and the second one after the completion of RAP implementation. The evaluation will be carried out under a set term of reference. It would focus on assessing whether the overall objectives of the project are being met and will use the defined impact indicators as a basis for evaluation. Specifically, the evaluation will assess: (i) The level of success (including the constraints and barriers) in land acquisition programme, resettlement plan, income recovery of PAPs particularly, those who have been displaced from the project affected area, and, (ii) the types of complaints/ grievances and the success of grievance handling, etc. The evaluation study would involve both quantitative and qualitative surveys and compare results before and after the implementation of the project. It will focus on assessing whether the overall objectives of the project are being met and will use the defined impact indicators as a basis for evaluation. The evaluation study would undertake the following but not limited to:

- Review monthly progress report submitted by RAP consultant and internal monitoring report prepared by NHRCL
- Undertake consultations with PAPs to assess their point of view regarding the overall process,
- Intensity and effectiveness of information dissemination regarding RAP implementation covering eligibility of different categories of PAPs and various aspects of RAP implementation staff such as frequency of interactions with PAPs, deployment of staff, quality of rapport maintained with PAPs, capability of personnel, availability, behaviour, assistance provided to PAPs, and satisfaction level of PAPs with regard to work
- Collect information about adequacy of distribution of awareness generation materials, entitlements, distribution of identity cum entitlement card, adequacy of dissemination of information, consultations meetings regarding eligibility and entitlements, alternatives and relocation related

issues, measurement and valuation of affected properties, understanding and use of grievance procedure, disbursement of assistance, and other R&R related issues, compliance of LPF

- Conduct sample survey (25% of PAPs) for making comparative analysis substantiated by qualitative surveys and case studies, etc.

It may be noted that one of the key objectives of RAP implementation is an improvement of socio-economic conditions of PAPs or at least restoration of socio-economic status of PAPs to the pre-project level and hence it is important to assess the socio-economic status of PAPs after RAP implementation and resettlement activities. An illustrative list of indicators is given in Table 10-2 which would be measured against the baseline data collected for the preparation of RAP. The M&E agency would finally select the indicators for the evaluation of the project depending upon the progress of R&R and resettlement activities.

**Table 10-2: Impact Evaluation Indicators**

| SN | Indicator   | Unit | Before Project Implementation | During/after RAP Implementation |
|----|---|------|-------------------------------|---------------------------------|
| 1  | Sources of income of household  |      |                               |                                 |
| 2  | Monthly income of family/household  |      |                               |                                 |
| 3  | Change in consumer durables and materials assets owned  |      |                               |                                 |
| 4  | Ownership of personal transport facilities  |      |                               |                                 |
| 5  | Ownership of farm equipment   |      |                               |                                 |
| 6  | Ownership of farm animals   |      |                               |                                 |
| 7  | Occupation of head of household and other members   |      |                               |                                 |
| 8  | Type of dwelling units  |      |                               |                                 |
| 9  | Number of earning members/household   |      |                               |                                 |
| 10 | Monthly income of vulnerable households   |      |                               |                                 |
| 11 | Family under debt   |      |                               |                                 |
| 12 | Size of loan  |      |                               |                                 |
| 13 | Land ownership of households  |      |                               |                                 |
| 14 | Households with various sizes of land   |      |                               |                                 |
| 15 | Ownership/tenancy of dwelling units (owner, encroacher, squatter)   |      |                               |                                 |
| 16 | Status of vulnerable PAPs (BPL, WHH, Disabled, Destitute, Orphan, Landless, Elderly persons above 65 years without a dependent, SC, ST) |      |                               |                                 |
| 17 | Access to water and sanitation facilities   |      |                               |                                 |
| 18 | Migration for employment  |      |                               |                                 |
| 19 | Access to various facilities  |      |                               |                                 |
| 20 | Govt. scheme under which help/ benefits availed   |      |                               |                                 |

### **10.3 Monitoring & Evaluation and Reporting Schedule**

Monthly progress report covering the progress of RAP implementation including mobilization of staffs, the opening of site offices etc of the project would be submitted by RAP consultant to CPM office by 7<sup>th</sup> of next month. Internal monitoring report covering progress of land acquisition in terms of area, consent award declared in terms of villages and individual land owners, compensation and R&R amount awarded and disbursed to all overall PAPs and vulnerable groups, grievance cases received (by type) and resolved, shall be summarized by CPM office and submitted to SEMU, Head Office for review and further submission to JICA.

RAP consultant will submit a completion report within one month after completion of RAP activities. End-term evaluation by third-party external agency will be conducted after submission of RAP completion report.

## **11.0 RAP IMPLEMENTATION SCHEDULE**

### **11.1 MA-HSR Project Implementation**

Land acquisition and resettlement is a sensitive matter to deal with and therefore engagement of experienced RAP Consultant is very important. Experience from projects involving resettlement issues indicates that good rapport with the community in general and PAPs in particular help in the smooth implementation of RAP. The implementation arrangement necessitates the engagement of agency having experience in resettlement issues. NHSRCL has already engaged RAP preparation and implementation agency keeping in view the continuity of the same agency to take advantage of the familiarity and rapport built with affected persons during survey and consultations.

Scheduling of RAP implementation is linked with construction works. As per the standard conditions of civil contracts, a land free from all encumbrances should be made available to the contractor. Thus, one of the pre-requisites for the start of the construction works is handing over site to the contractor. Delay in handing over sites to the contractor after mobilization at the site may result in an unwarranted claim by the contractor from the project authority. Implementation of HSR project involves land acquisition, dismantling of structures, shifting of CPRs, etc from the right-of-way. The resettlement principles states that compensation and R&R assistances shall be disbursed before taking over the possession of land and clearing of right-of-way. It is important to note that land acquisition as per the provisions of the Act and transfer of government land through inter-departmental processes invariably takes more time than expected. However, in this project, land required for the project will be taken as per consent award. The time required for acquisition of land through consent award is likely to be comparatively much less as compared to the normal land acquisition process. Thus, the entire project site can't be handed over to the contractor at a time to start the work. Present day construction activities/works use heavy machinery and less human labour. Thus, unless some reasonable length of project stretch free from encumbrances is not available, the construction work can't be started.

Structures are required to be removed before handing over project stretch to the contractor. Sufficient time would have to be provided to affected persons for shifting of belongings, dismantling of structures, salvaging of useful materials, etc in case the affected persons requires relocation.

RAP implementation activities can be started once the formalities for consent award with land owners is agreed upon. This will help initiate other activities related to RAP implementation.

Disbursement of compensation and R&R assistance would have to be completed before issuing notice for vacating the place. A mandatory notice period of two months (for vacating structure) and 3 months (for harvesting standing crops/fruits etc) or suitable compensation would be served by project authority after the disbursement of compensation and R&R assistance. Disbursement of compensation and R&R assistance is also linked with a valuation of structures, and other improvements on the land. Thus preparation of project specific identity card, preparation, and submission of a micro plan for approval are critical activities to complete the disbursement to affected persons. Based on the joint measurement, the actual area to be acquired from each gata/ survey would be established. Simultaneously, demarcation of RoW, measurement of structures for valuation, tree enumeration, etc will be carried out which will

form the basis for consent award. Any likely inclusion & exclusion in the list of affected persons shall also be known at this stage. A time period of 16 months has been estimated for RAP implementation.

One of the officials (PM/ APM) from CPM office should be specifically deputed for each district to work in close coordination with RAP agency. The PM/APM shall be acquainted with RAP and receive training on various aspects of the RAP implementation. The training shall be organized by SEMU for all PMs/APMs deputed in each district. Broad understanding of R&R aspects will help better interactions between concerned PM/APM and staffs of RAP consultant. Important aspects which need to be understood in resettlement action plan implementation are as under:

- The concept of titleholders, encroachers, and squatters
- Legal and policy framework with a specific emphasis on entitlement matrix,
- Stages of land acquisition as per applicable act and disbursement of compensation,
- Preparation of project specific identity card,
- Preparation of micro plan,
- Establishing institutional arrangements,
- Civil construction works vis-à-vis RAP implementation,
- Development of income restoration plan based on the survey carried out,
- Identification of relocation site for displaced persons, if any,
- Role of other agencies particularly District Collector Office, DILR, Forest, Horticulture, Agriculture departments, etc.

## 11.2 Resettlement and Rehabilitation

As mentioned above, RAP implementation will be completed within a time period of 16 months. The implementation schedule for the major activities of the RAP is presented in the flowchart.

### Implementation Process

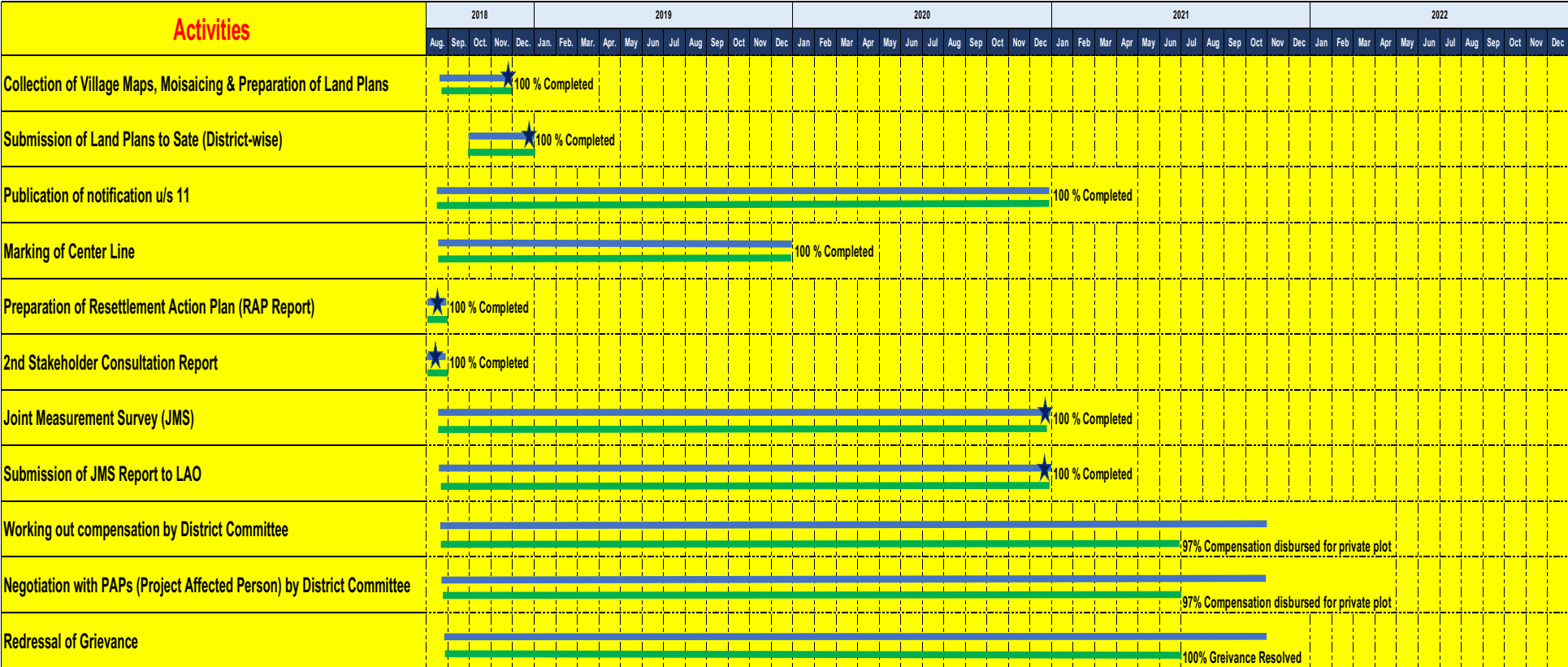
The major activities related to the implementation of the resettlement action plan are related to impacts on land, structures, CPRs etc. The project will provide requisite notice two months (for vacating structure) and 3 months (for harvesting standing crops/fruits etc.) or suitable compensation to the project affected persons so that they are able to move or take away their assets without undue hardship before the commencement of civil works. The implementation of RAP consists of the following major activities:

- Deployment of required staffs (at the site by RAP consultant and project authority);
- Information dissemination activities by holding consultations, awareness generation materials (leaflets, flyers, handbills, etc containing salient features of the project, entitlement matrix, the role of GRC, etc) in the local language,
- Verifying list of PAPs identified during survey during the project preparation;
- Confirming the status of PAPs (titleholder, encroacher, squatter, etc),
- Measurement and valuation of structures affected,
- Preparation of project specific identity card and micro plan,
- Distribution of identity card,
- Checking and vetting of the micro plan by CPM office,
- Assistance in the disbursement of compensation and R&R assistance to PAPs,

- Assist PAPs in the relocation and rehabilitation of PAPs,
- Conduct consultations with the local community for rehabilitation and relocation of CPRs
- Preparation for the relocation of PAPs, if any, etc.

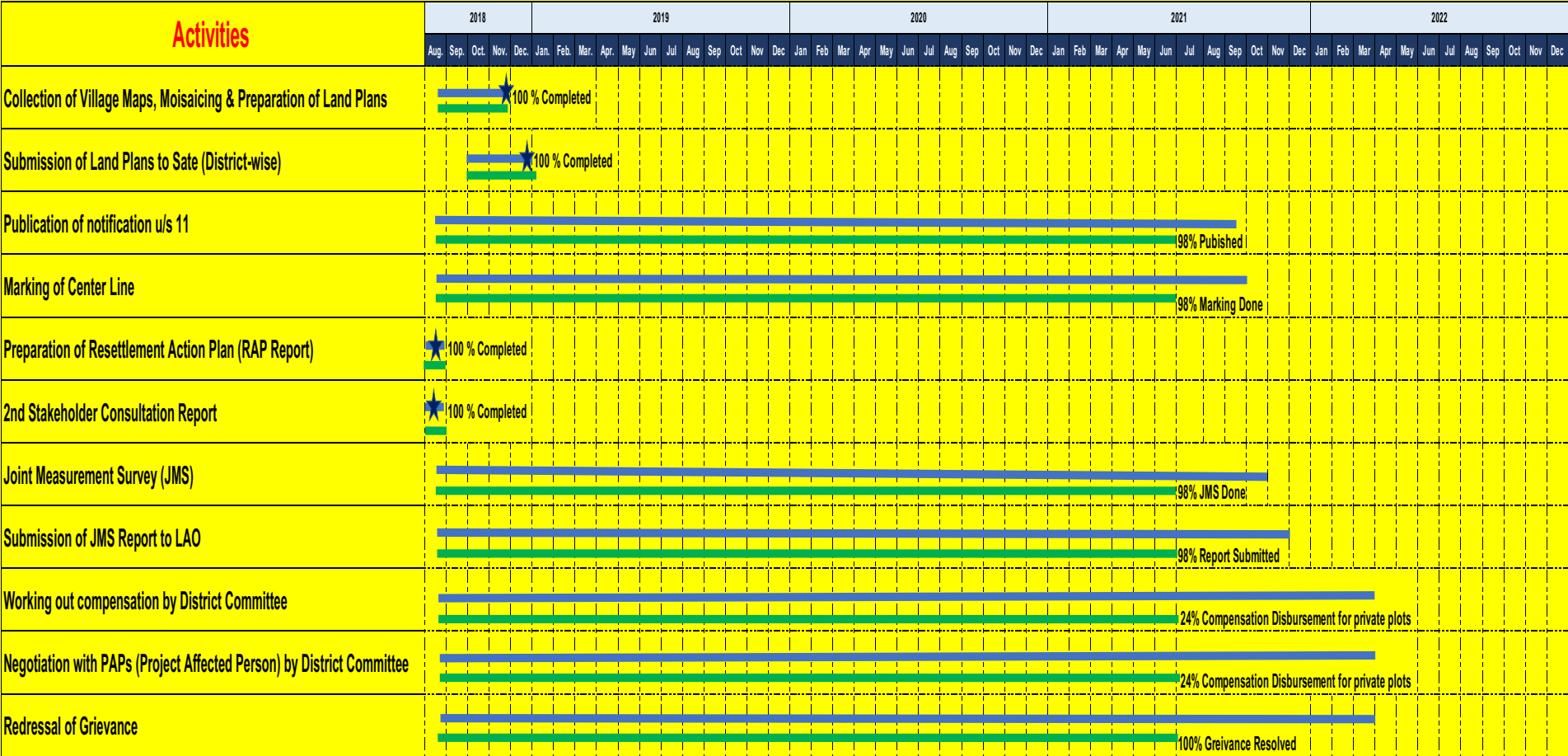
Land acquisition Schedule for Gujarat, Maharashtra, and DNH is provided in Figure 11-1, Figure 11-2 and Figure 11-3 respectively. Activities wise implementation schedule for is presented in Figure 11-4.

**Figure 11-1: Activity wise Implementation Schedule-Flow Chart for Gujarat**



Legend:   
— Actual Work Progress   
— Planned   
★ Milestone

**Figure 11-2: Activity wise Implementation Schedule-Flow Chart for Maharashtra**



Legend:   
█ Actual Work Progress   
█ Planned   
★ Milestone



**Figure 11-3: Activity wise Implementation Schedule-Flow Chart for DNH**

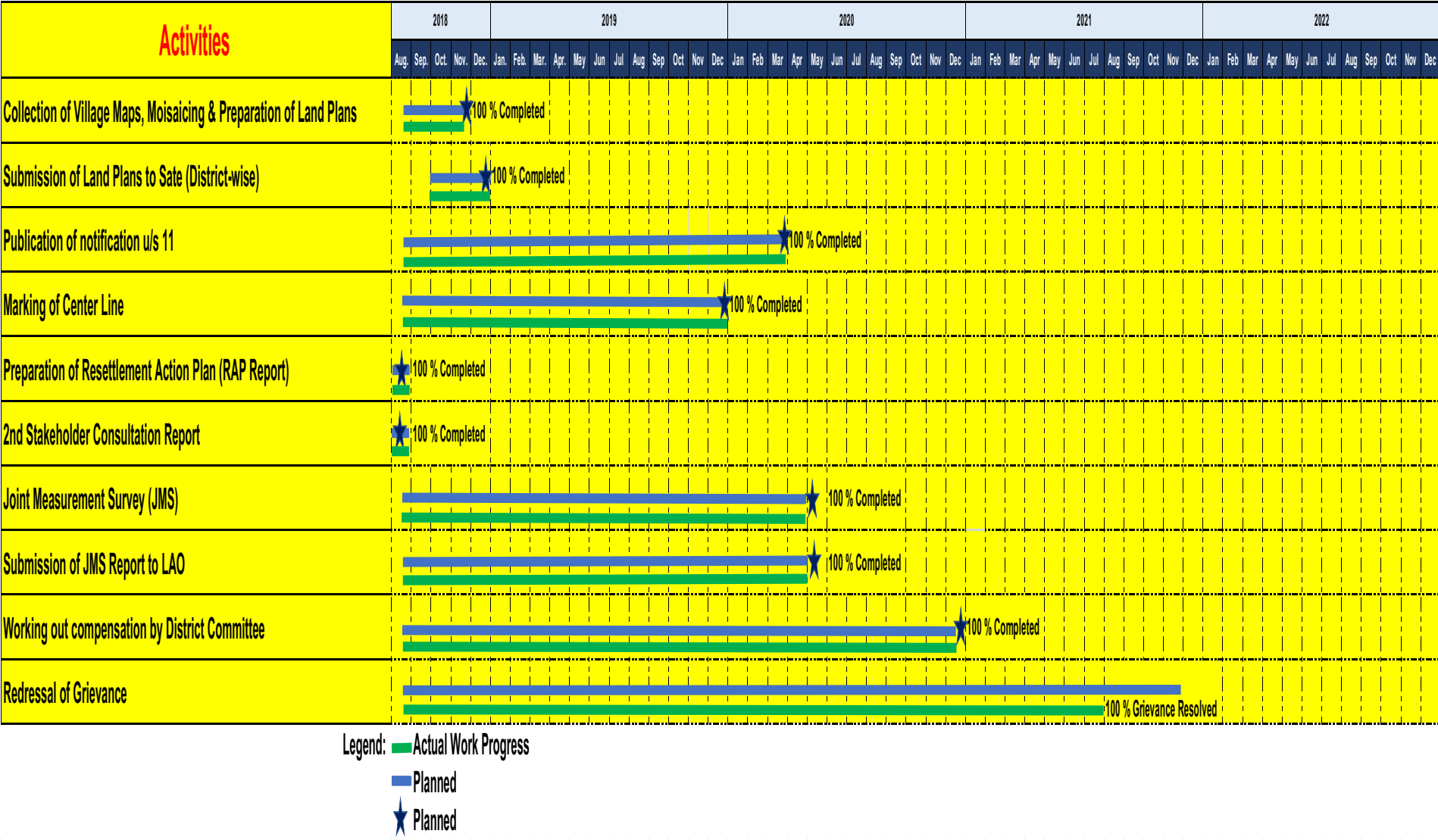


Figure 11-4: Activity Wise implementation schedule – Flow Chart

| Sl.No | Activity  | 2018    |      |      |      |      | 2019 |      |      |      |     | 2020 |     |     |     |     | 2021 |     |     |     |     | 2022 |     |     |     |     | 2023 | 2024 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
|-------|---|---------|------|------|------|------|------|------|------|------|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|
|       |   | Aug.    | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun  | Jul | Aug | Sep | Oct | Nov  | Dec | Jan | Feb | Mar | Apr  | May | Jun | Jul | Aug | Sep  | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan-Dec | Jan-April |  |  |  |  |  |  |  |  |  |  |  |  |
| 1     | Coordination with District Collector Office (LAD) and other line departments                      |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 2     | Collection of village maps, mosaicking & preparation of Land Plans                                |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 3     | Submission of Land Plans to State (District Wise)   |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 4     | Issue of Notification for Social Impact Assessment (SIA) Exemption (State Govt.)                  |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 5     | Second Stakeholder Consultation   |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 6     | Submission of Final RAP Report  |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 7     | Demarcation of ROW & Fixing of ROW Pillars  |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 8     | Joint Measurement of land area  |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 9     | Measurement and valuation of structure and other assets   |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 10    | Supporting DLR & SDO in village wise JMS file preparation and verification of PAP                 |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 11    | Verification of Titles & Structures with concerned Departments                                    |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 12    | Orientation training of RAP consultant staff and concerned PMAPM on RAP implementation activities |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 13    | Organise awareness campaigns for sharing information on RAP                                       |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 14    | Establishment of GRC  | Planned |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 15    | Preparation of entitlement/assistance compensation for the TH & NTHs                              |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 16    | Preparation and distribution of entitlement cards and entitlements after approval from CPM office |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 17    | Income restoration Options & Training needs for PAPs/PDPs   |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 18    | Vocational, Skill upgradation training based on the micro plans etc.                              |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 19    | Restoration of Common Property Resource   |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 20    | Handover & Completion Report  |         |      |      |      |      |      |      |      |      |     |      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |           |  |  |  |  |  |  |  |  |  |  |  |  |

## **12.0 INFORMATION DISCLOSURE AND STAKEHOLDER CONSULTATION**

### **12.1 Introduction**

The Right to Information Act, 2005 provides for setting out the practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, the constitution of a Central Information Commission and State Information Commissions and for matters connected therewith or incidental thereto. The process for obtaining information and details of designated officials shall be posted on the NHRCL website <https://www.nhrcl.in/>.

Information dissemination and stakeholder consultation for projects involving land acquisition and resettlement impacts are an integral part of RAP preparation and implementation. Information sharing and regular consultations held with stakeholders help resolve issues which sometimes become difficult to handle. Experience from several projects involving involuntary resettlement indicates that information sharing and consultations with stakeholders have helped project authority in the implementation of the project. It reduces opposition and resistance in the implementation of the project. This is also likely to dissuade people seeking for project related information under RTI Act, 2005.

### **12.2 Project stakeholders**

The project has various stakeholders at different levels. NHRCL, Ministry of Railways and participating State governments are stakeholders from the project side whereas at local level Project Affected Persons are the main stakeholders. Other stakeholders include:

- District Collector Office (LAO), responsible for land acquisition
- Line departments (DILR, Forest, Agriculture, Horticulture, etc) for providing necessary support for measurement of land, valuation of improvements on land, police department, etc,
- Elected representatives,
- Community representatives,
- Media,
- Interest groups (Chamber of commerce and industries, Non-government organization, Civil society organization, Community based organization, etc).

Project authority and PAPs are primary stakeholders as one is responsible for the successful implementation of the project; whereas other (PAPs) is the one who is directly affected by the project. Other stakeholders may be categorized as secondary and tertiary stakeholders. District administration and line departments are secondary stakeholders as they are involved in project implementation on behalf of project authority. Tertiary stakeholders are those who have an interest in the project but are not directly involved in the project. Tertiary stakeholders in the context of this project are the Chamber of commerce and industries, media, Non-Government Organization (NGOs), Civil Society Organization (CSO), Community Based Organization (CBO) and other interested local groups etc. These organizations have significance as they are opinion makers and represent the collective opinion of people, in general, and a group of people, in particular.

## 12.3 Approach and Methods of Information Disclosure and Consultation

### Disclosure and Public Consultation Plan

Disclosure of project information and consultation with stakeholders is a continuous process which is being done at regular intervals. Following activities have been undertaken to ensure participation of PAPs and local communities in RAP implementation. The objective of continued consultations is to promote understanding about resettlement and rehabilitation provisions, grievance redressal mechanism, etc among PAPs. Various activities in this regard are listed below:

- Communicating and informing PAPs in the affected village and urban areas through District, block and village/ ward level consultations on resettlement and rehabilitation provisions, stamp duty reimbursement, and grievance redress mechanism, roles, and responsibilities of various agencies;
- Holding collective as well as one to one meeting with the PAPs to explain their eligibility;
- Placing of the micro plan in affected villages for review and minimize grievances;
- Verifying receipt of compensation and R&R assistance as per eligibility;
- Identification of training needs for livelihood restoration/improvement.

Information dissemination has been carried out by adopting suitable means such as the distribution of printed leaflets/ information booklets covering relevant information about project aspects in the local language. The information dissemination materials have been prepared by implementation agency and are being modified as and when required to meet the requirement of various stakeholders. Village/ward level consultation meetings are being organized once every month/ or twice a month as required in each village/ward to explain matters contained in the information brochure and ascertain an understanding of PAPs on those matters. The information dissemination documents are being distributed among other stakeholders such as, head of various villages (sarpanch), opinion leader, school teacher, elected representative, and others in the village/ ward who could be contacted by PAPs for clarification. Information dissemination materials/ documents are normally distributed in advance before conducting the monthly meeting. This helps better interaction between the implementation agency and affected persons. This will help villagers prepare themselves for the meeting.

The information leaflet/ flyer/ booklet covers the following:

- A brief description of the project and its objectives;
- a summary of adverse impacts in the village (including land acquisition, and impacts on common property resources, etc);
- method of determination of compensation by consent award,
- method of determination of lumpsum R&R assistance,
- specific provisions for the vulnerable group;
- roles and responsibilities of implementation agency and officials of CPM office;
- Grievance redress mechanisms, etc.

Information dissemination is being carried out at least once in a month by organizing consultations in every village/ ward. Prior information covering date, time and venue would be intimated to villagers at least two days prior to the meeting date. Community representative of implementation agency or other team members will describe all aspects of the project, the importance of consultations and also seek their participation and co-operation in the project.

Participants would be provided an opportunity to raise issues, concerns, and suggestions. Documentation and Minutes of Meeting (MoM) of consultation meeting have been maintained by the implementation agency.

### **Disclosure of Draft and Final RAP**

Most of the information regarding the compensation, extent of the impact, Project affected persons, entitlement has been discussed with various stakeholders during the Second and First Stakeholder Consultation as well as during various village level consultations carried out for the project. In most of the consultations, it was observed that Project affected persons were well informed on the project from various sources and had specific questions on project components including entitlement and compensation.

The Final Resettlement Action Plan (in English and local language) shall be disclosed on NHRCL website for public viewing and inviting comments and suggestions. To enhance transparency in implementation, list of PAPs eligible for compensation and R&R assistance shall be disclosed in concerned village/ Panchayat Office/ Urban Local Body. A copy RAP shall also be kept in the Office of District Collector, Tehsil/ Taluka Office, and CPM office for public access.

## **12.4 Information Disclosure and Stakeholder Consultations**

### **12.4.1 Second Stakeholder Consultations**

The second stakeholder consultations at District level have been conducted after preparation of draft RAP. The second stakeholder consultations included the representatives from the district authorities, key government departments, Project affected persons, other stakeholder having interest in the project, Non-government organizations, Media and NHRCL representatives. The information on the district level consultations (including venue and timings) were communicated through newspaper advertisements to the wide range of stakeholders directly or indirectly involved in the project. In some of the cases, the first advertisement was given seven days prior to the meeting and the second advertisement was given a day before the meeting. The second stakeholder consultation was centrally organized within each district to ensure maximum participation from all the relevant stakeholders.

The presentation for the second stakeholder consultation included project details, alignment details extent of impacts, the category of PAPs, entitlement matrix along with compensation disbursement details, institutional arrangements for RAP including grievance redressal committee, roles, and responsibilities of implementation agency, monitoring and evaluation. It was followed by questions and open discussion where queries and questions of participants were answered, and their suggestions noted.

The presentation was made in the local language for each district and the proceedings of the Stakeholder consultations were recorded on paper and also captured on video camera. Minutes of the meeting, attendance sheet, newspaper clipping regarding the consultations and photographs of these meetings were documented. The dates, venues and attendee's details of the second stakeholder consultations are provided in Table 12-1.

**Table 12-1: Details of the Second Stakeholder Consultations**

| District  | Date  | Place  | Notice publication details                | No. of attendees | No. of female participants |
|-----------|---|--|---|------------------|----------------------------|
| Kheda     | 04/04/18  | Ambedkar hall  | 25/03/2018                                | Approx. 155      | 10-15                      |
| Ahmedabad | 09/05/18  | Ropara village ground Ahmedabad  | 04/05/18 and 08/05/18 in Gujarat Samachar | Approx. 100      | 10-15                      |
| Anand     | 30/04/18  | Town Hall, Anand   | 24/04/18 In Gujarat Samachar              | Approx. 300      | 15-20                      |
| Vadodara  | 25/04/18  | Sayaji Nagar Gruh  | 19/04/18 and 24/04/18 in Gujarat Samachar | Approx. 1500     | 200-300                    |
| Navsari   | 29/05/18  | Shree Navsari Kshatriya Sanskratik Bhavan, Near Jhumar Gas, Navi Chali. Juna Thana | 23/05/18 in Sandesh                       | Approx. 150      | 10-15                      |
| Surat     | 14/05/2018  | Gandhismruti Bhavan  | 11/05/2018 in Gujarat Samachar            | Approx. 250      | 15-20                      |
| Valsad    | 30/05/18  | Morarji Desai Auditorium Hall, Opp. S.T. Depo Valsad                               | 23/05/18 in Sandesh                       | Approx. 300      | 40-50                      |
| Bharuch   | 10/05/18  | Dr B. R Ambedkar Hall, Bharuch   | 04/05/18 and 08/05/18                     | Approx. 100      | 5-10                       |
| Thane     | 07/04/18  | Niyोजan Bhavan Collectorate, Thane (presided by SDO), Thane Tehsil                 | 08/04/18 in Lokmat                        | Approx. 200      | 20-25                      |
| Bhiwandi  | 21/04/18  | New Oswal Hall, Anjur Phata (presided by MP, MLA, and SDO), Bhiwandi Tehsil        | 20/04/18 in Sakal and Lokmat              | Approx. 300      | 40-50                      |
| Palghar   | 02/06/2018  | Shri S T Kadam Secondary School, Jivan Vikas Sanshtah, Boisar Road                 | 01/06/2018                                | Approx. 400      | 50-60                      |
| DNH       | 30/05/2018 (2 <sup>nd</sup> stakeholder consultation) | Naroli Panchayat hall  | 27/06/2018                                | Approx. 250      | 20-25                      |
|           | 4/07/2018 (Public hearing)                            |  |   | Approx. 100      | 15-18                      |

Refer **Appendix D1** for detail minutes of the meeting, list of attendees, newspaper notice, news pertaining to the consultation in the local newspaper.

#### 12.4.2 First Stakeholder Consultation

First stakeholder consultation was held at Tehsil/ Taluka level involving government officials, elected representative of villages, project Affected persons or their representatives, district administration and NHSRCL representative. Taluka/ tehsil level meetings were conducted in Gujarat, Maharashtra, and DNH. The meetings were witnessed by representatives from villages (village head (Sarpanch), other elected representatives and key decision makers), district administration, NHSRCL, and Arcadis. It involved elected representatives of villages, village revenue officials, government officials, community and opinion leaders, and a limited number of PAPs.

Before the first stakeholder consultations, all concerned stakeholders were informed in advance to attend the meeting. Beside newspaper advertisement, Invitation letters were sent to these people and follow up over the phone was undertaken requesting them to attend the meetings. At village level one to one information was also provided to PAPs or their family members. Follow up was done by the RAP consultant on the day of the meeting. A booklet containing salient features of the project was distributed to participants for a summary understanding of the project. Later a presentation was made by RAP consultant followed by queries and concerns raised by participants and replies by RAP consultant. Table 12-2 provides details on the first stakeholder consultation including details on date, venue, and number of attendees.

**Table 12-2: First Stakeholder Consultation Details for Gujarat, Maharashtra, and DNH**

| Venue                                 | District  | Date       | No. of attendees |
|---------------------------------------|-----------|------------|------------------|
| <b>Gujarat</b>                        |           |            |                  |
| Ankleshwar Tehsil Office              | Bharuch   | 08-01-2018 | 20               |
| Bharuch Tehsil Office                 | Bharuch   | 03-01-2018 | 26               |
| Mamlatdar Office Chikhali             | Navsari   | 03-01-2018 | 5                |
| Mamlatdar office, Gandevi             | Navsari   | 12-01-2018 | 20               |
| Mamlatdar Office, Magrol              | Surat     | 02-01-2018 | 11               |
| Collector Office, Anand               | Anand     | 22-12-2017 | 27               |
| Tehsildar Office, Asarva              | Ahmedabad | 21-12-2017 | 12               |
| Arcadis Ahmedabad Office              | Ahmedabad | 22-12-2017 | 7                |
| Collector Office, Nadiad Gramma       | Kheda     | 22-12-2017 | 21               |
| Amod Tehsil Office                    | Bharuch   | 28-12-2017 | 19               |
| Chorasi Mamlatdar Office              | Surat     | 26-12-2017 | 13               |
| Mamlatdar Office, Kamrej              | Surat     | 27-12-2017 | 21               |
| Mamlatdar Office, Karjan              | Vadodara  | 20-12-2017 | 11               |
| Mamlatdar Office, Padra               | Vadodara  | 20-12-2017 | 11               |
| Pardi Seva Sadan                      | Valsad    | 27-12-2017 | 11               |
| Tapi Seva Sadan                       | Valsad    | 27-12-2017 | 11               |
| Prant Office, Navsari                 | Navsari   | 3-1-2018   | 25               |
| Mamlatdar office, Olpad               | Surat     | 2-1-2018   | 16               |
| Mamlatdar Office Palsana              | Surat     | 3-1-2018   | 14               |
| Umargam Mamlatdar Office              | Valsad    | 29-1-2018  | 10               |
| Mamlatdar Office, Vaso                | Kheda     | 3-11-2017  | 10               |
| Taluka Panchayat Office, Kheda        | Kheda     | 3-11-2017  | 12               |
| Tehsildar Office, Vastral             | Ahmedabad | 31-10-2017 | 15               |
| Tehsildar Office Gatlodia             | Ahmedabad | 30-10-2017 | 8                |
| Prant Office, Narmada Bhavan Vadodara | Vadodara  | 16-1-2018  | 20               |
| Vatva Tehsil Office, Ahmedabad        | Ahmedabad | 7-2-2018   | 18               |
| Tehsil Office, Valsad                 | Valsad    | 7-3-2018   | 14               |
| <b>Maharashtra</b>                    |           |            |                  |
| Tehsildar Office, Thane               | Thane     | 21-12-2017 | 11               |
| Panchayat Samiti Hall, Palghar        | Palghar   | 4-1-2018   | 45               |
| SDO Office, Dahanu                    | Palghar   | 2-1-2018   | 38               |
| SDO Office, Bhiwandi                  | Thane     | 4-1-2018   | 34               |

| Venue                          | District                      | Date       | No. of attendees |
|--------------------------------|-------------------------------|------------|------------------|
| Panchayat Samiti, Talasari     | Palghar                       | 8-1-2018   | 47               |
| Tehsildar Office, Vasai        | Palghar                       | 22-12-2017 | 39               |
| Panchayat Samiti Hall, Palghar | Palghar                       | 4-1-2018   | 45               |
| SDO Office, Dahanu             | Palghar                       | 2-1-2018   | 38               |
| <b>Dadar and Nagar Haveli</b>  |                               |            |                  |
| Gram Panchayat Office, Naroli  | Dadar and Nagar Haveli (U.T.) | 22-12-2017 | 35               |

Prior to the 1<sup>st</sup> Stakeholder Consultation, a letter in this connection was issued by Mamlatdar which was circulated to relevant stakeholders. Minutes of the Meeting of stakeholder consultations were noted. Photographs of stakeholder consultations have been taken for record and documentation. Proceedings of stakeholder consultations are provided in Appendix D2.

### 12.4.3 Village Level Focus Group Discussions

The project team has made a lot of efforts to reach out each to every Person affected by the project and details have been provided to them through various stakeholder consultations, village level meetings, and individual discussion.

In addition to the First and Second stakeholder consultation done for the project, numerous Focus Group Discussions were carried out with the community including PAPs before the census and socio-economic survey and during the census and socio-economic survey.

During these consultations, participants were informed about the project, its broad features particularly, reducing impacts on land by because of elevated track, safety, the extent of land required for the project, laws governing land acquisition, etc. Thus, information disclosure was disclosed to stakeholders through stakeholder consultation meeting, individual village level meeting and interaction with a group of people and PAPs during the survey. The details on some of the focus group discussions conducted with the community are provided in Table 12-3 and minutes have been provided in **Appendix H**.



**Table 12-3: Details of Focus Group Discussions & Village Level Consultation conducted for Gujarat, Maharashtra and DNH**

| SN             | District | Tehsil    | Village name         | Village wise Consultation Date |
|----------------|----------|-----------|----------------------|--------------------------------|
| <b>Gujarat</b> |          |           |                      |                                |
| 1              | Valsad   | Umbergaon | Zaroli               | 21-Dec-17                      |
| 2              | Valsad   | Umbergaon | Nagwas               | 21-Dec-17                      |
| 3              | Valsad   | Umbergaon | Borigam              | 29-Jan-18                      |
| 4              | Valsad   | Umbergaon | Achchhari            | 29-Jan-18                      |
| 5              | Valsad   | Vapi      | Dungra               | 29-Nov-17                      |
| 6              | Valsad   | Vapi      | Karvad               | 14-Dec-17                      |
| 7              | Valsad   | Valsad    | Kocharva             | 24-Jan-18                      |
| 8              | Valsad   | Valsad    | Rata                 | 13-Dec-17                      |
| 9              | Valsad   | Valsad    | Pandor               | 18-Jan-18                      |
| 10             | Valsad   | Pardi     | Ambach               | 18-Jan-18                      |
| 11             | Valsad   | Valsad    | Paria                | 28-Nov-17                      |
| 12             | Valsad   | Pardi     | Dashwada             | 7-Dec-17                       |
| 13             | Valsad   | Valsad    | Dungri               | 29-Nov-17                      |
| 14             | Valsad   | Valsad    | Velparva             | 7-Dec-17                       |
| 15             | Valsad   | Valsad    | Sukhlav              | 29-Jan-18                      |
| 16             | Valsad   | Valsad    | Khumbhariya          | 5-Dec-17                       |
| 17             | Valsad   | Valsad    | Balda                | 1-Dec-17                       |
| 18             | Valsad   | Valsad    | Binwada              | 29-Nov-17                      |
| 19             | Valsad   | Valsad    | Chanvai              | 29-Nov-17                      |
| 20             | Valsad   | Valsad    | Pathri               | 25-Nov-17                      |
| 21             | Valsad   | Valsad    | Jujwa                | 5-Dec-17                       |
| 22             | Valsad   | Valsad    | Ghadoi               | 29-Jan-18                      |
| 23             | Valsad   | Valsad    | Gorwada              | 11-Dec-17                      |
| 24             | Valsad   | Valsad    | Palan                | 11-Dec-17                      |
| 25             | Valsad   | Valsad    | Khajurdi             | 29-Jan-18                      |
| 26             | Valsad   | Valsad    | Endergota            | 27-Nov-17                      |
| 27             | Valsad   | Valsad    | Sonwada              | 29-Nov-17                      |
| 28             | Valsad   | Valsad    | Bhanji falia         | 27-Nov-17                      |
| 29             | Valsad   | Valsad    | Panchlai             | 11-Dec-17                      |
| 30             | Valsad   | Valsad    | Vaghaldhara          | 5-Dec-17                       |
| 31             | Navsari  | Gandevi   | Undach vaniya faliya | 13-Dec-17                      |
| 32             | Navsari  | Chikhli   | Vankal               | 12-Dec-17                      |
| 33             | Navsari  | Chikhli   | Ghekti               | 12-Dec-17                      |
| 34             | Navsari  | Gandevi   | Nandarkha            | 25-Nov-17                      |
| 35             | Navsari  | Gandevi   | Kesali               | 27-Nov-17                      |
| 36             | Navsari  | Gandevi   | Pati                 | 27-Nov-17                      |
| 37             | Navsari  | Gandevi   | Deshad               | 27-Nov-17                      |
| 38             | Navsari  | Gandevi   | Khergram             | 14-Dec-17                      |
| 39             | Navsari  | Gandevi   | Vadsangal            | 14-Dec-17                      |

| SN | District | Tehsil    | Village name        | Village wise Consultation Date |
|----|----------|-----------|---------------------|--------------------------------|
| 40 | Navsari  | Gandevi   | Dhanori             | 14-Dec-17                      |
| 41 | Navsari  | Gandevi   | Pathri (gandevi)    | 1-Dec-17                       |
| 42 | Navsari  | Gandevi   | Manekpor            | 1-Dec-17                       |
| 43 | Navsari  | Gandevi   | Pinjara             | 1-Dec-17                       |
| 44 | Navsari  | Gandevi   | Icchapor            | 6-Dec-17                       |
| 45 | Navsari  | Navsari   | Khadsupa            | 6-Dec-17                       |
| 46 | Navsari  | Navsari   | Kachhol             | 6-Dec-17                       |
| 47 | Navsari  | Navsari   | Sisodra (ganesh)    | 7-Dec-17                       |
| 48 | Navsari  | Navsari   | Nasilpor            | 7-Dec-17                       |
| 49 | Navsari  | Navsari   | Virwadi             | 7-Dec-17                       |
| 50 | Navsari  | Navsari   | Dharagiri           | 28-Nov-17                      |
| 51 | Navsari  | Navsari   | Amadpor             | 24-Nov-17                      |
| 52 | Navsari  | Navsari   | Amri                | 28-Nov-17                      |
| 53 | Navsari  | Navsari   | Padgha              | 11-Dec-17                      |
| 54 | Navsari  | Navsari   | Vejalpor            | 28-Nov-17                      |
| 55 | Navsari  | Navsari   | Parthan             | 29-Nov-17                      |
| 56 | Navsari  | Navsari   | Dhaman              | 8-Dec-17                       |
| 57 | Navsari  | Jalalpore | Dabhel              | 8-Dec-17                       |
| 58 | Navsari  | Jalalpore | Asana               | 29-Nov-17                      |
| 59 | Surat    | Chorasi   | Kacholi             | 28-Nov-17                      |
| 60 | Surat    | Chorasi   | Bhatia              | 28-Nov-17                      |
| 61 | Surat    | Chorasi   | Pardi (kachholi)    | 7-Dec-17                       |
| 62 | Surat    | Chorasi   | Ravla alias vaktana | 28-Nov-17                      |
| 63 | Surat    | Chorasi   | Bonand              | 28-Nov-17                      |
| 64 | Surat    | Chorasi   | Goja                | 27-Nov-17                      |
| 65 | Surat    | Chorasi   | Timbarva            | 27-Nov-17                      |
| 66 | Surat    | Chorasi   | Molni               | 27-Nov-17                      |
| 67 | Surat    | Palsana   | Niyol               | 27-Nov-17                      |
| 68 | Surat    | Palsana   | Antroli             | 25-Nov-17                      |
| 69 | Surat    | Palsana   | Vengkaneda          | 7-Dec-17                       |
| 70 | Surat    | Kamrej    | Oviyan              | 29-Nov-17                      |
| 71 | Surat    | Kamrej    | Kosmada             | 29-Nov-17                      |
| 72 | Surat    | Kamrej    | Khadsad             | 29-Nov-17                      |
| 73 | Surat    | Kamrej    | Pasodara            | 29-Nov-17                      |
| 74 | Surat    | Kamrej    | Laskana             | 1-Dec-17                       |
| 75 | Surat    | Kamrej    | Kholvad             | 1-Dec-17                       |
| 76 | Surat    | Kamrej    | Kathor              | 1-Dec-17                       |
| 77 | Surat    | Kamrej    | Ghaludi             | 1-Dec-17                       |
| 78 | Surat    | Kamrej    | Shekhpur            | 1-Dec-17                       |
| 79 | Surat    | Olpad     | Kudsad              | 4-Dec-17                       |
| 80 | Surat    | Olpad     | Mulad               | 4-Dec-17                       |
| 81 | Surat    | Olpad     | Kimamli             | 4-Dec-17                       |

| SN  | District | Tehsil    | Village name    | Village wise Consultation Date |
|-----|----------|-----------|-----------------|--------------------------------|
| 82  | Surat    | Mangrol   | Kumvarda        | 5-Dec-17                       |
| 83  | Surat    | Olpad     | Kathodara       | 29-Nov-17                      |
| 84  | Surat    | Mangrol   | Tarsadi         | 5-Dec-17                       |
| 85  | Surat    | Mangrol   | Hathuran        | 5-Dec-17                       |
| 86  | Bharuch  | Anklesvar | Untiyadara      | 27-Nov-17                      |
| 87  | Bharuch  | Anklesvar | Ravidra         | 27-Nov-17                      |
| 88  | Bharuch  | Anklesvar | Panoli          | 27-Nov-17                      |
| 89  | Bharuch  | Anklesvar | Alonj           | 27-Nov-17                      |
| 90  | Bharuch  | Anklesvar | Umarwada        | 25-Nov-17                      |
| 91  | Bharuch  | Anklesvar | Amboli          | 25-Nov-17                      |
| 92  | Bharuch  | Anklesvar | Bojdara         | 25-Nov-17                      |
| 93  | Bharuch  | Anklesvar | Anklesvar       | 15-Dec-17                      |
| 94  | Bharuch  | Anklesvar | Diva            | 24-Nov-17                      |
| 95  | Bharuch  | Anklesvar | Sarfuddin       | 24-Nov-17                      |
| 96  | Bharuch  | Bharuch   | Kukarwada       | 28-Nov-17                      |
| 97  | Bharuch  | Bharuch   | Dahegam         | 28-Nov-17                      |
| 98  | Bharuch  | Bharuch   | Kanthariya      | 30-Nov-17                      |
| 99  | Bharuch  | Bharuch   | Tham            | 30-Nov-17                      |
| 100 | Bharuch  | Bharuch   | Mahudhala       | 5-Dec-17                       |
| 101 | Bharuch  | Bharuch   | Derol           | 5-Dec-17                       |
| 102 | Bharuch  | Bharuch   | Tralsi          | 1-Dec-17                       |
| 103 | Bharuch  | Bharuch   | Tralsa          | 1-Dec-17                       |
| 104 | Bharuch  | Bharuch   | Pipalia         | 4-Dec-17                       |
| 105 | Bharuch  | Bharuch   | Pariej          | 1-Dec-17                       |
| 106 | Bharuch  | Bharuch   | Karela          | 4-Dec-17                       |
| 107 | Bharuch  | Bharuch   | Padariya        | 4-Dec-17                       |
| 108 | Bharuch  | Amod      | Vantarsa        | 29-Nov-17                      |
| 109 | Bharuch  | Amod      | Kolhi vantarsa  | 29-Nov-17                      |
| 110 | Bharuch  | Amod      | Dora            | 29-Nov-17                      |
| 111 | Bharuch  | Amod      | Telod           | 29-Nov-17                      |
| 112 | Bharuch  | Amod      | Ochhan          | 29-Nov-17                      |
| 113 | Vadodara | Karjan    | Mesrad          | 15-Dec-17                      |
| 114 | Vadodara | Karjan    | Mangrol         | 13-Dec-17                      |
| 115 | Vadodara | Karjan    | Kambola         | 12-Dec-17                      |
| 116 | Vadodara | Karjan    | Bodaka          | 13-Dec-17                      |
| 117 | Vadodara | Karjan    | Handod          | 12-Dec-17                      |
| 118 | Vadodara | Karjan    | Khanda          | 12-Dec-17                      |
| 119 | Vadodara | Karjan    | Manpur          | 13-Dec-17                      |
| 120 | Vadodara | Karjan    | Pingalwada      | 13-Dec-17                      |
| 121 | Vadodara | Vadodara  | Untiya (medhad) | 15-Dec-17                      |
| 122 | Vadodara | Vadodara  | Gosindra        | 15-Dec-17                      |
| 123 | Vadodara | Padra     | Medhad          | 11-Dec-17                      |

| SN  | District | Tehsil                  | Village name        | Village wise Consultation Date |
|-----|----------|-------------------------|---------------------|--------------------------------|
| 124 | Vadodara | Padra                   | Virpur              | 8-Dec-17                       |
| 125 | Vadodara | Padra                   | Thikariya mubarak   | 7-Dec-17                       |
| 126 | Vadodara | Padra                   | Shihor              | 6-Dec-17                       |
| 127 | Vadodara | Padra                   | Itola               | 7-Dec-17                       |
| 128 | Vadodara | Padra                   | Chansad             | 30-Nov-17                      |
| 129 | Vadodara | Vadodara                | Khalipur            | 28-Nov-17                      |
| 130 | Vadodara | Vadodara                | Maretha             | 11-Dec-17                      |
| 131 | Vadodara | Vadodara                | Chapad              | 28-Nov-17                      |
| 132 | Vadodara | Vadodara                | Talsar              | 29-Nov-17                      |
| 133 | Vadodara | Vadodara shaher (south) | Maneja              | 24-Nov-17                      |
| 134 | Vadodara | Vadodara shaher (south) | Vadsar              | 28-Nov-17                      |
| 135 | Vadodara | Vadodara shaher (south) | Manjalpur           | 24-Nov-17                      |
| 136 | Vadodara | Vadodara                | Vadodara Mun. Corp. | 8-Dec-17                       |
| 137 | Vadodara | Vadodara shaher (west)  | Akota               | 30-Nov-17                      |
| 138 | Vadodara | Vadodara shaher (north) | Gorwa               | 28-Nov-17                      |
| 139 | Vadodara | Vadodara shaher (north) | Karodiya            | 4-Dec-17                       |
| 140 | Vadodara | Vadodara shaher (north) | Chhani              | 27-Nov-17                      |
| 141 | Vadodara | Vadodara                | Dasharath           | 4-Dec-17                       |
| 142 | Vadodara | Vadodara                | Ajod                | 27-Nov-17                      |
| 143 | Vadodara | Vadodara                | Padmala             | 5-Dec-17                       |
| 144 | Vadodara | Vadodara                | Sankarda            | 1-Dec-17                       |
| 145 | Vadodara | Vadodara                | Rayaka              | 5-Dec-17                       |
| 146 | Vadodara | Vadodara                | Dodka               | 1-Dec-17                       |
| 147 | Anand    | Anand                   | Rajupura            | 6-Dec-17                       |
| 148 | Anand    | Anand                   | Vasad               | 5-Dec-17                       |
| 149 | Anand    | Anand                   | Anklavdi            | 6-Dec-17                       |
| 150 | Anand    | Anand                   | Adas                | 5-Dec-17                       |
| 151 | Anand    | Anand                   | Ramnagar            | 29-Nov-17                      |
| 152 | Anand    | Anand                   | Mogar               | 30-Nov-17                      |
| 153 | Anand    | Anand                   | Vaghasi             | 29-Nov-17                      |
| 154 | Anand    | Anand                   | Chikhodra           | 27-Nov-17                      |
| 155 | Anand    | Anand                   | Gamdi               | 27-Nov-17                      |
| 156 | Anand    | Anand                   | Samarkha            | 29-Nov-17                      |
| 157 | Anand    | Anand                   | Boriavi (m)         | 27-Nov-17                      |
| 158 | Kheda    | Nadiad gramya           | Chaklasi (m)        | 29-Nov-17                      |
| 159 | Kheda    | Nadiad gramya           | Bhumel              | 28-Nov-17                      |
| 160 | Kheda    | Nadiad gramya           | Uttarsanda          | 29-Nov-17                      |
| 161 | Kheda    | Nadiad gramya           | Gutal               | 28-Nov-17                      |
| 162 | Kheda    | Nadiad gramya           | Piplag              | 2-Dec-17                       |
| 163 | Kheda    | Nadiad gramya           | Dumral              | 2-Dec-17                       |
| 164 | Kheda    | Nadiad gramya           | Tundel              | 11-Dec-17                      |
| 165 | Kheda    | Nadiad gramya           | Davda               | 11-Dec-17                      |

| SN                            | District           | Tehsil        | Village name        | Village wise Consultation Date |
|-------------------------------|--------------------|---------------|---------------------|--------------------------------|
| 166                           | Kheda              | Nadiad gramya | Degam               | 1-Dec-17                       |
| 167                           | Kheda              | Vaso          | Dantali             | 9-Dec-17                       |
| 168                           | Kheda              | Vaso          | Zarol               | 1-Dec-17                       |
| 169                           | Kheda              | Mehmedabad    | Gothaj              | 7-Dec-17                       |
| 170                           | Kheda              | Mehmedabad    | Bavra               | 7-Dec-17                       |
| 171                           | Kheda              | Mehmedabad    | Iawa                | 12-Dec-17                      |
| 172                           | Kheda              | Mehmedabad    | Katakpara           | 9-Dec-17                       |
| 173                           | Kheda              | Mehmedabad    | Chhapra             | 6-Dec-17                       |
| 174                           | Kheda              | Mehmedabad    | Viol                | 7-Dec-17                       |
| 175                           | Kheda              | Mehmedabad    | Vadadla             | 6-Dec-17                       |
| 176                           | Kheda              | Mehmedabad    | Nenpur              | 5-Dec-17                       |
| 177                           | Kheda              | Mehmedabad    | Malataj             | 6-Dec-17                       |
| 178                           | Kheda              | Mehmedabad    | Kenij               | 4-Dec-17                       |
| 179                           | Kheda              | Kheda         | Mahij               | 4-Dec-17                       |
| 180                           | Ahmedabad          | Daskroi       | Barejdi             | 1-Dec-17                       |
| 181                           | Ahmedabad          | Daskroi       | Devdi               | 28-Nov-17                      |
| 182                           | Ahmedabad          | Daskroi       | Geratpur            | 27-Nov-17                      |
| 183                           | Ahmedabad          | Daskroi       | Ropda               | 27-Nov-17                      |
| 184                           | Ahmedabad          | Daskroi       | Rajpur-hirpur       | 6-Dec-17                       |
| 185                           | Ahmedabad          | Vatva         | Vatva               | 1-Dec-17                       |
| 186                           | Ahmedabad          | Maninagar     | Vinzol              | 4-Dec-17                       |
| 187                           | Ahmedabad          | Maninagar     | Godasar             | 7-Dec-17                       |
| 188                           | Ahmedabad          | Maninagar     | Khokhra-mehmadavad  | 5-Dec-17                       |
| 189                           | Ahmedabad          | Maninagar     | Shaher kotda        | 6-Dec-17                       |
| 190                           | Ahmedabad          | Asarva        | Asarva              | 4-Dec-17                       |
| 191                           | Ahmedabad          | Asarva        | Dariyapur (kajipur) | 4-Jan-18                       |
| 192                           | Ahmedabad          | Sabarmati     | Acher               | 30-Nov-17                      |
| 193                           | Ahmedabad          | Sabarmati     | Ranip (m)           | 5-Dec-17                       |
| 194                           | Ahmedabad          | Sabarmati     | Kali (m)            | 30-Nov-17                      |
| 195                           | Ahmedabad          | Ghatlodiya    | Chainpur            | 4-Jan-18                       |
| <b>Dadra and Nagar Haveli</b> |                    |               |                     |                                |
| 1                             | Dadra Nagar Haveli | Dhapsa        | Dhapsa              | 6 Feb and 7 Feb 18             |
| <b>Maharashtra</b>            |                    |               |                     |                                |
| 1                             | Palghar            | Vasai         | Shilottar           | 17 Feb 18                      |
| 2                             | Palghar            | Vasai         | Sasunavghar         | 17 Feb 18                      |
| 3                             | Palghar            | Vasai         | Mori                | 17 Feb 18                      |
| 4                             | Palghar            | Vasai         | Sarjamori           | 17 Feb 18                      |
| 5                             | Palghar            | Vasai         | Bapane              | 17 Feb 18                      |
| 6                             | Palghar            | Dahanu        | Govane              | 22 Feb 2018                    |
| 7                             | Palghar            | Dahanu        | Chari               | 24 Feb 2018                    |
| 8                             | Palghar            | Dahanu        | Kotabi              | 24 Feb 2018                    |
| 9                             | Palghar            | Dahanu        | Dabhale             | 28 Feb 2018                    |

| SN | District | Tehsil   | Village name | Village wise Consultation Date |
|----|----------|----------|--------------|--------------------------------|
| 10 | Palghar  | Dahanu   | Asave        | 01 Mar 2018                    |
| 11 | Palghar  | Talasari | Manpada      | 12 Feb 2018                    |
| 12 | Palghar  | Talasari | Varvada      | 16 Feb 2018                    |
| 13 | Palghar  | Talasari | Aamgaon      | 21 Feb 2018                    |
| 14 | Palghar  | Vasai    | Chandsar     | 10 Mar 2018                    |
| 15 | Palghar  | Vasai    | Gaskopri     | 10 Mar 2018                    |
| 16 | Palghar  | Vasai    | Gokhiware    | 06 Mar 2018                    |
| 17 | Palghar  | Vasai    | Kopri        | 07 Mar 2018 & 10 Mar 2018      |
| 18 | Palghar  | Vasai    | More         | 06 Mar 2018                    |
| 19 | Palghar  | Palghar  | Padaghe      | 10 Mar 2018                    |
| 20 | Palghar  | Palghar  | Kelwe Road   | 11 Mar 2018                    |
| 21 | Thane    | Bhiwandi | Kewani       | 09 Mar 2018                    |
| 22 | Thane    | Bhiwandi | Kaseli       | 09 Mar 2018                    |

In addition to the village level consultation done earlier, numerous additional consultation and discussion in various villages were carried out. Details of additional consultation carried out in addition to the above is provided in the following table.

| Consultations in July 2018 |             |                |                             |
|----------------------------|-------------|----------------|-----------------------------|
| District                   | Village     | Taluka         | Date of recent Consultation |
| Surat                      | Boland      | Chorasi        | 12/07/2018                  |
|                            | Kachholi    | Chorasi        | 03/07/2018                  |
|                            | Vaktana     | Kamrej         | 10/07/2018                  |
|                            | Kosmada     | Kamrej         | 25/07/2018                  |
|                            | Laskana     | Kamrej         | 23/07/2018                  |
|                            | Kholvada    | Kamrej         | 18/07/2018                  |
|                            | Timbarva    | Kamrej         | 16/07/2018                  |
|                            | Kuwarda     | Mangrol        | 30/07/2018                  |
|                            | Tarsadi     | Mangrol        | 30/07/2018                  |
|                            | Khadsad     | Kamrej         | 30/07/2018                  |
| Ahmedabad                  | Devdi       | Daskroi        | 28/07/2018                  |
| Vadodara                   | Khanda      | Karjan         | 25/07/2018                  |
|                            | Manpur      | Karjan         | 11/07/2018                  |
|                            | Manpur      | Karjan         | 17/07/2018                  |
|                            | Pingalwada  | Karjan         | 06/07/2018                  |
|                            | Handed      | Karjan         | 30/07/2018                  |
|                            | Bodaka      | Karjan         | 31/07/2018                  |
|                            | Kambola     | Karjan         | 01/08/2018                  |
| Kheda                      | Nenpur      | Mahemdabad     | 26/07/2018                  |
|                            | Virol/ Iawa | Mahemdabad     | 26/07/2018                  |
|                            | Degam       | Nadiad         | 24/07/2018                  |
|                            | Zarol       | Vaso           | 24/07/2018                  |
|                            | Piplag      | Nadiyad Gramya | 28/07/2018                  |

| Consultations in July 2018 |                        |                |                             |
|----------------------------|------------------------|----------------|-----------------------------|
| District                   | Village                | Taluka         | Date of recent Consultation |
|                            | Gutal                  | Nadiyad Gramya | 28/07/2018                  |
|                            | Bhumel                 | Nadiyad Gramya | 28/07/2018                  |
| Navsari                    | Bhaman                 | Navsari        | 10/07/2018                  |
|                            | Dharagiri              | Navsari        | 18/07/2018                  |
|                            | Kachhol                | Navsari        | 20/07/2018                  |
|                            | Padgha                 | Navsari        | 16/07/2018                  |
|                            | Dhanori                | Gandevi        | 31/07/2018                  |
| Bharuch                    | Ravidra                | Ankleshwar     | 24/07/2018                  |
|                            | Mahudhala/ Derol/ Tham | Bharuch        | 30/07/2018                  |
|                            | Tham                   | Bharuch        | 31/07/2018                  |
|                            | Mahudhala              | Bharuch        | 02/08/2018                  |
|                            | Dehgam                 | Bharuch        | 02/08/2018                  |
|                            | Kukarwada              | Bharuch        | 03/08/2018                  |
|                            | Kanthariya             | Bharuch        | 04/08/2018                  |
| Valsad                     | Bhanji Faliya          | Valsad         | 26/07/2018                  |
|                            | Endergota              | Valsad         | 04/07/2018                  |
|                            | Jujwa                  | Valsad         | 16/07/2018                  |
|                            | Nagwas                 | Umbergaun      | 27/07/2018                  |
|                            | Palan                  | Valsad         | 24/07/2018                  |
|                            | Pathari                | Valsad         | 24/07/2018                  |
|                            | Panchlai               | Valsad         | 26/07/2018                  |
|                            | Palan                  | Valsad         | 09/07/2018                  |
|                            | Pathari                | Valsad         | 19/07/2018                  |
|                            | Chanwai                | Valsad         | 21/07/2018                  |
|                            | Dingra                 | Vapi           | 23/07/2018                  |
|                            | Binwada                | Valsad         | 26/07/2018                  |
|                            | Chanwai                | Valsad         | 23/07/2018                  |
|                            | Chanwai                | Valsad         | 25/07/2018                  |
|                            | Zaroli                 | Umbergaun      | 30/07/2018                  |
|                            | Borigam                | Umbergaun      | 30/07/2018                  |
|                            | Gorwada                | Valsad         | 02/08/2018                  |
|                            | Vagaldhara             | Valsad         | 04/08/2018                  |
| Palghar                    | Uplat                  | Talasari       | 03/07/2018                  |
|                            | Rothe                  | Palghar        | 06/07/2018                  |
|                            | Rambag                 | Palghar        | 07/07/2018                  |
|                            | Vasanwadi              | Dahanu         | 16/07/2018                  |
|                            | Asave                  | Dahanu         | 16/07/2018                  |
|                            | Gowane                 | Dahanu         | 17/07/2019                  |
|                            | Ambesari               | Talasari       | 23/07/2018                  |
|                            | Dhable                 | Dahanu         | 19/07/2018                  |
|                            | Gowane                 | Dahanu         | 20/07/2018                  |
|                            | Zari                   | Talasari       | 20/07/2019                  |
|                            | Vanai                  | Dahanu         | 21/07/2018                  |
|                            | Govane                 | Dahanu         | 21/07/2018                  |

| Consultations in July 2018 |                                   |            |                             |
|----------------------------|-----------------------------------|------------|-----------------------------|
| District                   | Village                           | Taluka     | Date of recent Consultation |
|                            | Gowane                            | Dahanu     | 23/07/2018                  |
|                            | Shilte/virathan                   | Palghar    | 25/07/2018                  |
|                            | Vasa                              | Talasari   | 26/07/2018                  |
|                            | Verkhunti                         | Palghar    | 26/07/2018                  |
|                            | Zari                              | Dahanu     | 24/07/2018                  |
|                            | Dehane                            | Dahanu     | 24/07/2018                  |
|                            | Verkhunti                         | Palghar    | 27/07/2018                  |
|                            | Uplat                             | Talasari   | 16/07/2018                  |
|                            | Zari                              | Talasari   | 17/07/2018                  |
|                            | Varwada                           | Talasari   | 17/07/2018                  |
|                            | Gowane                            | Dahanu     | 24/07/2018                  |
|                            | Zari                              | Talasari   | 24/07/2018                  |
|                            | Virathan BK                       | Palghar    | 24/07/2018                  |
|                            | Dehane                            | Dahanu     | 25/07/2018                  |
|                            | Vasa                              | Talasari   | 26/07/2018                  |
|                            | Vasantwadi                        | Dahanu     | 26/07/2018                  |
|                            | Asave                             | Dahanu     | 26/07/2018                  |
|                            | Mande                             | Palghar    | 27/07/2018                  |
|                            | Vasantwadi                        | Dahanu     | 27/07/2018                  |
|                            | Gowane                            | Dahanu     | 27/07/2018                  |
|                            | vasa                              | Talasari   | 27/07/2018                  |
|                            | ambesari                          | Talasari   | 30/07/2018                  |
|                            | Chari                             | Dahanu     | 30/07/2018                  |
|                            | kotabi                            | Dahanu     | 30/07/2018                  |
|                            | vasantwadi                        | Dahanu     | 30/07/2018                  |
|                            | aassve                            | Dahanu     | 30/07/2018                  |
|                            | dehane                            | Dahanu     | 30/07/2018                  |
|                            | govane                            | Dahanu     | 31/07/2018                  |
|                            | Kawade                            | Talasari   | 02/08/2018                  |
| Manpada                    | Talasari                          | 03/08/2018 |                             |
| Asawe                      | Dahanu                            | 03/08/2018 |                             |
| DNH                        | Dhapsa, navgam faliya             | Silvasa    | 13/07/2018                  |
|                            | Dhapsa                            | Silvasa    | 25/07/2018                  |
|                            | Dhapsa                            | Silvasa    | 27/07/2018                  |
|                            | Naroli                            | Silvasa    | 30/07/2018                  |
|                            | Naroli, Kumbharvadi faliya        | Silvasa    | 02/08/2018                  |
|                            | Dhapsa, navagam faliya            | Silvasa    | 03/08/2018                  |
|                            | Naroli, Kumbharvadai faliya       | Silvasa    | 06/07/2018                  |
|                            | Naroli, Kumbharvadi faliya        | Silvasa    | 26/07/2018                  |
|                            | Naroli                            | Silvasa    | 04/07/2018                  |
|                            | Naroli, nava faliya               | Silvasa    | 10/07/2018                  |
|                            | Naroli village Patel faliya       | Silvasa    | 18/07/2018                  |
|                            | Naroli village Tekri faliya       | Silvasa    | 19/07/2018                  |
|                            | Naroli village Nava faliya faliya | Silvasa    | 21/07/2018                  |



| Consultations in July 2018 |                            |         |                             |
|----------------------------|----------------------------|---------|-----------------------------|
| District                   | Village                    | Taluka  | Date of recent Consultation |
|                            | Naroli village Nava faliya | Silvasa | 24/07/2018                  |

| Consultations in June 2018 |                |           |  |
|----------------------------|----------------|-----------|--|
| District                   | Village        | Taluka    | Date of recent Consultation            |
| Surat                      | Anroli         | Palsana   | 15/06/2018                             |
|                            | Niyoli         | Palsana   | 15/06/2018                             |
|                            | Vankaneda      | Palsana   | 15/06/2018                             |
|                            | Mohni          | Chorasi   | 15/06/2018                             |
|                            | Timbarva       | Chorasi   | 15/06/2018                             |
|                            | Boland         | Chorasi   | 15/06/2018                             |
|                            | Bhatia         | Chorasi   | 15/06/2018                             |
| Palghar                    | Kamare         | Palghar   | 11/06/2018<br>16/06/2018<br>18/06/2018 |
|                            | Kelwas road    | Palghar   | 15/06/2018                             |
|                            | Vewer,         | Palghar   | 20/6/2018                              |
|                            | Kopri,         | Palghar   | 20/6/2018                              |
|                            | Mann Bategoan, | Palghar   | 20/6/2018                              |
|                            | More,          | Palghar   | 20/6/2018                              |
|                            | Nagle,         | Palghar   | 20/6/2018                              |
|                            | Ponal          | Palghar   | 20/6/2018                              |
|                            | Rambaag,       | Palghar   | 19/06/2018                             |
|                            | Navli          | Palghar   | 19/06/2018                             |
|                            | Morivali       | Palghar   | 19/06/2018                             |
|                            | Rambaag,       | Palghar   | 19/06/2018                             |
|                            | Sakhare,       | Palghar   | 20/6/2018                              |
|                            | Shilte         | Palghar   | 20/6/2018                              |
|                            | Shirgaon,      | Palghar   | 20/6/2018                              |
|                            | Tembhikhodave, | Palghar   | 20/6/2018                              |
|                            | Tiwari,        | Palghar   | 20/6/2018                              |
|                            | Upalat         | Palghar   | 20/6/2018                              |
|                            | Walwe          | Palghar   | 20/6/2018                              |
|                            | Warwada        | Palghar   | 20/6/2018                              |
| Rothe                      | Palghar        | 21/6/2018 |  |
| Thane                      | Betwade        | Thane     | 15/06/2018                             |
|                            | Malodi         | Bhiwandi  | 15/6/2018                              |
|                            | Bharodi        | Bhiwandi  | 16/6/2018                              |
|                            | Anjur          | Bhiwandi  | 16/6/2018                              |
|                            | Anjur          | Bhiwandi  | 21/6/2018                              |

| Consultations in May 2018 |                     |           |                             |
|---------------------------|---------------------|-----------|-----------------------------|
| District                  | Village             | Taluka    | Date of recent Consultation |
| Bhiwandi                  | Bharodi             | Bhiwandi  | 18/5/2018                   |
|                           | Dive Anjur          | Bhiwandi  | 7/5/2018                    |
|                           | Koper               | Bhiwandi  | 04/05/2018                  |
|                           | Kewani              | Bhiwandi  | 04/05/2018                  |
|                           | Vehale              | Bhiwandi  | 18/05/2018                  |
| Palghar                   | Vasai               | Nagale    | 07/05/2018                  |
|                           | Palghar             | Khanivade | 05/05/2018                  |
|                           | Palghar             | Betegaon  | 05/05/2018                  |
|                           | Palghar             | Kalayale  | 26/05/2018                  |
| Bharuch                   | Umarwada            | Anklesvar | 07/05/2018                  |
|                           | Dahegam             | Bharuch   | 24/05/2018                  |
|                           | Derol               | Bharuch   | 23/05/2018                  |
|                           | Tralsi              | Bharuch   | 23/05/2018                  |
| Anand                     | Chikhodra           | Anand     | 17/05/2018                  |
|                           | Boriavi (m)         | Anand     | 22/05/2018                  |
| Ahmedabad                 | Barejdi             | Daskroi   | 24/05/2018                  |
|                           | Geratpur            | Daskroi   | 07/05/2018                  |
|                           | Ropda               | Daskroi   | 08/05/2018                  |
|                           | Vatva               | Vatva     | 04/05/2018                  |
|                           | Godasar             | Maninagar | 14/05/2018                  |
|                           | Shaher kotda        | Maninagar | 09/05/2018                  |
|                           | Asarva              | Asarva    | 09/05/2018                  |
|                           | Dariyapur (kajipur) | Asarva    | 22/05/2018                  |
|                           | Acher               | Sabarmati | 04/05/2018                  |
|                           | Ranip (m)           | Sabarmati | 04/05/2018                  |
|                           | Kali (m)            | Sabarmati | 04/05/2018                  |

Details of consultations including photographs, location, attendees, key points of discussion are attached as **Appendix H**.

During the consultation, the details of the compensation and other benefits to be provided to the project affected households and project affected persons were discussed. The general consensus of the project affect person on the entitlement matrix was that it is better than the entitlement proposed for various other projects in the region. The same was experienced in DNH and few other places where PAH contacted the LAO office to take immediate possession of their land and disburse the compensation.

In Palghar, along with the consultations at various level following initiatives have been taken up by NHSRCL like:

**Display of project information posters** in various villages is provided in **Appendix I**.

**Discussions over tea (Chai pe charcha)** - this programme is being undertaken by NHSRCL in the various project affected villages and has been successful in garnering support to the project at the community level

The efforts of the above initiatives have started bearing fruits and people have come up to support the project and form a broad consensus on the project. The assurance to meet the community facility demands of the PAPs through village development plans and other plans & programme of government has increased the interest of the project amongst the PAPs. Recently, some of the community leaders from these villages have agreed to discuss the project with representatives of RAP consultant & NHSRCL. This is further evident from the demand letter provided by sarpanch of various villages, where they have indicated their basic demand on infrastructure support and related support required from the project team for supporting the project in their area. Approaching landowners for their other demands have been the new strategy of the NHSRCL- which primarily include the development of village-level amenities like streetlights, drinking water, hospitals, ambulance etc. in addition to the compensation. One of India's prominent newspaper, Economic Times has also reported on 18<sup>th</sup> of June 2018 that 'Slowly the NHSRCL is turning the tide in its favour by targeting the specific demands of the villagers which are not related to their personal need but basic necessity like street light, ambulance for the community'.

#### **12.4.4 Communication Campaign**

Information dissemination has been carried out by adopting suitable means such as the distribution of printed leaflets/ information booklets covering relevant information about project aspects in the local language. The information dissemination materials have been prepared by implementation agency and modified as and when required to meet the requirement of various stakeholders. The information dissemination documents are being distributed among other stakeholders such as, head of various villages (sarpanch), opinion leader, school teacher, elected representative, and others in the village/ ward who could be contacted by PAPs for clarification.

Further, NHSRCL has also deployed communicators for micro level communication for covering each village for establishing one to one contact with PAH/PAPs, information dissemination, providing assistance at all levels. That resulted in significant improvement of consent obtaining and reduce the grievance at it lowest level. As on August' 2021 in total 958 Communication campaign have been conducted by NHSRCL and participating District Administration for information dissemination, providing all possible assistance to the concern and explaining the process of Consent Agreement in Gujarat and Sale Deed Signing (Direct Purchase) in Maharashtra.

#### **12.5 Conclusion & Way forward**

Land acquisition and RAP implementation for the Project will be done as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR, 2013), and relevant state laws and government notifications. It will be guided by Japan International Cooperation Agency (JICA) guidelines for Environmental and Social Considerations, April 2010, entitlement matrix developed for the project and other details provided in the RAP report.

An Indigenous People Plan and Village Development Plan addressing the needs of the community has been prepared under the project for the villages with the substantial tribal population to improve the basic facilities and create assets for them. For other Schedule V areas,

NHSRCL will coordinate with the tribal development officers of the district and state authorities to include the eligible project affected people as part of various tribal development programmes and ensure that they are benefitted from that.

For PAHs whose structures will be impacted by the project may need relocation will be rehabilitation and the cost for the site and facility development will be borne by NHSRCL. These displaced families will be compensated at replacement value. Income restoration plan has been developed for the project and is not limited to payment of compensation, R&R assistance etc; but also includes skill development training enhancement for income restoration and development of livelihood restoration and income generation opportunities for the project affected persons.

Due care has been taken and will be taken during implementation to avoid or minimize land acquisition and involuntary resettlement impacts by exploring all viable alternatives and to ensure adequate rehabilitation package and expeditious implementation of rehabilitation process with the active participation of affected families.

## **RAP Revised – August-21**

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A decorative graphic at the bottom of the page consisting of a horizontal orange line and two diagonal orange lines that intersect it, creating a stylized 'V' or 'X' shape.