

CHAPTER 1

INTRODUCTION

	<i>Social Impact Assessment Report – Vadhvan Port</i>
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1.0 Introduction

1.1 Project Background

India has an approximately 5,423 km long peninsular coastline and is located close to major shipping routes linking East Asia, Europe and the Middle East. India therefore has the potential to significantly grow its maritime trade with other countries and as its economy grows, necessity of developing ports for international trade will also grow. Presently, there are 12 Major Ports and 187 Non-Major ports in India.

The Major Ports are all Government owned and handled around 54% of India's maritime trade in 2019-20. The cumulative traffic handled by Indian Ports in 2019-20 were about 1,310 MT of which Major Ports contributed 704.9 MT and Non-Major Ports (minor and intermediate ports) handled 604.8 MT. Major Ports are ports developed by act of Parliament with Ministry of Ports, Shipping & Waterways, Government of India ownership. Non-major ports include ports owned by State Government, Private Ports, Captive Ports setup for specific cargo by large industries, etc. Though there are 187 non-major ports, the number of functional ports with more than 2 MT of annual traffic are 26 only.

The 12 major ports carry about 54% of the total port traffic of the country. The share of non-major ports in cargo traffic has increased from 7% in 1990 to the current levels of 46%. Large cities have grown around Major ports restricting its expansion, limiting cargo evacuation to hinterland. There exist inefficiencies at major ports. The non-major ports (especially private ports) are developed away from cities with modern infrastructure. The operational efficiencies of these non-major ports have gradually taken away incremental cargo of Major ports and with development of minor ports by the respective states. The Government of India initiated the ambitious SAGARMALA project which aimed at capacity enhancement of all major ports by means of increasing the productivity and efficiency through mechanization of berths, stackyard and effective evacuation of cargo. Development of Vadhvan Port as satellite port of Jawaharlal Nehru Port Authority (JNPA) is one such initiative of Government of India. This would facilitate larger contribution of Major Ports in sea borne trade of India.

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Maharashtra with a coastline of 720 km stretching along the Arabian sea has two major ports. Mumbai and JNPA which cater to the hinterland of Maharashtra, North Karnataka, Telangana, Gujarat and secondary hinterland of NCR, Punjab, Rajasthan, and Uttar Pradesh. JNPA was developed as a satellite port of Mumbai port and has coped well in becoming the largest container port of the country. The development of Phase 2 of 4th container terminal is underway and after its full development there is little space for further expansion. Apart from that due to the presence of bed rock at or very close the existing bed level, JNPA cannot be deepened further economically to handle the future generation of mega container ships drawing draft of 16 m or more. There is a need for a deep draft port that will cater to the spill over traffic from JNPA port once its expanded capacity of 10 million TEUs is fully utilized.

With the projected demand for containers to go up, it is necessary to locate a new mega port site which can cater to increased requirement of capacity and could be developed to handle the future deep draft ships. Considering the above it has been decided to develop Vadhvan port as a satellite port for JNPA and for this purpose the present report has been prepared to assess its technical suitability and cost economics.

1.2 Proposal

Vadhvan Port is planned to be developed by JNPA (Jawaharlal Nehru Port Authority) and MMB (Maharashtra Maritime Board) as Joint Venture Project with equity share of 74% & 26% respectively. The port will be developed in two phases. The proposed port is to be developed on landlord model with the port terminals to be developed on PPP basis. In this model, basic infrastructure of the port necessitating upfront investment such as, breakwater, rail and road linkages, power, water lines and common infrastructure and services will be developed by the port/ SPV whereas all cargo handling infrastructure will be developed and operated by the agencies which are awarded concessions through global tender in an open and transparent manner by the port. On 19th February, 2020, Central Government has declared as Vadhawan Port as Major port and geographical co-ordinates of its limits are presented in **Table 1.1**. Project Location of the proposed Vadhvan Port is shown in **Figure 1.1**.

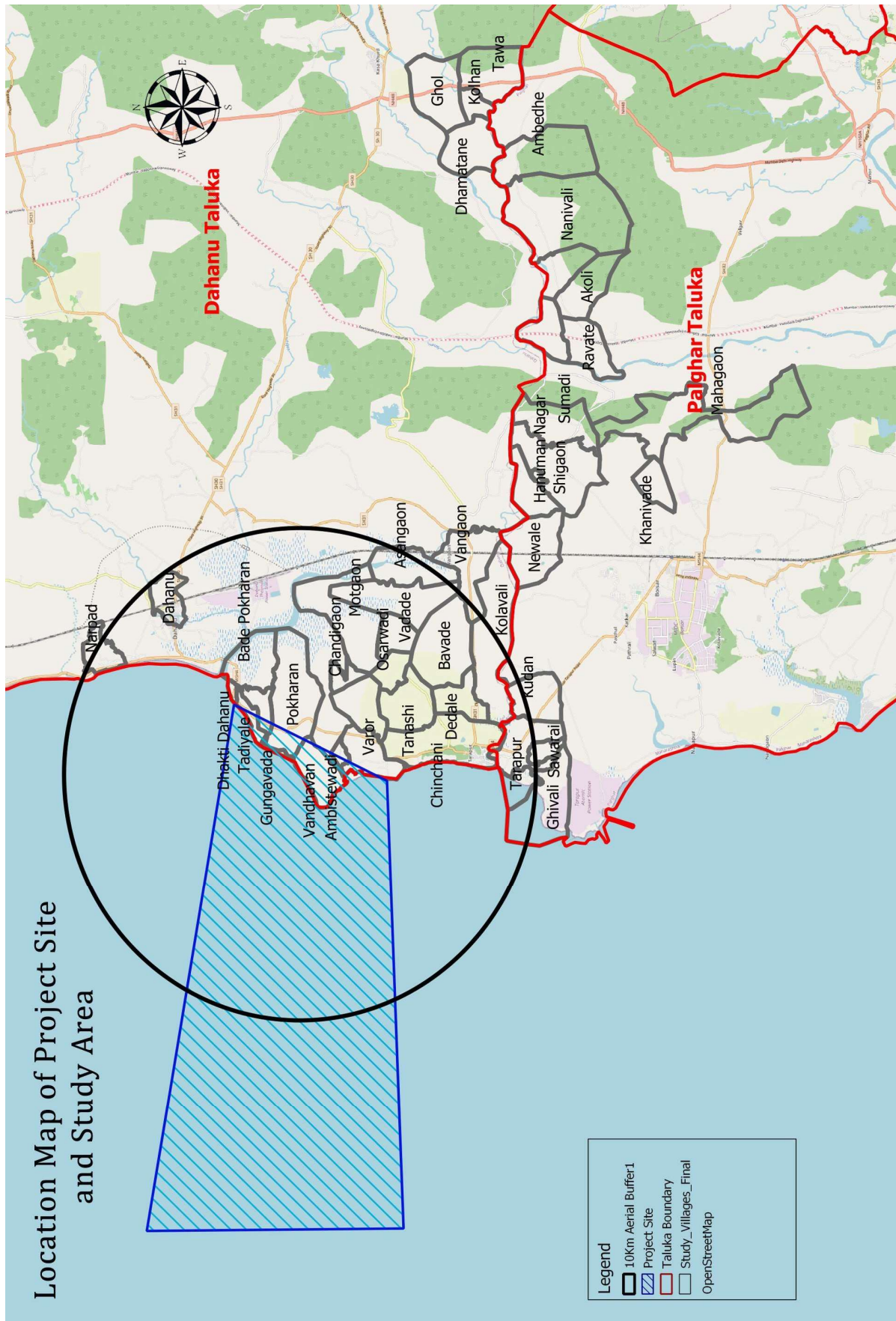


Figure 1.1
Project Location

**Table 1.1
Co-ordinates of Proposed Vadhvan Port**

S. N.	Details	Particulars
1	Point A (on the Coast)	Latitude 19 ⁰ 54' 26'' N and Longitude 72 ⁰ 40' 34'' E along the coast northwards to
2	Point B (on the Coast)	Latitude 19 ⁰ 57' 59'' N and Longitude 72 ⁰ 42' 18'' E including banks of and shores up to highwater marks and creeks within the line as far as navigable and into the sea westwards to
3	Point C (in Territorial waters)	Latitude 20 ⁰ 0' 0'' N and Longitude 72 ⁰ 30' 0'' E then southwards to
4	Point D (in Territorial waters)	Latitude 19 ⁰ 54' 5'' N and Longitude 72 ⁰ 30' 0'' E and back to coordinate (A) on the coast

Development of port is consisting of following components:

Inside Port

- Breakwater of total length 10.14 km.
- Dredging 6.98 M cum in Phase I & 21.5 M cum in Phase 2.
- Port craft/ Tug berth of 200 m (1 berth with berthing face of 100 m on each side)
- Total Reclamation area inside the port 1448 ha. with 1162 ha. In Phase 1.
- Road inside the port 32 km
- DFC rail yard 227.5 ha.
- Buildings with area of 23,500 m².
- Pavement inside port.

Outside of Port Area

- Land acquisition 571 ha. (For road & rail connectivity)
- External road connectivity of 33.4 km, 120 m wide corridor.
- Rail linkage area length 12 km, 60 m wide corridor

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- Water pipeline from Suriya river which is about 22 km from port site.
- Power line from PGCIL line/ Tarapur Boisar power station 20 km from port

Concessionaire (Operator)

- Container terminals including yard storage, equipment, internal terminal pavements, drainage, utilities networks etc., with berth length of 9000 m (4 terminals in Phase – 1 & 5 terminals in Phase 2 each of 1000 m length) capable of handling vessels of 24,000 TEU and above with 24,000 TEU design container vessels.
- Multipurpose berths of 1000 m (4 berths each of 250 m) including equipment, storage yard/ shed.
- 1 Ro, Ro berth of 250 m including storage and onshore facilities.
- 4 Liquid cargo terminals including pipeline and tank farm.

The port is designed primarily to cater container business. Other berths are being developed to utilize the waterfront facility given the Greenfield development.

1.3 Need and Advantage of Port

Existing ports have strong customer base, infrastructure, connectivity and logistics services along with long years of experiences. However, over the period of time, some of the ports have reached their capacity and due to expansion constraint, the congestion at port has caused serious concern especially ports like JNPA and MbPA. Competitors are facing following 5 major restrictions for capacity expansion.

- Unavailability of waterfront to create new Jetties/Terminals (JNPA, AHPPL-partially)
- Located further away from the route considered unproductive for shipping lines to divert (Kandla, Dahej)
- Heavy siltation/tidal issues rendering expansion of infrastructure extremely high (Hazira, Dahej) Legal & Regulatory issues embedded in the 30 years' concession agreement restricting expansion of private ports till the time they are sure of extension of Concession Agreement (Mundra and Pipavav)
- Limited availability of waterfront suitable for construction of Container port on the Coast of Maharashtra and Gujarat (discussed in detail in section Need for

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Vadhvan).

Because of capacity constraints the cargo of these ports is routed to other ports available in immediate hinterland.

- Vadhvan is nearest to MbPA and JNPA as compared to ports of Gujarat. Vadhvan have huge advantage due to its proximity to JNPA and MbPA making it easier to attract spill over traffic.
- Vadhvan would have competitive edge over these major ports also due to the ability to berth large ships and closeness to northern hinterland.
- The logistics cost savings due to infrastructure and connectivity advantage to Vadhvan is likely to provide higher traffic gains for Vadhvan compared to competitors.
- Vadhvan would be able to attract incremental increase in traffic over the years is then distributed as per the facilities and capacity constraints at different ports.

Vadhvan having the highest potential with modern facilities, deep draft and no capacity constraints in the initial years is expected to gain a larger share in the traffic. Also, there is no other container port planned in near future in the hinterland by respective state government. Possibility of any new port in competitive location is very limited. It has been assumed that Vadhvan will be the new large container port in Maharashtra catering to NCR region.

1.4 Size of the Project

The proposed port is designed operate 23.9 million TEUs capacity. The project cost is Rs. 76,220 Crores. The total area of the project is 17471 Ha out of which 16900 has been declared as Port limit and 571 Ha outside the port limit. In addition to above an area of 1000 ha has been earmarked for road and rail enable services and port related infrastructure.

1.5 Land Requirement

Details of land requirement to develop greenfield port and related infrastructural facilities along with current land use pattern are presented in **Table 1.2**

**Table 1.2
Land Requirement and Land Use Pattern**

Sr. No.	Particular	Land Use Pattern (Ha.)					Total
		Sea Area	Private Land	Adivasi Land	Govt Land	Forest Land	
1	Port area (Within A, B, C & D Co-ordinate Points)	16869.85	-	-	-	-	16869.85
2	Water Zone	15216.00	-	-	-	-	15216.00
3	Intertidal Zone	337.53	-	-	-	-	337.53
4	Reclamation	1448.00	-	-	-	-	1448.00
5	Road Connectivity	-	192.55	120.80	23.45	98.32	435.11
6	Rail Connectivity	-	95.08	19.81	6.55	8.38	129.83
	Total	33871.38	287.63	140.60	30.01	106.70	

1.6 Water and Power Requirement

Water Requirement

Daily water demand for the Phase 1 development is estimated to be around 6.8 MLD (million litres per day) and for the master plan phase, the anticipated demand is at 13.3 MLD. Out of this the potable water demand for port usage is 1.8 MLD in Phase 1 and 2.8 MLD in master plan phase, with the balance being the demand for raw water and supply to port township. A static storage of raw water of 1-day storage is provided for the port while half a day storage is provided for the township.

The water source identified for the port operations is Surya River about 22 km (approx.)

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away from the proposed Vadhvan Port. Maharashtra Jeevan Pradhikaran (Government of Maharashtra) will be facilitating the required water supply to Vadhvan Port.

Power Requirement

The required electrical system for the project will consist of:

- The incoming electrical supply at 80 MVA level.
- 220/33 kV substations containing transformers, switchboards, control equipment, etc. to supply the electrical power to various parts of the site at the required voltage levels of 11kV or 6.6 kV & 0.415 kV.
- Control and Monitoring systems.

Two locations of the nearest 220 kV source from PGCIL line and Tarapur Power Boisar Power line are identified to be provided by MSETCL. The PGCIL line and Tarapur Power Boisar Power line located at 20 km (approx.) away from Vadhvan site by overhead 220 KVA HT Line to Vadhvan port site.

1.7 Objectives and Scope of Social Impact Assessment

- To qualify the rationale for identification of potentially impacted villages
- To provide representation of the social, cultural and economic conditions of the population along Vadhvan Port AoI and RoW bases on data available in public domain (secondary data) and as provided by RH-DHV/JNPA data
- To develop attainable mitigation measures to enhance positive impacts and reduce or avoid negative impacts
- Preparation of community Development plan and implementation

1.8 Tools and Techniques of the Data Collection

➤ Primary Data Collection:

This includes collating information from various sources at the ground level in the Social Impact Assessment study area. The different levels at which, contacts will be made to collect information are institutional, community and individual. The tools to be used at various levels to gather information include reconnaissance survey, focus group discussion (FGD), public consultation, household surveys and village surveys. However, prior to planning and executing the surveys, a **reconnaissance survey** will help get the perception of the site and its surroundings.

➤ Reconnaissance Survey:

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It includes the first visit to the site and its surrounding villages, with an unbiased mind, so as to perceive things with an open-mind, and note down the major observations in the field diary. This includes talking to the common people, observing the major physical linkages, identifying the first appearing socio-cultural features, and other aspects such as dominant means of livelihood, major crops in the field, etc. which are observed/perceived. This would be followed by the secondary data analysis and then the primary survey.

Household Surveys:

Household surveys will be conducted to understand their current socio-economic scenario, to generate suitable data and information to create a comprehensive socio-economic baseline, and anticipate the impacts of the project. The distinct target groups which may be identified (emphasized):(1) all households who had sold land to the Project Proponent if any, (2) all households who will experience R&R, (3) all households whose main source of income is fishing.

Addressing the primary data collection of different target groups will include the identification of the villages falling under the immediate zone of influence and the buffer zone. These zones will be a result of the delineation of the study area.

Furthermore, the accuracy of the qualitative and quantitative information collected from the primary data will depend on the sampling method and sampling size, which is discussed ahead.

Sampling:

This includes two things, a) sampling size (to be decided before the surveys), and b) sampling method (to be used at the time of beginning the survey).

Sampling Size:

This very much depends on the location of the villages across the three categories identified. As per the radius decided, the villages falling within will be surveyed. However, the sampling size will be decided based on the secondary data of population and demography of the villages (As per Census 2011). Very specifically, it means those villages which have a smaller number of total HHs, and the percentage decided to calculate sample size leads to extremely a smaller number of HHs to be surveyed, in that case, a minimum number of HHs to be decided. This is to avoid interpretation from a very micro-sized sample, and avoiding chances of getting inaccurate data. The sampling size to be decided based on calculations

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for the total villages to be surveyed.

Sampling Method:

The preferred method for such socio-economic survey is the ‘**Random stratified**’ sampling to minimize chances of missing out any crucial information. However, to get understanding of all the three zones, a village survey (A separate questionnaire) will be conducted for all the three zones.

Village Survey:

This includes a questionnaire which will take all the necessary information relevant to the village, its institutions, village profile of socio-economic characteristics, history, culture, etc. Thus, a separate questionnaire will help to collect that information which will not be available at household level.

Public/ Community Level Consultation:

Consultations will hold to understand the villagers’ knowledge of the project, their apprehensions and perceived benefits. Consultations will be held with the officials of District/Taluka/Gram Panchayat, Nagar Palika, District Rural Development Authority, Local NGOs, Co-operative Organizations and other directly and indirectly affected population.

Focus Group Discussions (FGDs):

The objective of FGDs is to understand the status of the identified target groups and their perception about the project. FGDs are another way of perceiving the opinions, issues and expectations of the target groups. This will help in giving a qualitative perspective to the quantitative data and analysis.

➤ **Secondary Data Collection:**

This includes the data collection from various departments and other published data and literature to get the details of the district, taluka and villages for an overall understanding of the region. Some of the departments visited for relevant data are the District Panchayat, Taluka Panchayat, Gram Panchayat of the villages of the study area, Block Research Centre (BRC) for educational status, and Community Health Centre (CHC) for details of health status and amenities.

CHAPTER 2

DEMOGRAPHY AND SOCIO - ECONOMICS

2.1 Demography and Socio-Economics

The growth of infrastructure developments for mining and industrial sectors in and around the agriculture dominant areas, villages and towns is bound to create its impact on the socio-economic aspects of the local population of the area experiencing development. The impacts may be positive or negative depending upon the developmental activity. To assess the anticipated impacts of the infrastructural industrial growth on the socio-economic aspects of people, it is necessary to study the existing socio-economic status of the local population, which will be helpful for making efforts to further improve the quality of life in the area under study. For assessing the prevailing socio-economic aspects of people in the study area around the port project, the required data has been collected from primary and various secondary sources and analyzed.

2.2 Scope of the Study

As a consequence of developing Vadhvan Port would acquire a 17471 ha. of land which includes waterfront, intertidal zone, private governmental waste and forest land. This would have serious implications on the lives of the people, as they will be losing their land, means of livelihood. It will be of prime importance to acquire a sound database of the families who will be affected by the proposed project.

- To prepare a demographic profile of the project affected villages
- To assess the socio- economic status of the people and nature of displacement to be caused by the proposed project and rail and road alignment route
- To assess quality of life of the people falling under study area rail and road alignment route
- To assess the prospects and consequences of the project on social and economic lives of the people who would be alienated from their agricultural land
- Assessing the socio-economic growth profile and growth potentials in the surrounding areas of the project
- To understand the mood, perception and extent of preparedness of the people towards the establishment of the project

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- To prepare the preliminary suggestions and rehabilitation plan of the project affected people.

For such projects, the benefits of undertaking a systematic Social Impact Assessment (SIA) can include:

- Reduced impact on communities or individuals – identification of mitigation measures is an integral element of SIA;
- Enhanced benefits to those affected – SIA preparation also helps identify measures such as job training packages;
- Avoiding delays and obstruction – a well prepared SIA demonstrates that social impacts are taken seriously and helps to gain development approval;
- Lowered costs – addressing social impacts and mitigation measures at an early stage helps to avoid costly errors and remedial actions imposed at a later stage by regulatory agencies;
- Better community and stakeholder relationships – experience has shown that SIA can help to allay fear and concern and build a basis of trust and cooperation necessary for the proponent to successfully introduce and operate the project; and
- Improved proposals – an SIA provides information that adds value to existing projects and helps to design future ones.

2.3 Methodology Adopted for the Study

The methodology adopted for the study is based on the following:

- Review of secondary data, such as District Primary Census and Statistical Hand Books of Thane and Palghar- 2011 and the data from National Informatics Center, New Delhi, for the parameters of demography, occupational structure of people within the study area around the proposed port project area and rail and road alignment route
- Review and collection of data from District Census Hand books and District Development plans
- Conducting Focus Group discussions in the villages for eliciting the general information of the study area, to support or supplement the information collected through secondary and primary surveys.

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- Interactions with senior citizens and various stakeholders in proposed project site and surrounding area to get primary information on stakeholder’s concerns

2.4 Review of Demographic and Socio-Economic Profile - 2011

The sociological aspects of this study include human settlements, demography, social strata such as Scheduled Castes and Scheduled Tribes and literacy levels besides infrastructure facilities available in the study area. The economic aspects include occupational structure of workers. The information on socio-economic aspects of the study area has been collected from secondary sources, which mainly include District Primary Census Handbooks 2011 of Thane and Palghar districts, the latest census records available at the village level.

The proposed Vadhvan port is to develop all weather port village lands of Vadhvan, Tadiyali Varora and Gungvada of Dahanu Tehsil of Palghar District, Maharashtra. The study area within 10 Km around the periphery of the proposed port project is falling in tehils of Dahanu and Palghar. About 33 villages of Dahanu Tehsil 7 villages of Palghar Tehsil of Palghar district are covered within the study area. Most of these settlements of the study area are shown in the Study Area Map presented as **Figure 2.1**. 0-3 km, 0-7 km and 0-10 m map of the study area shown in **Figure 2.2**, **Figure 2.3** and **Figure 2.4** respectively. Villages in the 10 km Study Area (Category-wise) shown in **Figure 2.5**. Schematic Drawing of Villages of falling under Radius of 10 km shown in **Figure 2.6**. The settlement-wise demographic data as per 2011 census is presented in **Annexure I**. The salient features of the demographic and socio-economic aspects of the study area are described in the following sections.

2.5 Demographic Aspects- Port area

2.5.1.1 Distribution of Population

As per 2011 census the study area consisted of 140070 persons inhabited in 40 villages of the study area. The distribution of population in the study area is shown in **Table 2.1**. The males and females constitute to about 50.29% and 49.71% of the study area.

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**Table 2.1
Distribution of Population in Study Area – 2011**

S. N.	Particulars	0-3 km	3-7 km	7-10 km	0 – 10 km
1	No. of Households	2298	18302	11087	31687
2	Male Population	5017	40817	24620	70454
3	Female Population	5079	39978	24559	69616
4	Total Population	10096	80795	49179	140070
5	% Of Males to Total Population	49.69	50.51	50.06	50.29
6	% Of Females to Total Population	50.31	49.49	49.94	49.71
7	Average Household Size	4.40	4.41	4.44	4.42
8	Sex Ratio	987.7	1020	1002	1012

Source: District Primary Census Hand Books, Thane district, 2011

2.5.1. 2 Average Household Size

The study area had an average family size of 4.42 persons per household in 2011. This is a normal family size in India, however less in comparison with the other areas of Maharashtra. This normal family size could be attributed to a considerable degree of influence of local living conditions with migration of people with higher literacy levels who generally opt for smaller family size with family welfare measures to this study area and also due to the prevalence of single member families, a common phenomenon in geographical conditions of district.

2.5.1.3 Sex Ratio

The configuration of male and female indicates that the males constitute to about 50.29 % and females to 49.71% of the total population as per 2011 census records. The sex ratio i.e., the number of females per 1000 males indirectly reveals certain sociological aspects in relation with female births, infant mortality among female children and single person family structure, a resultant of migration of industrial workers. The study area on an average has 1012 females per 1000 males as per 2011 census. This ratio is considered to be lower in comparison with other states but more in comparison with the other parts of Maharashtra.

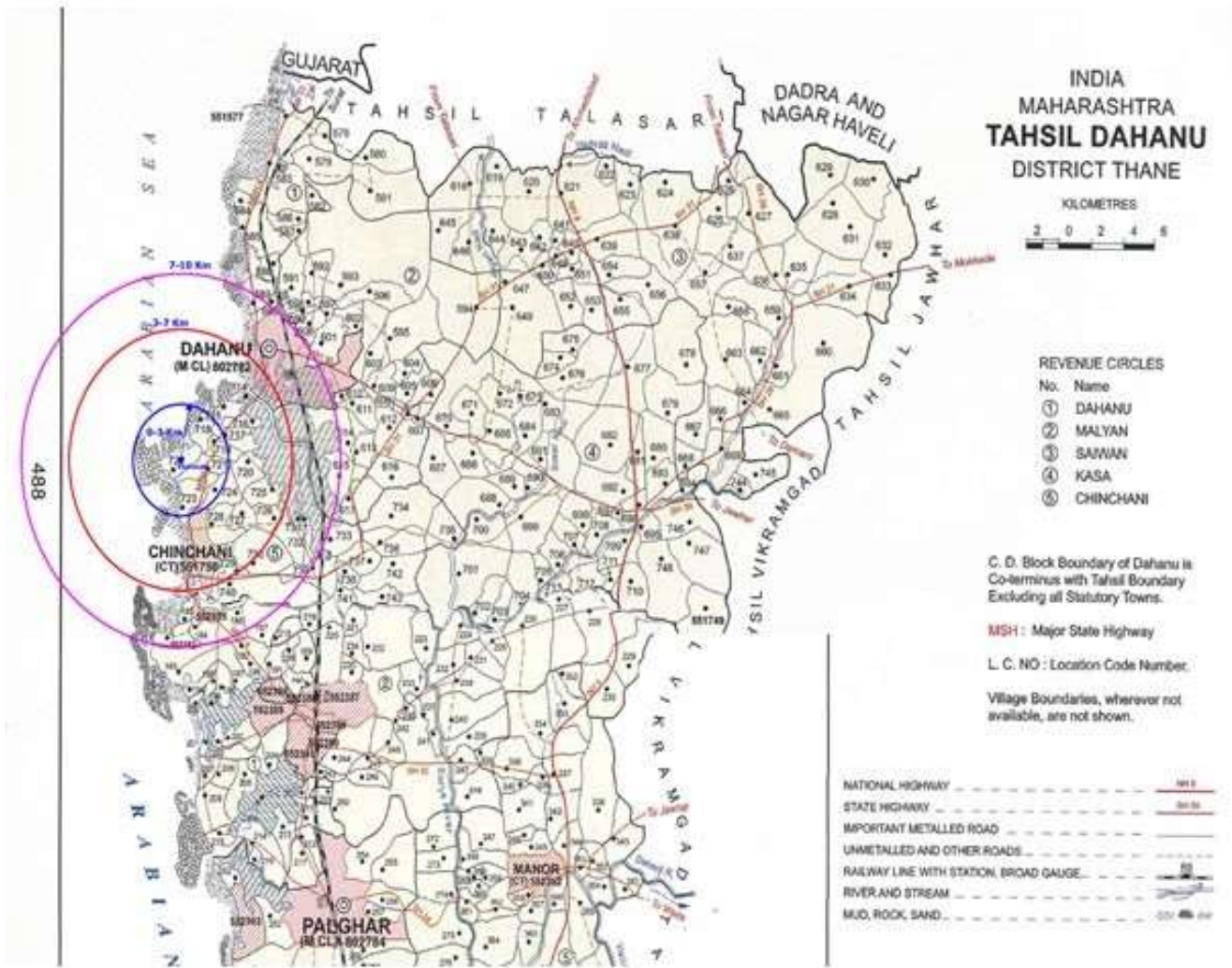


Figure 2.1
Socio-Economic Map of the Study Area

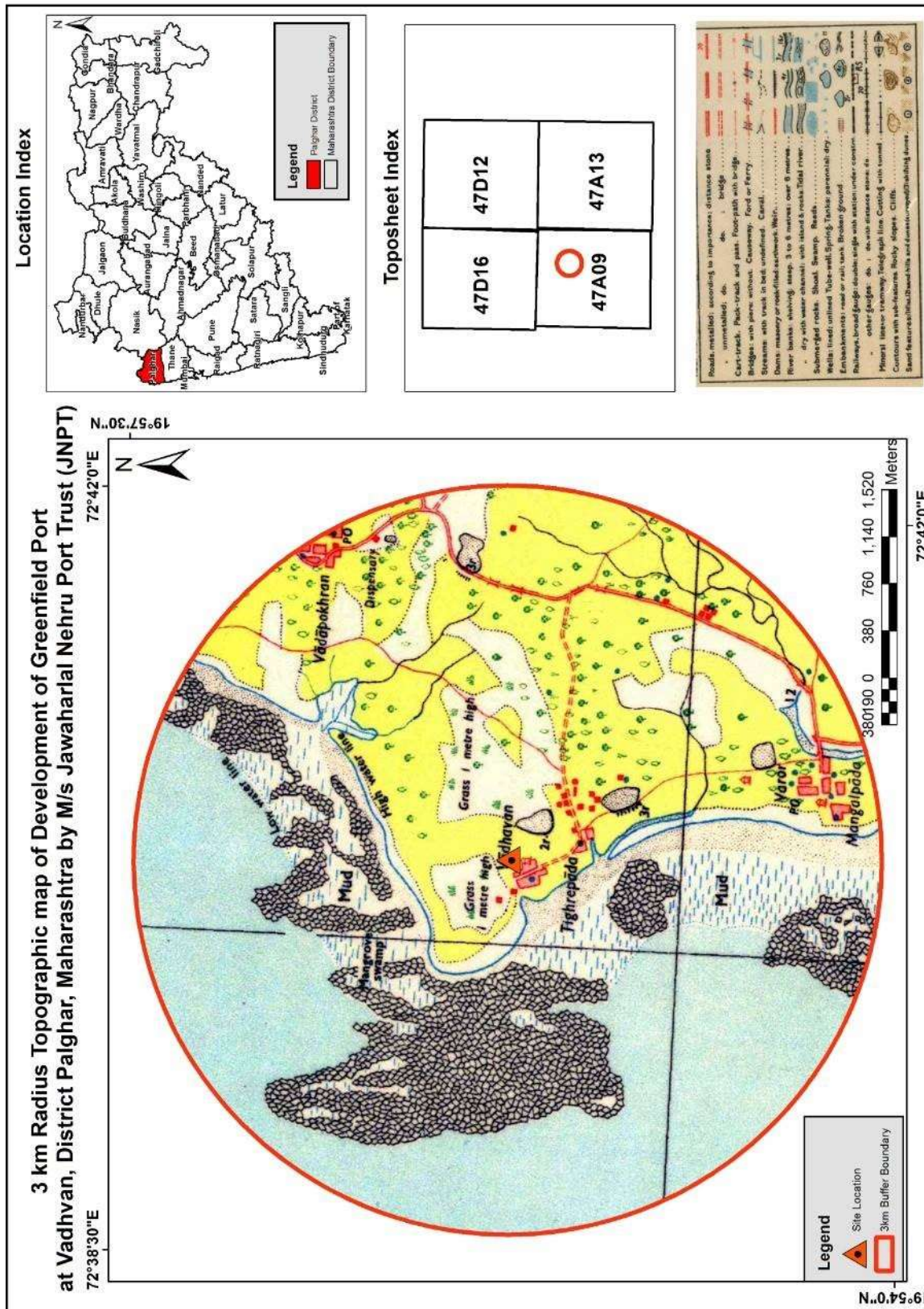


Figure 2.2
0-3 km Map of the Study Area

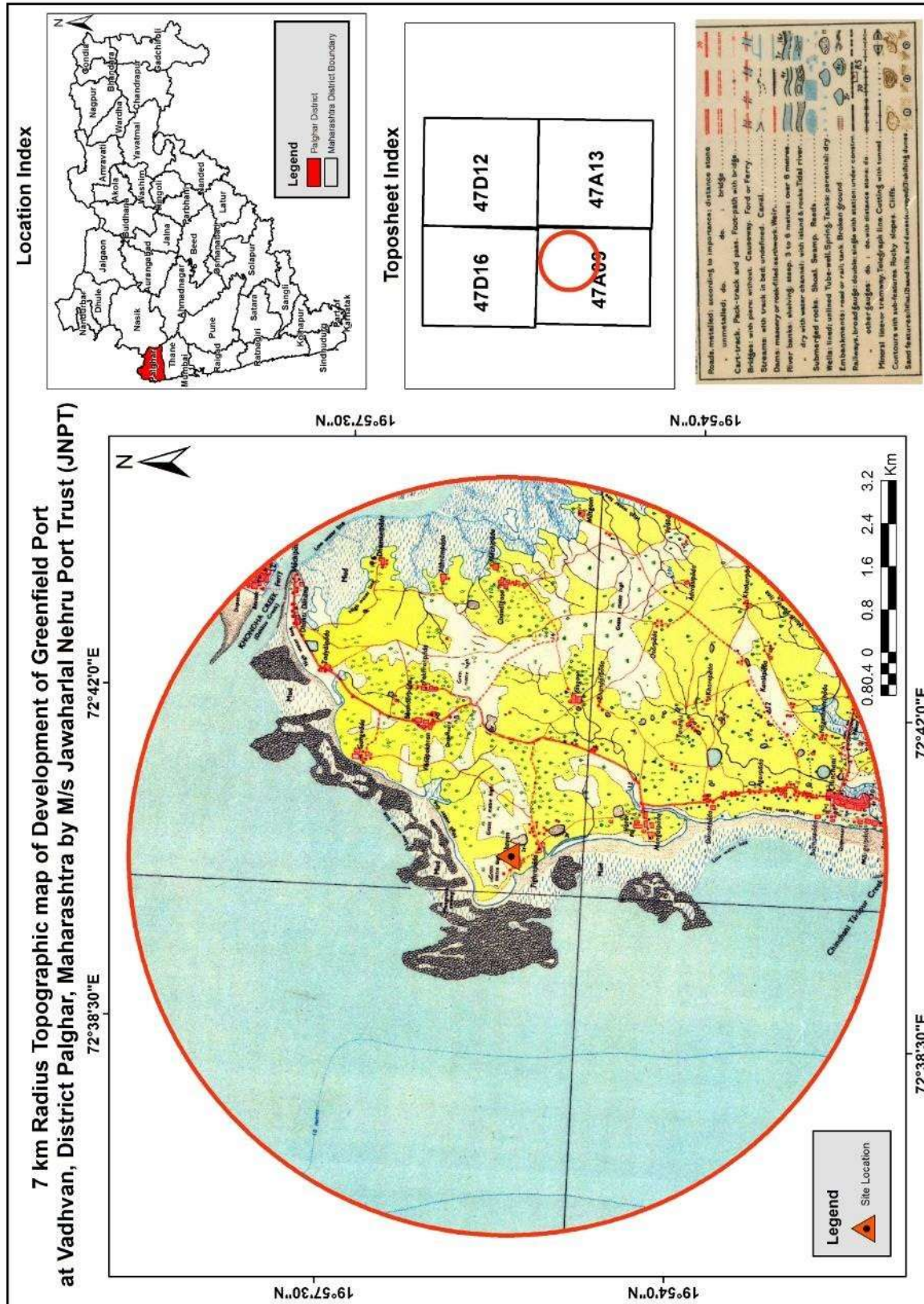


Figure 2.3
0-7 km Map of the Study Area

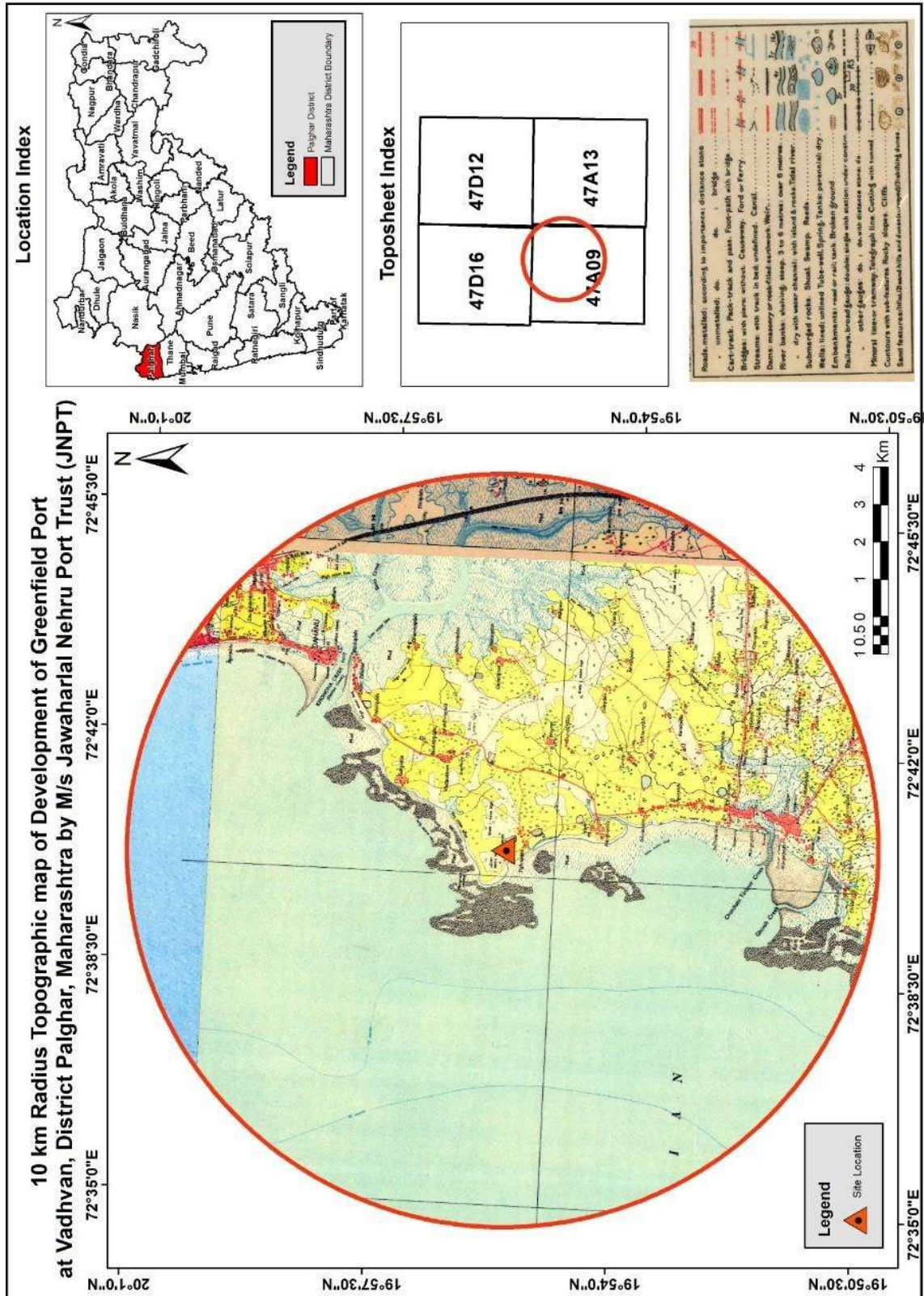


Figure 2.4
0-10 km Map of the Study Area

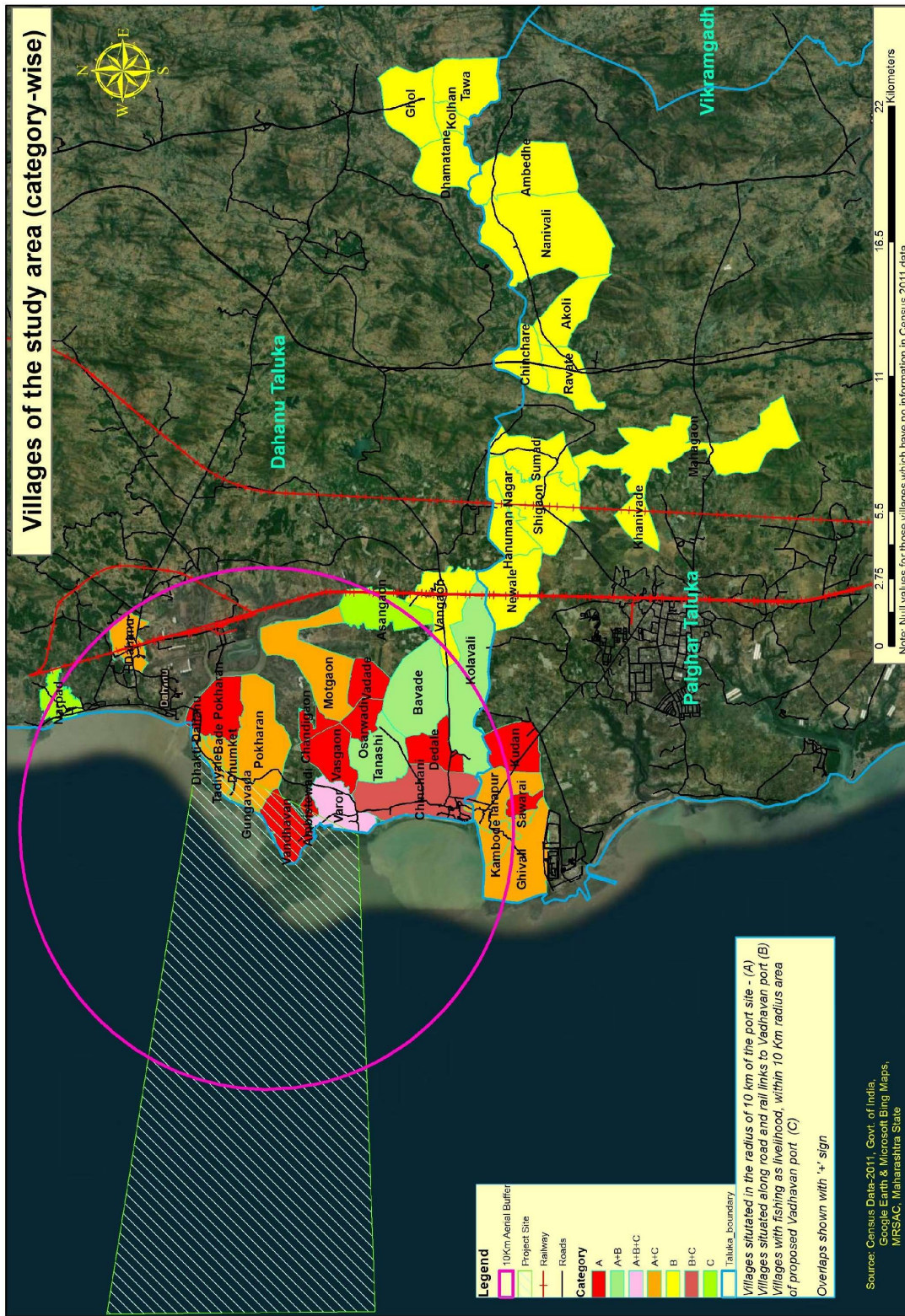


Figure 2.5
Villages in the 10 km Study Area (Category-wise)

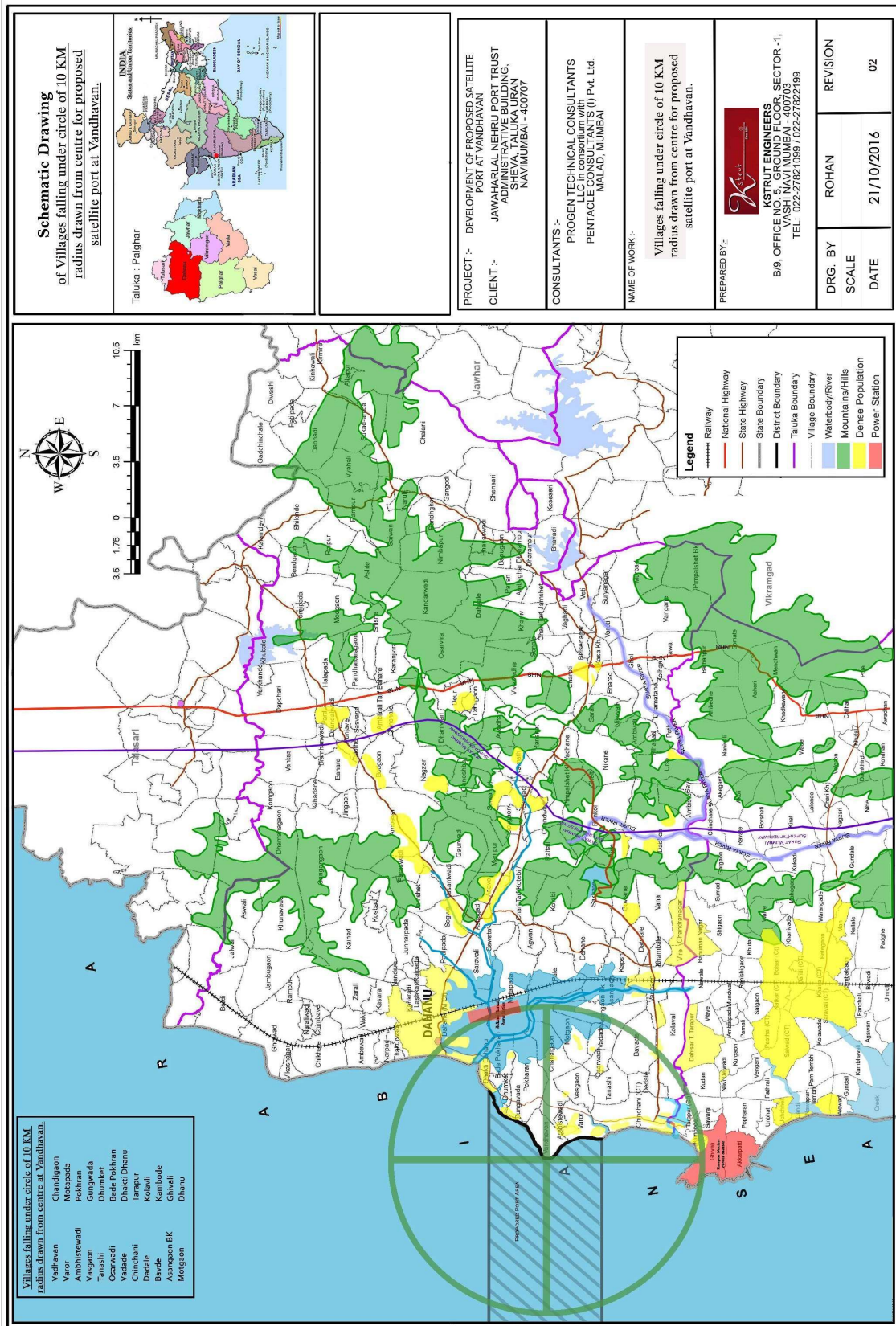


Figure 2.6
Schematic Drawing of Villages falling under Radius of 10 km

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2.5.2 Social Structure

In the study area, as per 2001 census, 3.79% of the population belonged to Scheduled Castes (SC) and 22.28% to the Scheduled Tribes (ST). This indicates that about one fourth of the population in the study area belong to weaker sections and works to about 26.07% of the total population in 2011. The distribution of population in the study area by social structure is shown in **Table 2.2**

**Table 2.2
Distribution of Population by Social Structure – 2011**

S. N.	Particulars	0-3 km	3-7 km	7-10 km	0 – 10 km
1	Scheduled Castes	285	2795	2229	5309
2	% To total population	2.82	3.46	4.53	3.79
3	Scheduled Tribes	712	15525	14963	31200
4	% To total population	7.05	19.21	30.42	22.28
5	Total SC and ST	997	18320	17192	36509
6	% To total population	9.87	22.67	34.95	26.07
7	Other castes	9099	62475	31987	103561
8	% To total population	90.13	77.33	65.05	73.93
9	Total Population	10096	80795	49179	140070

Source: District Primary Census Hand Books, Thane district, 2011

2.5.3 Literacy Levels

The analysis of the literacy levels in the study area reveals a higher literacy rate in the study area. The study area experienced a literacy rate of 74.22% in 2011. If this is computed only for the people of above the age group of 5 years, i.e., the school going age people, this may slightly increase the literacy rate. The distribution of literates and literacy rate in the study area is given in **Table 2.3**.

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**Table 2.3
Distribution of Literates and Literacy Rates – 2011**

S. N.	Particulars	0-3 km	3-7 km	7-10 km	0 – 10 km
1	Total Literates	8074	61189	34704	103967
2	Average literacy (%)	79.97	75.73	70.56	74.22
3	Male Literates	4234	32968	18862	56064
4	Male Literacy (%)	52.43	53.87	54.35	53.92
5	Total Male	5017	40817	24620	70454
6	% Male Literates to total Literates	52.43	53.87	54.35	53.92
7	Female Literates	3840	28221	15842	47903
8	Total Female	5079	39978	24559	70454
9	Female Literacy (%)	75.60	70.59	64.50	67.99
10	% Female Literates to Total Literates	47,56	46.13	45.65	46.08
11	Total Population	10096	80795	49179	140070

Source: District Primary Census Hand Books, Thane district, 2011

The male literacy i.e., the percentage of literate males to the total males of the study area works out to 53.92%. The female literacy rate, which is an important indicator for social change, is observed to be only 46.08% in the study area as per 2011 census. This indicates that there is a need for major sociological development in the region with the increase in literacy levels of both males and females.

2.5.4 Occupational Structure

The occupational structure of people in the study area is studied with reference to main workers, marginal workers and non-workers. The main workers include 10 categories of workers defined by the Census Department, which consists of cultivators, agricultural laborers, those engaged in live-stock, forestry, fishing, mining and quarrying;

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manufacturing, processing and repairs in household industry; and other than household industry, construction, trade and commerce, transport and communication and other services.

The marginal workers are those workers engaged in some work for a period of less than six months during the reference year prior to the census survey. The non-workers include those engaged in unpaid household duties, students, retired persons, dependents, beggars, vagrants etc.; institutional inmates or all other non-workers who do not fall under the above categories.

As per 2011 census records altogether the main workers work out to be 35.23% of the total population. The marginal workers and non-workers constitute to 5.96 % and 58.8.% of the total population respectively. The distribution of workers by occupation indicates that the non-workers are the predominant population. The occupational structure of the study area is shown in **Table 2.4**.

**Table 2.4
Occupational Structure – 2011**

S. N.	Occupation	0-3 km	3-7 km	7-10 km	0-10 km
1	Total Main Workers	3916	27984	17448	49348
2	Percentage to Total Population (%)	38.78	34.73	35.47	35.23
3	Main workers-Male	2777	20437	12319	35533
4	Main workers-Male % total Population	27.50	25.29	25.05	25.37
5	Main Workers- Female	1139	7547	5129	13815
6	Main workers-Female % total Population	11.28	9.34	10.42	9.86
7	Marginal Workers	425	4850	3085	8360
8	Percentage to Total Population (%)	4.20	6.00	6.27	5.96
9	Marginal Workers –Male	247	2768	1588	4603
10	Percentage to Total Population (%)	2.44	3.42	3.22	3.28

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S. N.	Occupation	0-3 km	3-7 km	7-10 km	0-10 km
11	Marginal Workers-Female	178	2082	1497	3757
12	Percentage to Total Population (%)	1.76	2.58	3.04	2.68
13	Total Non-Workers	5755	47961	28646	82362
14	Percentage to Total Population (%)	57.00	59.36	58.24	58.8
15	Non-Workers-Male	1993	17612	10713	30318
17	Percentage to Total Population (%)	19.74	21.79	21.78	21.64
18	Mon Workers-Female	3762	30349	17933	52044
19	Percentage to Total Population (%)	37.26	37.56	36.46	37.15
Total Population		10096	80795	49179	140070

Source: District Primary Census Hand Books, Thane district, 2011

2.5.4.1 Dependency Ratio

Based on the occupational structure of the study area the dependency rate of non-workers on the workers category has been estimated at 142.72%, which is considered to be low or moderate while indicating that most of the people are engaged in some sort of income generating activity.

2.5.5 Infrastructure Facilities

The infrastructure and amenities available in the study area denotes the economic well being of the region. Reasonably good levels of infrastructure facilities are available in the study area, which consists of education, health care, communications, transportation, etc.

A review of infrastructure facilities available in the area has been done based on the information given in the District Census Hand Books and the data of National Informatics Center, for the year 2011. The infrastructure facilities available in the study area are described in the subsequent sections and the village-wise available infrastructure facilities are given in **Annexure II, III and IV.**

2.5.5.1 Educational Facilities

The educational facilities are almost evenly distributed in the area. In all, there are 100 Pre-primary schools, 91 Primary schools, 63 middle schools, 22 Secondary schools and 2 Degree colleges and no technical institutes and colleges exists in study area. All the high schools are situated in larger villages. The available educational facilities in the area as per 2011 census are given in **Table 2.5**.

**Table 2.5
Educational Facilities in the Study Area**

S. N.	Institution	Total
1	Pre- Primary schools	100
2	Primary schools	91
3	Middle schools	63
4	Secondary schools	22
5	Degree colleges	2
6	ITI, Polytechnic, Medical and Engineering institutes	0

Source: District Primary Census Hand Books, Thane district, 2011

2.5.5.2 Health Facilities

Different types of health facilities including hospitals, dispensaries and clinics are available in the study area. The health facilities include 1 hospital, 8 primary health centers, 12 dispensaries and others as shown in **Table 2.6**.

**Table 2.6
Health Facilities in the Study Area**

S. N.	Type of Institution	No. of Institutions in Study Area
1	Medical facilities	
2	Community Health centers	1
3	Primary Health centers	0
4	Primary Health sub centers	11
5	Maternity and child welfare centers	2
6	TB clinic	1
7	Allopathic hospital	1
8	Dispensaries	1
9	Family welfare centers	1
10	Non-government medical facilities	28

Source: District Primary Census Hand Books, Thane district, 2011

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2.5.5.3 Transport Facilities

The study area is served by rail and road transport facilities. All villages have paved road connections. As a whole, the study area has moderate level of communication network.

2.5.5.4 Post and Telegraphs

The study area has moderate level of Post and Telegraphic services. Altogether there were 18 Sub Post Offices and 4 Post and Telegraphic Offices in the study area in 2001. All human settlements had telephone facility in them.

2.5.5.6 Electrification

Almost all villages in the study were electrified in 2011. Electricity was supplied for domestic, agricultural, industrial and public lighting purposes. Subsequently the electric connections have been given to many other villages.

2.5.5.7 Drinking Water Facility

Water supply in the study area is mainly from wells, hand pumps followed by protected water supply system. As per records, all villages are being supplied protected water supply system.

2.6 Land Use Studies

Studies on land use aspects of eco-system play an important role in identifying sensitive issues and to take appropriate action to maintain Ecological homeostasis in the region. The main objective of this section is to provide a baseline status of the study area covering 10-km radius surrounding the proposed project, so that temporal changes on the surroundings due to the project activities can be assessed in future.

2.6.1 Objectives

The objectives of land use studies are:

- To determine the present land use pattern;and
- To facilitate determination of the temporal changes in the land use pattern after the execution of the proposed project.

2.6.2 Methodology

The land use of the study area has been studied by analysing the available secondary data from the District Census handbooks, agricultural census and other available records of the region.

2.6.3 Land-Use Based on Census Data – 2011

As per the census records, the study area admeasures to about 24113.38 ha falling. The land-Use details based on census data are presented in **Table 2.7** This includes forests, cultivated area, cultivable waste and the area not available for cultivation. The village wise land use pattern in the study area is given in **Annexure V**.

**Table 2.7
Land Use Pattern of Study Area**

S. N.	Particulars of Land use	0-3 km	3-7 km	7-10 km	0-10 km
1	Forest Land	0	250.16	574.7	824.86
2	Land under Cultivation				
	a) Irrigated Land	58.52	177.37	580.79	816.78
	b) Un irrigated Land	1388.78	2986.46	8072.2	12447.44
3	Cultivable Waste Land	221.27	1109.40	1289.04	2619.71
4	Area not available for cultivation	856.26	1192.64	2204.42	4253.26
	Total Area	2524.84	5716.03	12721.15	20962.05

* All values are given in the table (Ha)

2.6.4 Forest Land

About 824.86 Ha (3.93%) of forest land is spreading over the 10-km radius study area and no forest land is present in 0-3 km radius of port project area.

2.6.5 Land Under Cultivation

Altogether 13264.22 ha cultivable land (irrigated and un- irrigated) was observed in the study area. The irrigated land admeasures to about 816.78 ha in the study area which works out to be 3.89 % of total study area. The un- irrigated land admeasures about 12447.44 ha and works out to about 58.38% of the total study area.

2.6.6 Cultivable Waste Land

Cultivable waste category of land includes the land which was cultivated sometime back and left vacant during the past 5 years in succession. These lands may either be fallows

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or covered with shrubs, which are not put to any use. The study area comprises of 2619.71 ha cultivable wastelands, which works out to about 12.49% of the total area. This percentage of land in this category indicates that almost all the cultivable lands are used for cultivation as well as various other purposes, while leaving a very less extent of land un-cultivated.

2.6.7 Land not Available for Cultivation

All the lands not included in the above categories of land uses are considered in the category of land not available for cultivation. This category of land use mainly consists of the hilly and barren lands, human settlements, roads, water-bodies, etc. About 4253.26 ha area working out to about 20.29% of the total study area falls in this category.

2. 7 Demographic Aspects- Rail and Road Alignment

2.7.1 Distribution of Population

As per 2011 census the study area consisted of 49721 persons inhabited in 21 villages along with alignment route from Port to connecting National Highway. The distribution of population in the study area is shown in **Table 2.8**. Proposed Road & Rail Alignment for Vadhvan Port shown in **Figure 2.7**. Demographic details are presented in **Annexure VI**. The males and females constitute to about 50.44 % and 49.46% of the study area.

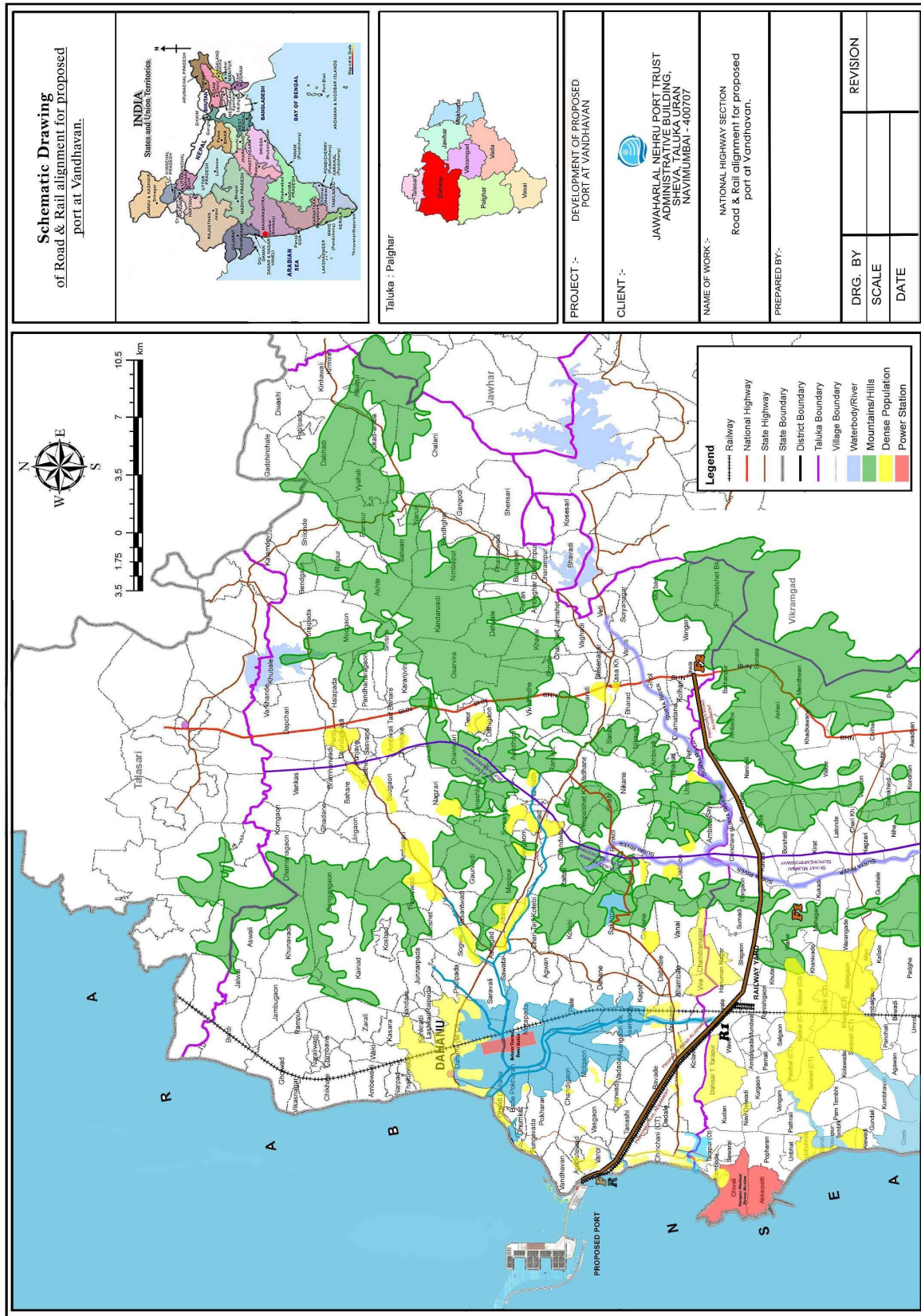


Figure 2.7
Proposed Road & Rail Alignment for Vadhvan Port

**Table 2.8
Distribution of Population in the Study Area – Census 2011**

S. N.	Particulars	Alignment Route
1	No. of Households	10641
2	Male Population	25078
3	Female Population	24643
4	Total Population	49721
5	% Of Males to Total Population	50.44
6	% Of Females to Total Population	49.56
7	Average Household Size	4.67
8	Sex Ratio	1017

Source: District Primary Census Hand Books, Thane district, 2011

2.7 2 Average Household Size

The study area had an average family size of 4.67 persons per household in 2011. This is a normal family size in India, however less in comparison with the other areas of Maharashtra. This normal family size could be attributed to a considerable degree of influence of local living conditions with migration of people with higher literacy levels who generally opt for smaller family size with family welfare measures to this study area and also due to the prevalence of single member families, a common phenomenon in geographical conditions of district.

2.7.1. 3 Sex Ratio

The configuration of male and female indicates that the males constitute to about 50.44 % and females to 49.56% of the total population as per 2011 census records. The sex ratio i.e., the number of females per 1000 males indirectly reveals certain sociological aspects in relation with female births, infant mortality among female children and single person family structure, a resultant of migration of industrial workers. The study area on an average has 1017 females per 1000 males as per 2011 census. This ratio is considered to be lower in comparison with other states but more in comparison with the other parts of Maharashtra.

2.7.2 Social Structure

In the study area, as per 2001 census, 1.36% of the population belonged to Scheduled Castes (SC) and 55.02% to the Scheduled Tribes (ST). This indicates that about more than half of the population in the study area belong to weaker sections and works to about 56.38 % of the total population in 2011. The distribution of population in the study area by social structure is shown in **Table 2.9**

**Table- 2.9
Distribution of Population by Social Structure – Census 2011**

S. N.	Particulars	Alignment Route
1	Scheduled Castes	674
2	% To total population	1.36
3	Scheduled Tribes	27360
4	% To total population	55.02
5	Total SC and ST	28034
6	% To total population	56.38
7	Other castes	21687
8	% To total population	43.62
9	Total Population	49721

Source: District Primary Census Hand Books, Thane district, 2011

2.7.3 Literacy Levels

The analysis of the literacy levels in the study area reveals a higher literacy rate in the study area. The study area experienced a literacy rate of 63.54 % in 2011. If this is computed only for the people of above the age group of 5 years, i.e., the school going age people, this may slightly increase the literacy rate. The distribution of literates and literacy rate in the study area is given in **Table 2.10**

**Table 2.10
Distribution of Literates and Literacy Rates – Census 2011**

S. N.	Particulars	Numbers
1	Total Literates	31594
2	Average literacy (%)	63.54
3	Male Literates	17519
4	Male Literacy (%)	69.85
5	Total Male	17519
6	% Male Literates to total Literates	68.85
7	Female Literates	14075
8	Total Female	24643
9	Female Literacy (%)	49.56
10	% Female Literates to Total Literates	57.11
11	Total Population	49721

Source: District Primary Census Hand Books, Thane district, 2011

The male literacy i.e., the percentage of literate males to the total males of the study area works out to 69.85%. The female literacy rate, which is an important indicator for social change, is observed to be only comparatively low in study area as per 2011 census. This indicates that there is a need for major sociological development in the region with the increase in literacy levels of both males and females.

2.7.4 Occupational Structure

The occupational structure of people in the study area is studied with reference to main workers, marginal workers and non-workers. The main workers include 10 categories of workers defined by the Census Department, which consists of cultivators, agricultural laborers, those engaged in live-stock, forestry, fishing, mining and quarrying; manufacturing, processing and repairs in household industry; and other than household industry, construction, trade and commerce, transport and communication and other services.

The marginal workers are those workers engaged in some work for a period of less than six months during the reference year prior to the census survey. The non-workers include those engaged in unpaid household duties, students, retired persons,

dependents, beggars, vagrants etc.; institutional inmates or all other non-workers who do not fall under the above categories.

As per 2011 census records altogether the main workers work out to be 35.77% of the total population. The marginal workers and non-workers constitute to 9.9% and 55.12% of the total population respectively. The distribution of workers by occupation indicates that the non-workers are the predominant population. The occupational structure of the study area is shown in **Table 2.11**.

**Table 2.11
Occupational Structure – Census 2011**

S. N.	Occupation	Numbers
1	Total Main Workers	17789
2	Percentage to Total Population (%)	35.77
3	Main workers-Male	12087
4	Main workers-Male % total Population	24.30
5	Main Workers- Female	5702
6	Main workers-Female % total Population	11.46
7	Marginal Workers	4522
8	Percentage to Total Population (%)	9.09
9	Marginal Workers –Male	2147
10	Percentage to Total Population (%)	4.31
11	Marginal Workers-Female	2375
12	Percentage to Total Population (%)	4.77
13	Total Non-Workers	27410
14	Percentage to Total Population (%)	55.12
15	Non-Workers-Male	10844
17	Percentage to Total Population (%)	21.80
18	Non-Workers-Female	16566
19	Percentage to Total Population (%)	33.31
Total Population		49721

Source: District Primary Census Hand Books, Thane district, 2011

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2.7.4.1 Dependency Ratio

Based on the occupational structure of the study area the dependency rate of non-workers on the workers category has been estimated at 118.56%, which is considered to be low or moderate while indicating that most of the people are engaged in some sort of income generating activity.

2.7.5 Infrastructure Facilities

The infrastructure and amenities available in the study area denotes the economic wellbeing of the region. Reasonably good levels of infrastructure facilities are available in the study area, which consists of education, health care, communications, transportation, etc.

A review of infrastructure facilities available in the area has been done based on the information given in the District Census Hand Books and the data of National Informatics Center, for the year 2001. The infrastructure facilities available in the study area are described in the subsequent sections and the village-wise available infrastructure facilities are given in **Annexure VII, VIII and IX**.

2.7.5.1 Educational Facilities

The educational facilities are almost evenly distributed in the area. In all, there are 22 primary schools, 3 Primary school and no other educational institutions exist in study area The available educational facilities in the area as per 2001 census are given in **Table 2.12**.

**Table 2.12
Educational Facilities in the Study Area**

S. N.	Institution	Numbers
	Educational facilities	
1	Pre-Primary schools	18
2	Primary schools	3
3	Secondary schools	0
4	Colleges	0
5	ITI, Polytechnic, Engineering and Medical college Education Centers	0

Source: District Primary Census Hand Books, Thane district, 2011

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2.7.5.2 Health Facilities

Different types of health facilities including hospitals, dispensaries and clinics are available in the study area. The health facilities include 1 community health Centre, 3 primary sub centers, 2 Maternity and Child welfare centers and 2 Veterinary Hospitals and others as shown in **Table 2.13**.

**Table 2.13
Health Facilities in the Study Area**

S. N.	Type of Institution	Numbers
1	Medical facilities	
2	Community Health centers	1
3	Primary Health centers	1
4	Primary Health sub centers	3
5	Maternity and child welfare centers	2
6	TB clinic	0
7	Allopathic hospital	0
8	Dispensaries	2
9	Family welfare centers	1
10	Non-government medical facilities	7
11	Veterinary Hospital	2

Source: District Primary Census Hand Books, Thane district, 2011

2.7.5.3 Transport Facilities

The study area is served by rail and road transport facilities. All villages have paved road connections. As a whole, the study area has moderate level of communication network.

2.7.5.4 Post and Telegraphs

The study area has moderate level of Post and Telegraphic services. Altogether there were 2 Sub Post Offices only in the study area in 2001. About 17 human settlements had telephone facility in them.

2.7.5.5 Electrification

As per records, almost all villages in the study were electrified. Electricity was supplied for domestic, agricultural, industrial and public lighting purposes. Subsequently the electric connections have been given to many other villages.

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2.7.5.6 Drinking Water Facility

Water supply in the study area is mainly from wells, hand pumps followed by protected water supply system. In 2001 about 6 villages have protected water supply system. About balance villages were served by wells and about tanks as the source of drinking water supply. All villages were facilitated with hand pumps and bore wells for water supply.

2.8 Land Use Studies

Studies on land use aspects of eco-system play an important role in identifying sensitive issues and to take appropriate action to maintain Ecological homeostasis in the region. The main objective of this section is to provide a baseline status of the study area covering 10-km radius surrounding the proposed project, so that temporal changes on the surroundings due to the project activities can be assessed in future.

2.8.1 Objectives

The objectives of land use studies are:

- To determine the present land use pattern; and
- To facilitate determination of the temporal changes in the land use pattern after the execution of the proposed project.

2.8.2 Methodology

The land use of the study area has been studied by analysing the available secondary data from the District Census handbooks, agricultural census and other available records of the region.

2.8.2.1 Land-Use Based on Census Data – 2011

As per the census records, the study area admeasures to about 16041.55 ha falling. The land-Use details based on census data are presented in **Table 2.14**. This includes forests, cultivated area, cultivable waste and the area not available for cultivation. The village wise land use pattern in the study area is given in **Annexure-X**

**Table 2.14
Land Use Pattern of Study Area**

S. N.	Particulars of Land Use	Rail Road
1	Forest Land	4598.37
2	Land under cultivation	
	a) Irrigated Land	181.22
	b) Un irrigated Land	9484.34
3	Cultivable Waste Land	466.34
4	Area not available for cultivation	1311.28
	Total Area	16041.55

* All values are given in the table (Ha)

2.8.2.2 Forest Land

4598.37 Ha of area of forest is spreading over the in rail and road alignment route villages in study area.

2.8.2.3 Land Under Cultivation

Altogether 9665.56 ha cultivable land (irrigated and un- irrigated) was observed in the study area. The irrigated land admeasures to about 181.22 ha in the study area which works out to be 1.12 % of total study area. The un- irrigated land admeasures about 9484.34 ha and works out to about 59.12 % of the total study area.

2.8.2.4 Cultivable Waste Land

Cultivable waste category of land includes the land which was cultivated sometime back and left vacant during the past 5 years in succession. These lands may either be fallows or covered with shrubs, which are not put to any use. The study area comprises of 466.34 ha cultivable wastelands, which works out to about 2.91 % of the total area. This percentage of land in this category indicates that almost all the cultivable lands are used for cultivation as well as various other purposes, while leaving a very less extent of land un-cultivated.

2.8.2.5 Land not Available for Cultivation

All the lands not included in the above categories of land uses are considered in the category of land not available for cultivation. This category of land use mainly consists of the hilly and barren lands, human settlements, roads, water-bodies, etc. About

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1311.28 ha area working out to about 8.17% of the total study area falls in this category.

2.9 Socio- Economic Survey of Project Affected Families – Primary Survey Port Area

The prime objective of the study is to make a Social Impact Assessment (SIA) of the people who will be the affected due to proposed Vadhvan Port Project. It will enable the development agency Jawaharlal Port Trust (JNPA), Maharashtra Maritime Board (MMB) as well as the government concerned to evolve suitable action plan for a systematic rehabilitation of Project Affected Families (PAFs). Presently, for achieving it, one should know the people and their assets. This section deals with diverse socio-economic and demographic characteristics of the affected people.

The responsibility of the project for rehabilitation of the Project affected Families (PAFs) will be restricted to villages as their agricultural land and fishing activity, means of livelihood is going to be acquired for setting up of proposed project.

The proposed project does not involve any Gaothan area from any of these villages. Therefore, there is no displacement due to the proposed project and issues related to resettlement do not figure in this report.

2.9.1 Methodology

The study team keeping the objectives of social impact assessment (SIA) in view has used a variety of data collection methods. The study of such nature requires a primary household survey. However, for the limited purpose of SIA study the team collected data from two sources. First household survey of the project affected people of the study area, second from local offices as well as non-official sources. The methods applied for the data collection comprise of structured questionnaire, in depth interviews and focus group discussion.

The team went in each village at different days to conduct focused group discussions (FGD) of the villagers. Each of these FGDs comprises different group of panchayat members, school teachers, leaders of informal / formal organization & village representatives. Each of the FGDs has very extensive lasting for at least 2 to 3 hours of duration. Besides, a keen personal observation of the team was a part of SIA. Moreover, secondary sources of data comprised various government department (local & district level) and project authorities.

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2.9.2 Religions & Castes

In terms of religions, the entire project area has some major religions and these are Hinduism, Christian, Parsis, Muslim and Buddha. Different caste and community living in the villages chiefly consist of Schedule Caste, Schedule Tribes, Kunabi, Mangeli, Bhandari, Vadval, Panchal, Suryavanshi Kshatriya, Vani, Machi and Maratha etc. It is observed from socio-economic survey that majority of Schedule caste and Maratha are in villages. It may be true that different caste & group may have their own close affinity with the parent caste, and creed but each village community in the area is well united as a strong entity. People interact with each other freely and have tremendous respect with each other.

2.9.3 Literacy Levels

The rate of literacy in India especially in the rural area is quite low. Literacy level of any area, sector or region is in fact an important indicator of social development of the people. The literacy levels are quite good in the villages of the study area.

2.9.4 Education Facility

It is quite noteworthy that the entire villages in the proposed project area have Anganwadi and primary school in their own village. For further education people of these villages either go to nearby village or Dahanu (13 km) where all educational facilities are available.

The proportion of students studying in various levels of education is in fact in accordance with size of population of the villages. The number of students studying in various classes of schools in the study area is proportionate to the population of village. In the existing facilities, basic requirements like drinking water facilities, school furniture, toilets, and playing tools are not available. There is no proper transportation facility for boys' students to go to other village or town for further education. This facility is available for girls' students only.

2.9.5 Land Acquisition

The proposed Vadhvan Port is going to be established in village Vadhvan. The total area acquired for the proposed project is 1947.47 Ha. Out of which 474 Ha from villages and 1473.47 form MMB (Reclamation). This area comprises of private Land, Government Land and Forest Land. Agricultural Private Land also includes irrigated land.

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2.9.6 Land Holding Size

As far as rural areas are concerned land plays a key role in the human survival. Often it is 'the' means of livelihood for a majority of the rural population. In the project area villages, the land is often in the name of head of household or the father of children of family concerned. However, the present prevalent practice in the village is that the land is further sub-divided amongst the major sons in the family. One of the prime reasons of sub-division of land among the male members of a family is that each child legally inherits land from his father. Moreover, it is also used as a device to shrink in the total land ownership record into smaller size and thus acquire the title of marginal and small farmers for eligibility to benefits of government schemes for the marginal and small farmers.

The affected villages are Varor, Chinchani, Tanashi, Bavade, Vangaon, Kolavali, Newale, Hanuman Nagar, Shigaon, Sumadi, Gargaon, Ravate, Akoli, Akhegavaon, Nanivali, Ambhedhe, Dhamatane, Kolhan, Ghol and Tawa due to road & Rail development for the transportation & Communication of Vadhvan Port. The Villages affected due to Port development are Vadhvan, Varor, Chinchani, Dhakati Dahanu & Dhumket. This is precisely due to the division of land amongst the legal heirs of the family. Land ownership, in terms of its size, is categorized as less than 2 hectares, 2 to 4 hectares, 4 to 6 hectares and more than 6 hectares of land. According to the data its ownership of the highest land acquisition is done from the village Bavade i.e., 65 Ha. and least from village Akoli i.e., 5.52 Ha.

2.9.7 Land Use and Cropping Pattern

In agriculture, crop yield (also known as "agricultural output") is not only a measure of the yield of cereal per unit area of land under cultivation, yield is also the seed generation of the plant itself.

One of the three seeds must be set aside for the next planting season, the remaining two either consumed by the grower, or one for human consumption and the other for livestock feed. The higher the surplus, the more livestock can be established and maintained, thereby increasing the physical and economic well-being of the farmer and his family. This, in turn, resulted in better stamina, better over-all health, and better, more efficient work. In addition, the more the surplus the more draft animals -- horse

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and oxen -- could be supported and harnessed to work, and manure, the soil thereby easing the farmer's burden. Increased crop yields meant few hands were needed on farm, freeing them for industry and commerce. This, in turn, led to the formation and growth of cities.

During survey, all most all affected household in all villages appear to own some agricultural land. Entire area has big impact of sea water but potable drinking water is good. People in all these villages depend on rain so they do agricultural activities in Kharif Season. Few villages in the study area use water from estuary for irrigation while very few use ground water from their wells. Nevertheless, the crops developed and cultivated in the area are Paddy, Vari, Bean-Legume and Vegetables.

2.9.8 Status of Livestock

Animals play an important role in the lives of the villagers. Practically all the households in these villages have their own agricultural lands. Therefore, the primary occupation of all these households is agriculture and allied activities. There is a very close relationship between the farmers and the animals. Animals often constitute as an asset as well as a means of livelihood. Farmers use bullocks for ploughing their agricultural field and pulling bullock carts. There are plenty of grazing lands in the area though; green fodder is available only for a small period after the monsoons. The district has unlimited potential for Dairy activity. Allied activities have also good scope, as the gigantic market of Mumbai and Thane is at the door step of the district.

2.9.9 Drinking Water Facilities

Potable Water

According to the observations of the survey team, there are very few sources of potable water in the study area. Most common source comprises of open well, panchayat tank, private hand pump and common hand pump.

2.9.10 Water Structures on Farm Side

There are various types of structures on the farm side as bore well. These structures mainly consist of farm wells, check dams and Canal Irrigation. It is apparent that the most prominent water structures in the study villages are the farm wells. Most of these wells are the lifelines of the farmers because this is one of the main irrigation facilities especially during the rabi crops in the study area.

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2.9.11 Community Facility

The availability of community facilities such as health, education, potable water, community hall, public distribution system, electricity and recreational facilities, etc. is an important indicator of the wellbeing and quality of life of the villagers.

2.9.12 Electricity

Electricity supply is essential in enhancing social and economic quality of life of the rural population. All the villages in the study area have electricity supply. As per the survey, in fact, almost all the households in villages of study area have electricity supply in their houses. Only 5 % households do not have electricity in their houses mainly because they cannot afford to pay for it. There are very few households in most of the villages which have electricity for running electric pumps at their agricultural farms.

2.9.13 Primary Health Center

In the study area there is PHC at Chanchani, Tarapur and Tawa and rural health center at Town Dahanu & Kasa which is well maintained with personnel, equipment and drugs. During the discussion with the medical practitioner at all PHCs, it was revealed that the general prevailing diseases are diarrhea, cough and common fever. He also added that water borne diseases like cholera, typhoid, and gastroenteritis are recorded in PHC and even the Covid 19 Pandemic also affect the population of the study area. Besides, people in the area are not at all aware about personal hygiene which may be due to low level of literacy among the people.

2.9.14 Sanitation

There is no congestion problem in the study area. Moreover, the availability of water for domestic use is just adequate and hence there is no question of excess use of water. Domestic waste especially consisting of cow dung is used as manure in agricultural fields. Thus, there is hardly garbage accumulation in the village creating any health hazards. People in the village do not feel to have toilet facilities in their houses. When they have an option of vast stretch of fields, they would not like to construct toilet in their houses and bear a burden of cleaning and maintaining them. That is why; some of the houses in the affected families have toilet facility. However, the village panchayats have constructed toilet facilities in some villages which are also not in use.

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2.9.15 Community Hall

A community hall in the villages may not have much meaning as it has in the urban area. Recreation, meeting, hosting marriage functions etc. are some of the functions carried out in the community hall. However, as far as rural areas are concerned, these functions can very conveniently be conducted outdoor in the open fields, under tree shadow or schools.

2.9.16 Public Distribution System (PDS)

PDS is a system by which the government tries to reach basic food items to the people below poverty line at subsidized price. All the villages in the project area have PDS in the village itself. Food items available at these PDS comprise of rice, wheat and sugar which are conveniently acquired by the beneficiaries.

2.9.17 Burial Ground

Availability of burial ground/cremation is one of the essential requirements in the village. Some villages have cremation ground at their own villages but not developed with required facilities.

2.9.18 Communication Infrastructure

Infrastructure facilities chiefly comprise of road network, State bus service, post office and telephone. These facilities are essential for the rural masses for their mobility, development and better quality of socio-economic life.

Transportation

All the villages are well connected with Tar Road, Kuccha as well as pucca road. Internal village road is not fully developed. Very few roads are constructed under Prime Minister Gram Sadak Yojana. The Mumbai- Surat Railway line passes through study area and the nearest railway station is at Dahanu.

Postal Facilities

The parent postal Centre for all the villages of the project area is available in their own village. The Urban facilities in postal services are available in Dahanu.

Telephone Services

During survey, it is observed that most of the villagers in the study area use Mobile Phone Set and people are very much aware of utilizing this facility. They said that the

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BSNL land line phone is not in use now days in their villages. Some villages have Internet facility in Gram panchayat whereas every mobile has internet connections.

2.10 Primary Data Collection - Rail and Road Alignment

2.10.1 Socio Economic Profile of Affected population

A baseline primary socio-economic profile of the project affected persons has been presented in the following sections with special reference to proposed port to National Highway connectivity and rail network system to be developed as part of port infrastructural facilities

A socio-economic survey and verification of the affected persons is critical in identifying adverse project impacts on people and assets and designing mitigation plans. It acts as baseline information and provides a cut-off point for eligibility for compensation or assistance for people lost assets and affected with other adverse impacts.

2.10.2 Survey Methodology

The primary survey is conducted for all the land owners identified through the revenue records subject to their availability and accessibility and willingness to participate in the survey. The survey has tried to capture all the socio-demographic characteristics of the land owners such as education level, occupational patter, social pattern, income levels, indebtedness and perceptions on project and other assistances. The survey questionnaire also included sections on perceptions of the affected people on resettlement and rehabilitation options and onion on resettlement preferences, employment, training and skill up gradation. The survey was conducted during July–August 2019 and revalidated in the months of October-2021.

As part of the survey a Household is considered as a unit where the affected land owners along with their family and other dependents having a separate kitchen. In some households it is observed that more than one affected land owners living together with his or her family and dependents. A total of 125 households are covered from all the rail and road alignment project villages and details are presented in **Table 2.15.**

**Table 2.15
Details of Households and Influenced Landholders**

S. N.	Name of Village	Number of House holds	Number of Influenced Land lords	Size of sample
1	Varor	678	282	282
2	Vangaon	1645	77	77
3	Tawa	289	0	0
4	Tanashi	255	93	9
5	Akegavhan	161	34	3
6	Akoli	134	15	2
7	Ambedhe	169	31	3
8	Bhadave	164	151	15
9	Chinchare	171	0	0
10	Hanuman Nagar	327	0	0
11	Nanivali	591	40	4
12	Newale	103	229	23
13	Ravate	177	21	2
14	Shigoan	998	117	12
15	Khanivade	222	28	3
16	Sumadi	223	19	2
17	Dhamatane	285	28	3
18	Ghol	312	0	0
19	Kolavali	486	17	2
20	Kolhan	122	7	1
21	Chinchani (CT)	3129	48	5
	Total	10641	1237	125

2.10.3 Headship of Family

As per survey, the headship of family depicts that in 88.8% families have male head. The (11.20%) families have female headship due to death of their husband. This pattern depicts that the population follows patriarchal family system. Details of headship of family are presented in **Table 2.16**.

**Table 2.16
Details of Headship of Family**

S. N.	Name of village	Total	Male	Female
1	Varor	28	28	0
2	Vangaon	8	7	1
3	Tawa	0	0	0
4	Tanashi	9	8	1
5	Akegavhan	3	2	1
6	Akoli	2	1	1
7	Ambedhe	3	3	0
8	Bhadave	15	13	2
9	Chinchare	5	5	0
10	Hanuman Nagar	0	0	0
11	Nanivali	4	4	0
12	Newale	23	19	4
13	Ravate	2	2	0
14	Shigoan	12	10	2
15	Khanivade	3	3	0
16	Sumadi	2	2	0
17	Dhamatane	3	3	0
18	Ghol	0	0	0
19	Kolavali	2	1	1
20	Kolhan	1	0	1
21	Chinchani (CT)	5	5	0
	Total	125	111	14
	%	100	(88.8)	11.2

2.10.4 Age Profile

The age distribution of male and female of the total affected population surveyed is presented in **Table 2.17**. As per survey reveals that the percentage of respondent from relatively young age group is 8% while 17.60% of the respondents are in above middle age group and old age each. The highest percentage of respondents are from the middle-aged group accounting to 27.20% and that from adults age is 29.60%. The depicts nearly two third of the respondents are in adult and middle age group.

**Table 2.17
Details of Age Group**

S. N.	Age group	Number of respondents	%
1	21-30	10	8.0
2	31-40	37	29.60
3	41-50	34	27.20
4	50-61	22	17.60
5	Above 60	22	17.60

2.9.5 Religion

Religion has the profound influence on way of living and shapes of customs and culture of the community. Among the interviewed respondents all are Hindus. It is clear that majority of the respondents are Hindus and details are presented in **Table 2.18**.

**Table 2.18
Details of Religion**

S. N.	Religion	Number of Respondents	%
1	Hindu	125	100

2.10. 6 Languages

Majority of population in the study area speaks Marathi language followed by Hindi & English. Dahanu is predominantly dominant by tribal population speaks Thakari, Warli, Koli languages (16%). In general majority of people speak in Marathi, but most of these people are proficient in multiple languages and detail are presented in **Table 2.19**.

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**Table 2.19
Details of Respondents-Languages**

S. N.	Religion	Number of Respondents	%
1	Marathi	105	84.00
2	Hindi	05	4.0
3	Other tribal languages	20	16
4	English	01	0.80

2.10.7 Literacy Profile of Affected People

Literacy levels of the affected population are presented in **Table 2.20**. as per survey reveal that the study area relatively large percentage of population is literate which is lower than the Dahanu taluka. People who have obtained primary and secondary level of education combine together is of 57.60% and very few have attended/obtained higher secondary education. The overall trend of educational status reveals that majority of population does not have privilege of gaining substantial education qualification. The reason could be directed to lack of understanding among the people for need of education and to a certain extent, absence of schools/institutes and facilities in abundance near the area with Dahanu urban area.

**Table 2.20
Details of Educational Status-Respondents**

S. N.	Education	Number of respondents	%
1	Illiterate	42	33.60
2	Literates	83	67.40
3	Primary education	31	24.80
4	Secondary education	41	32.80
5	Secondary education	10	8.10
6	Others	01	0.80

2.10.8 Family Information

Family is an important institution in society. Family members are born with ties of blood, love and law to their household members. This can bind generations together into a supportive and nurturing unit which provides security, care to its members. For

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almost everyone, the family where gender expectations and aspirations are instilled, where the value systems by which they will act later on life is formed. Details of nature of interfamily relations and affections and units in studied populations are presented in **Table 2.21**

**Table 2.21
Details of Family Relationships**

S. N.	Relationship	Number of respondents	%
1	Strong	97	77.60
2	Weak	28	22.40

2.10.9 Membership in Organization

To capture the social organization in the affected villages the membership of the affected person in local organizations was asked. As per the study analysis it is reported that only 7% of the affected people have some membership in associations such as Panchayat, Cooperative society, Self-help group, youth club, religious organization or political organizations. Details are presented in **Table 2.22**. As per survey reveals that 65.60% respondents are not associated with any kind of organization, only 19.20% respondents and their family members are associated with village panchayat. Balance respondents are associated with political parties and co-operative societies and non-government committees.

**Table 2.22
Details of Association**

S. N.	Organization	Number of respondents	%
1	Village panchayat	24	19.20
2	Political party	8	6.40
3	Co-operative society	5	4.0
4	Committees (GOs)/NGOs)	6	4.80
5	Without association	82	65.60
	Total	125	100

2.10.10 Education

Education is a weapon to improve one's life. It is probably the most important tool to

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change one's life. Education for a child begins at home. It is a lifelong process that ends with death. Education certainly determines the quality of an individual's life. Education improves one's knowledge, skills and develops the personality and attitude. Most noteworthy, Education affects the chances of employment for people. A highly educated individual is probably very likely to get a good job. In this essay on importance of education, we will tell you about the value of education in life and society. As per primary survey results reveals that 46.40 of the children are going to Higher secondary schools, 36% of children are enrolled in private school (Aided by Government) while 12.00% and 5.6% are attending government and aided ashramshalas supported by ITDA (Integrated Tribal Development) exclusively meant for tribal and details are presented in **Table 2.23**.

**Table 2.23
Presence of Education Systems in Study Area**

S. N.	Organization	Number of Respondents	%
1	Higher secondary school	58	46.40
2	Government- Ashramshala	15	12.00
3	Government-Aided Ashramshala	07	5.60
4	Private school (aided by Government)	45	36.00
	Total	125	100

2.10.11 Economic Information

Economic condition is an important determinant for the standard of living and status of an individual, in the community. A good economic condition definitely has bearing on the family. Future planning, ambitions and aspirations of the family members depend upon the visibility of the family. In the study area study area has a large number of tribes still have the characteristics of under development such as poverty, low standard of living, economic and social inequalities, non-utilization of natural and human resources. The economic condition information which includes economic conditions of respondents, economic background, occupations, size and nature of possession of land holding, nature of land, migration, animals, crops, vehicles and selling of products. The occupational profile of respondents is presented in **Table 2.24**. Most of the family members are engaged in

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different types of occupations. The major occupations of the respondents are farming, fishing and dye making. Around 68% of respondents are engaged in agriculture and animal husbandry. 10.40% respondents are involved in farming and daily wages. While a less no of respondents i.e., 10.40% are shopkeepers. 5.60% of respondents are involved each in private services & artisans. The majority of the population is involved in agriculture related farming and allied occupations.

**Table 2.24
Details of Occupational Profile of Respondents**

S. N.	Name of Village	Farming & Animal Husbandry	Farming and Daily Wages	Shopkeepers Business	Dye Making Artisans	Private Services	Total
1	Varor	19	1	3	3	2	28
2	Vangaon	4	2	1	0	1	8
3	Tawa	0	0	0	0	0	0
4	Tanashi	5	1	1	1	1	9
5	Akegavhan	3	0	0	0	0	3
6	Akoli	2	0	0	0	0	2
7	Ambedhe	2	1	0	0	0	3
8	Bhadave	9	2	2	0	2	15
9	Chinchare	0	0	0	0	0	0
10	Hanuman Nagar	0	0	0	0	0	0
11	Nanivali	4	0	0	0	0	0
12	Newale	20	0	3	0	0	23
13	Ravate	1	1	0	0	0	2
14	Shigoan	6	2	2	1	1	12
15	Khanivade	2	1	0	0	0	3
16	Sumadi	2	0	0	0	0	2
17	Dhamatane	3	0	0	0	0	3
18	Ghol	0	0	0	0	0	0
19	Kolavali	1	1	0	0	0	2
20	Kolhan	1	0	0	0	0	1
21	Chinchani (CT)	1	1	1	2	0	5
	Total	85	13	13	7	7	125
	%	68.00	10.40	10.40	5.60	5.60	100

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2.10.12 Agricultural Landholding

Details of landholding of respondents in study area are presented in **Table 2.25** and **Table 2.26**. As per survey report reveals that majority population has holding less than 1 Ha where as 17.60% own land parcels between 1-4 Ha. Around 10.40% of the population is landless and only 8 of respondent own land having size more than 4 Ha. It is clearly shows that half of the population have size of agricultural land less than one Ha.

**Table 2.25
Details of Land Holding-Respondents**

S. N.	Agricultural Land holding possession	Number of Respondents	%
1	Ancestral land holding	100	80.0
2	Tenancy right	2	01.60
3	Land given on rent	14	11.20
4	Land purchased	5	04.00
5	forest encroachment	4	03.20
	Total	125	100

**Table 2.26
Details of Size of Land Holding-Respondents**

S. N.	Agricultural Land holding possession	Number of Respondents	%
1	Landless	13	10.40
2	Less than 1 ha	80	64.00
3	1 Ha-4 Ha	22	17.60
4	Above 4 Ha	10	8.00
	Total	125	100

2.10.13 Land Use of Road and Rail Alignment

As per primary survey results reveals that nearly 54.40 of the respondent land is non-irrigated land whereas 36% of the population has irrigated land and 9.60% population has partial irrigated land and detail of land use pattern of respondent's land are presented in **Table 2.27**.

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**Table 2.27
Detail of Land Use Pattern- Respondents**

S. N.	Name of village	Un-Irrigated	Partial irrigated	Irrigated	Total
1	Varor	12	12	4	28
2	Vangaon	5	3	0	8
3	Tawa	0	0	0	0
4	Tanashi	4	4	1	9
5	Akegavhan	2	1	0	3
6	Akoli	1	1	0	1
7	Ambedhe	1	2	0	3
8	Bhadave	6	6	3	15
9	Chinchare	0	0	0	0
10	Hanuman Nagar	0	0	0	0
11	Nanivali	3	1	0	4
12	Newale	14	6	3	23
13	Ravate	1	1	0	2
14	Shigoan	7	5	0	12
15	Khanivade	2	1	0	3
16	Sumadi	2	0	0	2
17	Dhamatane	3	0	0	3
18	Ghol	0	0	0	0
19	Kolavali	1	1	0	2
20	Kolhan	1	0	0	1
21	Chinchani (CT)	3	1	1	5
	Total	68	45	12	125
	%	(54.40)	(36.00)	(9.60)	(100)

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2.10.14 Livestock Ownership

Details of livestock ownership of respondent are presented in **Table 2.28**. Many of them possess more than one variety of animal and chicken and goat are preferred animals by respondents compare to other animals.

**Table 2.28
Details of Livestock-Respondents**

S. N.	Live stock	Number of Respondents	%
1	Goats	21	16.80
2	Cows	23	18.40
3	Chicken	40	32.00
4	Buffaloes	17	13.60
5	Bullock	14	11.20
6	None	10	8.0
	Total	125	100

2.10.15 Agricultural Crops

Paddy is major crop in Dahanu and Palghar tehsils and while Nagali, Warai are the other cereals grown in the area. Apart from that commonly grown crop are Udid, Reg gram & Bengal gram. The mango, sapota and Banana, etc., Capsicum, turmeric, coconut and cashew are commonly grown in this region. Details of commonly grown cereal and fruits in respondents' lands are presented in **Table 2.29**.

**Table 2.29
Details of Major Crop and Horticulture**

S. N.	Live stock	Number of Respondents	%
1	Rice	99	79.20
2	Vegetables	14	11.20
3	Fruits	12	9.60
	Total	125	100

2.10.16 Income Levels of Affected Households

The analysis **Table 2.30** on the income levels of the affected households shows that out of the total 125 households a majority (51.20%) are coming under low-income category

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with annual income of up to Rs. 10,000. This due to the incidence of large number of small and marginal farmers with agriculture as main occupation. They are followed people (poor class) who earn (39.20%) between Rs. 10,000-40000 per annum. The income levels for the people who are into govt/private service and trade and business are high are above middle income of Rs. 40000-100000 (12%) per annum.

**Table 2.30
Economic Status**

S. N.	Economic status	Number of Respondents	%
1	Below poverty line	64	51.20
2	Poor class	49	39.20
3	Middle class	12	9.60
	Total	125	100

2.10.17 Selling of Agricultural Commodity

As per primary survey results reveals that the majority of population (49.60%) consumes food grains and other products produced by themselves for family needs. About 36% of the respondents are selling their production for traders, only 8% respondents selling for money lenders. Details are presented in **Table 2.31**

**Table 2.31
Details of Agricultural Produce Trading**

S. N.	Production Selling to	Number of Respondents	%
1	Money lenders	10	8.0
2	Traders	45	36.0
3	Individual customer	4	3.20
4	Tribal development corporation	4	3.20
5	Self-consumption	62	49.60
	Total	125	100

2.10.18 Domestic Asset Ownership

Details of domestic asset ownership of respondent's area presented in **Table 2.32**.

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**Table 2.32
Details of Domestic Asset Ownership-Respondents**

S. N.	Production Selling to	Number of Respondents	%
1	Bullock carts	9	7.20
2	Bicycle	27	21.60
3	Motorcycle	35	28.00
4	Tractor	7	5.60
5	Jeep and car	5	4.0

2.10.19 Housing and Other Facilities

Asset ownership is one of the indicators to assess the economic status of a family/household. Ownership of land, house and other assets and access to various amenities are taken as indicators for asset ownership. It is observed that almost all the households had their own houses.

Housing is one of the basic essentials and an important factor which influences the occupants in many ways. A good housing keeps the people healthy, physically and mentally. Although demographic and livelihood differences can be seen between households in project area villages. The housing structure of the tribals with the project area reflects dependency on natural, local resources and lack of ability to purchase external, more durable and manmade construction materials. Predominantly tribal houses have walls made from mud and buffalo or cow dung or both. These roofs are covered with tree branches and waste from farm lands. The House ownership and others of the affected households is presented in **Table 2.33**.

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Table 2.33

Details of Housing Information

S. N.	Production Selling to	Number of Respondents	%
1	Construction of House		
	Own	106	84.80
	Indira Awas Yojana	19	15.20
2	Type of Housing	125	100
	Kacha house	41	32.80
	Pakka house	84	67.20
3	Location of House	125	100
	Gavthan	79	63.20
	Own land	45	36
	Forest land	1	0.80
	Total	125	100
4	Drinking Water Facilities		
	Private well	7	5.60
	Public well	17	13.60
	Other bore wells	31	24.80
	Springlet	2	1.60
	Lake/dam	3	2.40
	Rivers	5	4.0
	Panchayat pipeline (treated)	44	35.20
	Hand pump	13	10.40
	Canal	3	2.40
	Total	1125	100
	Cooking facilities		
	Kerosene	7	5.60
	Biogas	4	3.20
	LPG	90	72.00
	Firewood etc.	24	19.20
	Total	125	100
	Electricity		
	Without electricity	29	23.20
	With electricity	96	76.80
	Total	125	100

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2.10.20 Health Information

Health is an important asset of a community and community is the base foundation of a strong nation. Health is important determinant of economic and socio development because disease creates vicious circle by depleting human energy leading to low productivity and earning capacity, deteriorating quality and quantity of consumption and standard of living

World Health Organization (WHO) defines health state of complete physical, mental and social well-being. Health is major problem among tribal. The nature of living, the environment and conditions of living are more susceptible to them for causing onset of diseases.

Sickness is major social problem and a universal one. Sickness is not only a source of immediate suffering in terms of pain, discomfort and dislocation of routine, it is also source of anxiety as it can fatal, and can lead to all the agony of bereavement by premature death, it can also chronically disable and result in poverty and hardship. Details of health facilities and prevailing diseases in study area presented in **Table 2.34**.

**Table 2.34
Details of Health Facilities and Diseases- Study Area**

S. N.	Health facilities	Number of Respondents	%
1	Health institutes		
	Sub center	6	
	Public health centers	2	
	Private dispensary	9	
	Sub –district hospital	0	
2	Usage of		
	Sub-centers	36	28.70
	Primary Health Centre	44	35.20
	Rural hospital	28	22.40
	Private dispensary	9	7.20
	Total	125	100
3	Patients		
	Help of medical practioners		

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S. N.	Health facilities	Number of Respondents	%
	Doctor	104	83.20
	Mantrik	3	2.40
	Nurse	8	6.40
	Asha worker/MPHW	10	8.0
	Total	125	100
4	Prevailing diseases		
	Diseases		
	Tuberculosis (T.B)	4	4.0
	Cancer	6	4.80
	Malaria	1	0.80
	Jaundice	5	4.0
	Scabies/skin	16	12.80
	Sickle cell	1	0.80
	Physically handicapped	4	3.20
	Malnutrition	32	25.60
	No disease	55	44.0
	Total	125	100
5	Diseases among women		
	Anemia	29	23.20
	No disease	96	76.80
	Total	125	100
6	Diseases among Children		
	Acute diarrhea	17	13.60
	Acute respiratory tract disease	20	16.00
	Malnutrition	7	5.60
	Vitamin A deficiency	43	34.40
	No disease	38	30.40
	Total	125	100

2.10.21 Public Response on Project

Project related information such as awareness, views and perception of people is presented in follow section. In addition to that, impact of proposed port project on personal, family, social, cultural and economic life of people are presented. Details of public awareness information are presented in **Table 2.35**

**Table 2.35
Public Awareness on Project Activities**

S. N.	Project Information	Number of Respondents	%
1	Yes	59	47.20
2	No	66	52.80
	Total	125	100

2.10.22 Awareness of Proposed Project

Primary survey was conducted to know the people aware of project information and details are presented in Table- 2.33. It can be seen from data that 52.80 are unaware of proposed project activities and only 47.20% respondents only said that they are aware about development of the project. It is necessary to inform them about the project in detail and benefits due to this development.

Regarding perception of people on project activities, more than two third of respondents felt that there will be disturbance in current way of living of fishermen, farmers and artisans and only less than one third feared about increase of crime in the area. More than half of them is worried about less employment opportunities, loss of land, danger to marine environment and submergence of Rama's temple at Vadhvan. Slightly more than half of people are anxious about minimal returns of poverty and loss of natural resources. While little less than half were perceived that they will be forcefully displaced to Jawahar and Mokhada tehsils. Details are presented in **Table 2.36**.

**Table 2.36
Perception of People About the Project**

S. N.	Perception of People	Number of Respondents	%
1	Displacement of many villages (loss of houses, agricultural land and community resources)	90	72.00
2	Resettlement to Jawahar and Mokhada Tehsils	56	44.80
3	Forceful displacement	57	45.60
4	Minimal returns against property	69	55.20

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S. N.	Perception of People	Number of Respondents	%
5	Loss of job opportunities for project affected families	78	62.40
6	Loss of natural resources in the region	67	53.60
7	Loss of land and marine environment	76	60.80
8	Increase in crime and loss of social peace	36	28.80
9	Disturbance in current way of living of fisherman, farmers and artisans	100	80.00
10	Loss of religious places in Vadhvan	72	57.60

2.11 Fishing Villages and Fisheries in study Area

2.11.1 Introduction

The site in the village Vadhvan and its coast near Dahanu has been selected for Port from the logistic and operation angle such as deep draught, very near to the coastline, vast hinterland of north and northwest of India, easy rail and road access to the hinterland and suitability of the site to develop a Port between Gujarat Ports and Mumbai and Jawaharlal Nehru Port.

The proposed Vadhvan port area is located in the intertidal zone and nearshore areas of Vadhvan village. The zone is rocky and at places, rocky prominences are visible during the low tide period. Rocky patch areas along the northern Maharashtra coastline extend from Dahanu to Vasai and Madh island near Mumbai. The rock crevices provide shelter and habitat for the crawling organisms like lobsters and protect the coast. Studies conducted by other agencies revealed that the mud in that area is a source of Calcium Carbonate clay (lime mud). A large number of fishermen families depend exclusively on fishing for their livelihood in the region. The developmental activities in this area may affect the fishing activity and thus livelihood.

The present study comprises of

- Extent of fishing areas and the fishing villages around the proposed port.
- Number of fishing vessels operating in inshore, near-shore and offshore fishing area.
- Number of fishermen families likely to be partly and fully affected.

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- Economics of various fishing activities around the port and likely loss of fishing area and livelihood of the dependent population.
- Existing facilities like fishing jetty/harbour, cold storage etc. in the region, number of fisheries societies in the region, and accordingly suggestion of measures to strengthen the fishing activities.

2.11.2 Data on Fishing Villages Around Proposed Port Area

The proposed Vadhvan Port is planned almost at the northern side of coastal Maharashtra (Fig.1), very near to the Dahanu creek, Palghar. Fishing and allied works are the major livelihood activities for the majority of the population in the selected 16 fishing villages within 10 km radius of the proposed Vadhvan port area. The fisher population, in general, and the fishing crafts and gears in particular, operating from villages near to the proposed site are likely to be affected by the port construction and activities. As per the guidelines of environmental impact studies, an area of 10 km radius and the villages falling in this area from the boundaries of the proposed port area have been identified. As explained earlier, a few villages beyond the radius of 10 km are also included in the survey as the fishing boats from these villages utilizing the landing, operating facilities in the identified coastal villages within 10 km range. The identified fishing villages within the port area and in also study area are presented in **Table 2.37.**

**Table 2.37
List of Fishing Villages in Study Area**

S. N.	Name of Village
1	Ghivali
2.	Kambode
3.	Tarapur
4.	Chinchani
5.	Tadiyale
6.	Varor
7.	Dhakti-Dahanu
8.	Dahanu
9	Gungwada
10	Matgaon
11	Asangaon

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S. N.	Name of Village
12	Agar
13	Narpad
14	Dandepada
15	Dhumket
16	Abram

2.11.2.1 Households and Population

ICAR-CMFRI tried to undertake socio-economic surveys in 16 selected fishing villages around the 10 km radius of the proposed port limit based on a structured questionnaire prepared by the Socio-Economic Evaluation and Technology Transfer Division (SEETTD) of ICAR-CMFRI. The fisher population of these fishing villages is 20,809 residing in 5,333 households and details are presented in **Table 2.38**

**Table 2.38
Demographic Details of Fishing Villages**

S. N.	Village	Fishermen Households	Total Population	Male	Female
1	Agar	116	514	261	253
2	Narpad	45	180	96	84
3	Dahanu	465	1927	989	938
4	Dhakti-Dahanu	1110	4370	2207	2163
5	Gungwada	537	1788	904	884
6	Tadiyale	229	869	456	413
7	Varor	299	1269	631	638
8	Dandepada	219	925	487	438
9	Chinchani	416	1816	924	892
10	Tarapur	154	605	293	312
11	Kambode	135	487	271	216
12	Ghivali	611	1814	901	913
13	Dhumket	345	1569	767	802
14	Abhram	157	684	314	370
15	Matgaon	300	1257	613	644
16	Asangaon	195	735	361	374
	Total	5333	20809	10475	10334

It is seen from the table that out of 5,333 fisher households, 91.2% are pucca houses while 470 households (8.8%) are kutcha houses. Of the total, 3,582 (67.2%) fisher households are above the poverty line (APL) and 1,751 households (32.8%) are below the poverty line (BPL). Most of the fisher population seems to be congregated in Dhakti-Dahanu village (21.0%) followed by Dahanu (9.3%), Chinchani (8.7%), Ghivali (8.7%), Gungwada (8.6%), Dhumket (7.5%). The remaining 7,525 fisher population (36.2%) resides in the remaining 10 villages. The sex ratio was 1:0.99 in the 16 villages.

2.11.2.2 Age Group

Details of age groups of studies are presented in **Table 2.39** and the analysis revealed that among fisher population, adults age group dominated 15,940 individuals (76.6%) followed by 3,531 children (17.0%) and infants 1,338 (6.4%).

**Table 2.39
Details of Age Groups in Study Area**

S. N.	Village	Adults	Infant (Below 5 year)	Children (Year 5 to 18)
1	Agar	397	36	81
2	Narpad	143	7	30
3	Dahanu	1510	125	292
4	Dhakti-Dahanu	3306	179	885
5	Gungwada	1425	115	248
6	Tadiyale	643	59	167
7	Varor	960	84	225
8	Dandepada	749	57	119
9	Chinchani	1438	148	230
10	Tarapur	479	30	96
11	Kambode	402	21	64
12	Ghivali	1536	82	196
13	Dhumket	1105	155	309
14	Abhram	459	48	177
15	Matgaon	845	115	297
16	Asangaon	543	77	115
	Total	15940	1338	3531

2.11.2.3 Literacy

Data analysis (**Table 2.39**) show that 17,486 individuals (89.8%) of the fisher population were literates and the remaining 1,985 individuals (10.2%) were illiterates. It was observed that out of 19,471 adult population most of them (41%) have studied up to higher secondary level, followed by primary level 7,565 (38.9%), those above higher secondary level 1,408 (7.2%) and graduation & above 528 (2.7%). Dhakti-Dahanu fishing village has maximum number of 3,352 individual’s educated accounting for 19.2% followed by Dahanu 1,783 (10.2%), Ghivali 1,760 (10.1%), Chinchani 1,728 (9.9%) and Gungwada 1,653 (9.5%). Details are presented in **Table 2.40**

**Table 2.40
Details of Literacy- Study**

S. N.	Village	Primary	Higher Secondary	Above Higher Secondary	Graduation & above
1	Agar	63	218	77	63
2	Narpad	60	88	14	10
3	Dahanu	699	948	113	23
4	Dhakti- Dahanu	1354	1505	426	67
5	Gungwada	890	601	149	13
6	Tadiyale	155	465	41	7
7	Varor	329	700	125	34
8	Dandepada	183	527	115	58
9	Chinchani	1171	343	61	153
10	Tarapur	167	281	68	39
11	Kambode	306	132	26	15
12	Ghivali	873	686	156	45
13	Dhumket	321	707	7	1
14	Abhram	436	61	2	0
15	Matgaon	138	677	13	0
16	Asangaon	420	46	15	0
	Total	7565	7985	1408	528

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2.11.2.4 Fishing Activity and Associated Activities

Details of fishing and associated activities involved in fishing village population are presented in **Table 2.41**. The fishers who spend at least 90% of the fishing time (excluding closed season) in a year for the source of income in were considered as “Full-time fishers” whereas fishers those who spend less than 90% of the fishing time in a calendar year were considered as “Part-time fishers”. The study revealed that 3,537 (17%) of the total fisher population is involved in actual fishing activities. Among them 1,734 fishers (49.0%) are engaged full time and the remaining 1,803 fishers (51.0%) have part-time involvement in fishery- related activities. A total of 7,580 fishers are engaged in fishing associated activities viz. marketing of fish, making/repairing of nets, curing / processing, peeling/cutting, laborer and other activities such as the collection of bivalves, seaweeds, collection of ornamental fishes, etc. Substantial number of fishermen (771 individuals) work as laborer’s (66.1%) including hired fishing crew members followed by 166 fishermen involved in net mending/repairing (14.2%) and 79 individuals marketing of fish (6.8%). Most of the laborer’s working as crew members on board the fishing boats come from Dhumket, Abhram, Matgaon and Asangaon villages which do not have direct access to the sea coast.

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**Table-2.41
Village-Wise Fisher Population Involved in Fishing and Fishing Associated Activities**

S.N.	Village	Members Involved in Actual Fishing		Number of members involved in Fishing associated activities(Male + Female)					
		Full Time	Part Time	Marketing of Fish	Making / Repairing net	Curing / Processing	Peelingg / Cutting	Labourer	Others
1	Agar	99	0	0	1	57	0	52	3
2	Narpad	24	1	1	0	45	0	12	0
3	Dahanu	171	67	107	14	455	1	274	0
4	Dhakti-Dahanu	887	172	850	6	738	0	75	2
5	Gungwada	79	406	63	10	344	0	37	11
6	Tadiyale	74	126	65	14	134	2	8	0
7	Varor	60	162	248	51	0	0	0	125
8	Dandepada	19	146	141	14	0	0	1	64
9	Chinchani	3	0	409	15	87	128	47	226
10	Tarapur	6	132	127	22	0	0	1	124
11	Kambode	0	1	16	1	0	0	0	173
12	Ghivali	0	0	0	0	0	10	197	513
13	Dhumket	176	178	167	81	222	2	191	0
14	Abhram	39	64	36	28	121	1	104	2
15	Matgaon	66	211	204	27	3	8	52	6
16	Asangaon	31	137	158	21	6	0	18	1
	Total	1734	1803	2592	305	2212	152	1069	1250

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Unlike male fisher population, 4,691 fisherwomen (73.2%) are involved in post-harvest management of fish. These activities are the marketing of fish and curing/processing of the fish catch (Fig. 9). Main post-harvest activity undertaken in these villages is fish drying of Bombay duck (*Bombil*), golden anchovy (*Mandeli*), non-penaeid prawns (*Jawala, Kardi, Ambadi/Bhobi*), lesser sardines (*Kati*), ribbon fishes (*Wakati*), solefish (*Lep*) and sciaenids (*Dhoma*) etc. Remaining 1,723 fisherwomen (26.9%) are engaged in making / repairing of net, peeling/cutting, labour activities and other activities.

Unlike male fisher population, 4,691 fisherwomen (73.2%) are involved in post-harvest management of fish. These activities are the marketing of fish and curing/processing of the fish catch (Fig. 9). Main post-harvest activity undertaken in these villages is fish drying of Bombay duck (*Bombil*), golden anchovy (*Mandeli*), non-penaeid prawns (*Jawala, Kardi, Ambadi/Bhobi*), lesser sardines (*Kati*), ribbon fishes (*Wakati*), solefish (*Lep*) and sciaenids (*Dhoma*) etc. Remaining 1,723 fisherwomen (26.9%) are engaged in making / repairing of net, peeling/cutting, labour activities and other activities. A large number of coastal communities, mostly women are involved in fish drying for consumption purpose and trade along the open, common spaces in the village and beach areas. This provides income and economic security to women.

An inventory of registers maintained by the State Fisheries Offices at Palghar and Dahanu and digital platform (ReALCraft) maintained by the department shows that only 11 villages Ghivali, Kambode, Tarapur, Dahanu, Narpad, Agar, Dhakti-Dahanu, Gungwada, Tadiyale, Chinchani and Varor have fishing boats. Altogether there are 470 fishing boats registered in the online site (ReALCraft) of the Fisheries Department, Govt. of Maharashtra, but it was found that at present only 337 boats are having fishing licenses as presented in **Table 2.42**.

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**Table 2.42
Village Wise Details of Operational Fishing Crafts in the Study Area**

S. N.	Name of the Village	ReALCraft registered vessels		Licensed Fishing Boat	
		Mechanized	Non mechanized	Mechanized	Non mechanized
1	Ghivali	20	01	08	00
2	Kambode	01	00	01	00
3	Tarapore	05	00	05	00
4	Dahanu	171	07	115	00
5	Narpad	08	00	01	00
6	Agar	12	00	08	00
7	Dhakti-Dahanu	190	01	154	00
8	Gungwada	06	00	06	00
9	Tadiyale	07	00	04	00
10	Chinchani	17	03	06	00
11	Varor	29	00	29	00
Total		470	12	337	00

(Source: Department of fisheries, Maharashtra state, Year 2018)

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2.11.2.5 Existing Fishery Infrastructure Facilities in Study Area

The fisheries infrastructure in the region are limited (Table 2.43). Ice factory/cold storage facility is available only in Dahanu village among the villages. Other villages purchase ice from the Dahanu ice factory which needs up-gradation. Six registered fishermen co-operative societies from the study area are located in Ghivali, Varor, Chinchani, Gungwada, Dhakti-Dahanu and Dahanu fishing village. The diesel storage facility is available only in Gungwada and Dhakti-Dahanu. The villages lack proper fish landing facilities like jetty or harbour. Most of the fish landings are taking place in the beach.

**Table 2.43
Fisheries Related Infrastructure in the Selected Villages**

S. N.	Name of village	Fisher Societies	Ice Factory/Cold Storage	Diesel Storage Facility
1.	Ghivali	1	-	-
2.	Kambode	-	-	-
3.	Tarapur	-	-	-
4.	Chinchani	1	-	-
5.	Dandepada	-	-	-
6.	Varor	1	-	-
7.	Gungwada	1	-	1
8.	Tadiyale	-	-	-
9.	Dhakti-Dahanu	1	-	1
10.	Dhumket	-	-	-
11.	Abhram	-	-	-
12.	Matgaon	-	-	-
13.	Asangaon	-	-	-
14.	Dahanu	1	1	-
15.	Agar	-	-	-
16.	Narpad	-	-	-
	Total	6	1	2

CHAPTER 3

MACRO LEVEL SOCIO ECONOMIC STATUS OF IMPACTED VILLAGES

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3.0 Macro Level Socio Economic Status of Impact villages- Proposed Vadhvan Port

3.1. Introduction

Total land Acquisition for rail and road from the Taluka Palghar and Dahanu of Palghar district is 571 Ha. The Land required for the railway is 69.00 Ha. The total land required for railways will be acquired from seven villages of Taluka Dahanu. The detailed list of villages acquisition land is given in the Table 3.1. The land required for the construction of the road is acquired from the Taluka Palghar and Dahanu respectively.

The land will be acquired from 11 villages from Palghar Tal. It is 201.15.46 Ha. Whereas from 10 villages from Dahanu Taluka and it is 204.31.30 Ha. Private land is more in comparison to forest and government land in both the Taluka. The important thing is that the land of tribal though less out is required in the project. Special consideration for their resettlement and rehabilitation shall be the focus and implemented as per the guidelines of R & R Policy 2007 with all latest amendments.

The land required for the construction of the project is 17471 Ha. This is owned by MMRT. Government land is encroached by the villagers and their livelihood depends on this land. They are using this land for more than 30 years and hence while remaining them the authority shall give them compensation as per schedule 2 & 3 of R & R policy, Land acquisition Act 2020 & The Policy of land acquisition and R & R is JNPT.

Any of one from these three shall be selected whichever gives the highest benefit to the project affected family. People extremely opposed the proposed project activity by displaying flex everywhere in every coastal village where fishing is the dominant livelihood.

The study area has two mythological important temples on which is Chinchani constructed by Chimaji Appa Ballalh, the younger brother of Bajirao Peshava whereas the other temple is of Mahalaxmi is at Akegaon. The respondent said the temple is about 8000 to 10000 years older in the era of Pandavas.

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3.2 Macro level Information Socio-Economic Status of Impacted Villages

Primary survey carried out to collect socio economic status of impacted villages in and around proposed port area through village sarpanches, asha workers, block development local senior citizens respective villages and details are presented in following sections

Village: Chandigaon

The name of village chandigaon is due to the temple of chandika mata. This shows that the villages have aesthetic and mythological values. The population of the village as per the administrator Mr. Sandeep Deu Jadhav is around 1300. There are two major Anganwadi and 3 primary schools out of which two are run by Jilha Parishad and the remaining by private administration. The same private school is up to 12th with a good number of students. For college studies, children have to go to Dahanu.

The village has a post office and fare price shop, but there is no facility for the police station, newspaper, bank, and co-operative society. The villagers have their own mobile phone. Every house has TV, Radio and internet connection for their entertainment & global connection. The village has a cremation ground for namesakes. There is no shade in good conditions. Around 90% of households have electricity facilities. 70% of the household are benefitted from Pradhanmantri Ujwala Yojana and have LPG in their kitchen. Till 30% of households are using wood and kerosene for cooking food.

All villagers have tap in their doorstep to get drinking water and water for domestic use. These villages get facilitated is drinking water from the Sakhare dam. The villagers fully satisfied with the taste, quality, and quantity of drinking water 100% of villagers have their private toilet at their own under the scheme of Swachh Bharat mission (Abhiyan), under the same scheme. Waste water sanitation is also in progress by the technique of soak pit but still, some houses use a back yard (Parasbagh) from the disposal domestic wastewater. During the covid period, the gram panchayat had spread around 6 times insecticides in the village to reduce diseases.

The villages have a very poor condition of the road. The approach road of the village is not good. The villagers have to travel 10 km either to Vanagon or Dahanu for the railway station. There is no state transport, communication in the village they have to use a share rickshaw for their traveling to near village.

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There is no industry in the near vicinity of the village. The main occupation of villagers is either agriculture or fishing. The traditional crop is of paddy but due to canal farmers are cultivating the second crop of chili, green vegetables. Capsicums, brinjals, cucumber, bottle gourd. The main market is at Vashi where the farmer sells out their products. The villagers are at Machipada are also engaged in embossing and cutting die-making.

For recreation there is only one community hall named is Atmaram Dhaji Sabhagruh and Television. The villagers enjoy a one-day Jatra at Chandika Mata Mandir on the occasion of Hanuman Jayanti. The villagers complain that the creek water is often get polluted because of industries at Tarapur MIDC and Reliance Power Plant. They found dead fishes in creek as well as layer of oil and grease on the body of fish when they during fishing. The fisherman complained that such fishes do not give them a good rate in the market

The medical facility is very poor because the village is facilities with sub center of Primary Health Center there is no ambulance available for emergency. The big hospital is at Dahanu that is 10 km away and the Primary Health Center at Chinchani which is 8 km away. The distance is not more but the transportation facilities are not available and hence villagers have to face difficulty during emergency. The response for COVID vaccination drive is very good. The first dose of vaccination is taken by 100% of villagers whereas the second dose of vaccination is in progress. Toddlers' vaccination is done by the parents on their own. Villagers faced nominal water-borne diseases during the rainy season. Gram Panchayat has the plan to replace to street light for 31 poles present in the village.

Village: Newale

The information of this village is received from Anganwadi Sevika. The population of the village as per the administrator Mr. Bapulal Nale is around 300. There is one major Anganwadi and 1 primary school. For High School education & College Studies students go to Boiser which is 2 Kms away or Vangaon which is 1 Km away.

The post office & Police Station of village is at Boiser and fare price shop is in the village but there is no facility for the newspaper, bank, and co-operative society. Everything is available at Boiser. The villages have their own mobile phone. Every house has TV, Radio and internet

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connection for their entertainment & global connection. The village has a cremation ground for namesakes. There is no shade in good conditions. Around 100% of households have electricity facilities. 100% of the household are benefitted from PM Ujwala Yojana and have LPG in their kitchen. Some of households are using wood and kerosene for cooking food.

Villagers get drinking water from bore well at their home or by hand pumps provided by Village Panchayat for drinking water and water for domestic use. Some households use package drinking water. 100% of villagers have their private toilet at their own, under the scheme of Swachha Bharat mission (Abhiyan), under the same scheme waste water sanitation is also in progress by the technique of soak pit, but still some houses use a back yard (Parasbagh) for the disposal of domestic wastewater.

The villages have a very poor condition of the road. The approach road of the village is not good. The villagers have to travel 1km to Vangaon or 2 km to Boiser for the railway station. There is no state transport, communication in the village they have to use a share rickshaw for their traveling.

The MIDC Boiser is at 2 km from the village and almost all qualified person get employment in the MIDC. The other occupation of villagers is agriculture.

For recreation the people use to go to Boiser for enjoying cinemas in theater as well as market for their purchase. The other and cheap mode of entertainment is Television which is available at every household.

The medical facility of PHC is at Tarapur which is 5 Km away and Sub-centers is at Parnali which is 1.5 Km away. The Sub-center has 03 bed where the delivery of pregnant women is done. For any complication the Doctor or Nurse is present in Sub-centre referred to Tarapur PHC. With the help of ASHAs the Doctors of Sub-centre conduct monthly Health Camp and provide nutritious food to pregnant women, Feeding Mothers and Adolescent girls.

Village: Vangaon

The information of this village is received from Ex Ward Member. The population of the village as per the administrator Mr. Anand Kantilal Rana is around 7649. There are 09 Anganwadies with 8 Sevika and 09 helper. There are 05 Primary school run by ZP, there are 02 High School &

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Junior colleges out of which 01 is run by Private Management & another by Government. For graduation studies children go to Chinchani 09 km away or to Dahanu 12 kms away.

The communication facilities available in the village are viz. Post office, Newspaper, Radio, Telephone, Internet at Gram Panchayat as well as on line centers, Internet cybercafé and at some households. The village have 04 cremation grounds, 01 Credit Co-operative society, 03 Bank namely Bank of Baroda, Thane District Co-operative Bank & Janata Sahakari Bank, there is 01 police Station and 01 Fare Price Shop.

100% Household in the villages have electricity connection at their home and most of the people use electricity for irrigating their farm. Gram Panchayat has provided 03 pumps to extracts ground water for villagers under the scheme of PM Ujwala Yojana. All household receives LPG connection in their kitchen, very few households use wood & kerosene as a fuel to cook the food. There are 03 overhead tank having capacity 120000 lit, 160000 lit and 75000 lit respectively. People received treated drinking water through Gram Panchayat at their doorsteps. People are very much satisfied with taste, quality and quantity of drinking water they received. Sanitation condition in the village is very good. 100% household have toilets at their house with safety tank. There is no any open defecation found in the village. Domestic waste water is disposed through soak pit and hence there is no water logging found anywhere. The village is clean and tidy and Grampanchayat scheduled to spray insecticides quarterly.

Village has their good transport facility Railway station and state transport bus stop is located within the village boundary. The village is located on Mumbai Surat Railway line. There are several trips of local trains from Mumbai to Dahanu which are very useful to the villagers. The road conditions are very good and hence business in the village is in progressive mode.

More than 80% of households are engaged in Emboss and Cutting Die Making Industry. For recreation villagers use easy mode like television, Radio and Newspaper. Children have Sport ground for playing outdoor games for enjoying Theater. Villagers travel either to Boiser 9Km away or to Dahanu 12 kms away both the places are connected with local trains. There are few temples in the village like Waghaya Devi Temple, Hanuman Temple and Mahadev Temple. They enjoyed one day Yatra on Hanuman Jayanti as well as Mahashivratri, Tribal enjoyed their

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festival after Diwali. One historical monument Bunker Wall is present at Patilwada within the village boundary as per the respondents and information received from Grampanchayat it was constructed by Chimaji Appa Ballar, younger brother of Bajirao Peshava during war.

The Rural Hospitals is present with the facility of 35 indoor patients, as per the lady respondent pregnant women get good treatment during pregnancy, delivery and post delivery period through these hospitals. During 2020-2021, 47 deaths were recorded and 02 births recorded as home delivery. There are more than 1000 well educated employable youth. The people in the village expecting employment from the Authority of Vadhvan Port.

Village: Asangaon

The information of this village is received from Village Development Officer. The population of the village as per the VDO Mr. G. L. Varghade is around 1335 For Asangaon Khurd & 1926 For Budruk. Asangaon is a Gut Gram Panchayat and under these 03 villages namely Vadade, Matgaon & Budruk & Khurd.

There is 01 Anganwadi and Primary school is up to 7th Class. For high School & junior college the Children go to Vangaon 03kms. Agriculture Diploma available in Vangaon Village. The Zp School in Vadade is up to 4th class and the total registered student are 14. 4 students in 1st std., 4 in 2nd, 5 in 3rd & 01 in 4th std. The school has 500 books in library, Maths, and English & Marathi box as a teaching aid. Carom, Cricket, Lagori, Ring & Ball are the playing aid available. They are expecting from the authority to help them in making good floor and repairing windows and door of school buildings.

The communication facilities available in the village are viz. Post office, Radio & Mobile. There is no internet connection at this village. The village have 06 cremation grounds, 01 Credit co-operative society, 01 Bank in Vangaon, the police Station is in Vangaon 3km and 04 Fare Price Shop at Khurd, Budruk, Vadade & Matgaon Villages.

80% Household in the village has electric connection at their home and 7 to 8% of the people use electricity for irrigating their farm. Grampanchayat has provided the scheme of PM Ujwala Yojana all household receives LPG connection in their kitchen very few households use wood & kerosene as a fuel to cook the food. There are 04 overhead tank having capacity 70000 lit,

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150000 lit respectively. People received treated drinking water through Industry at their doorsteps. People are not satisfied due to Scarcity because Water is provided after 2 days. People are satisfied with taste, and quality of drinking water they received. Sanitation condition in the village is not good but respondent didn't talk about sanitation facilities. Few households have toilets at their house with safety tank.

Village has they're not good transport facility. The villagers have to travel 3 km to Vanagon for the railway & bus station. There is no state transport, communication in the village. The Internal Road are not in good condition that's why villagers are facing problems. The MIDC Boiser is at 25 to 30km from the village and almost all employable person get employment in the MIDC. For recreation, villagers use easy mode like television and Radio. For enjoying Theater villagers travel to Boiser 30Km away. There are few temples in the village like Gramdevi Devi Temple, Hanuman Temple and Satimata Temple. They enjoyed one day Yatra on Hanuman Jayanti.

The medical facility of PHC is at Chandranagar which is 10Kms away. Daily Doctor or Nurse is present in PHC. There are 02 Private Doctors. With the help of ASHAs the Doctors of PHC conduct monthly Health Camp and provide nutritious food to pregnant women, Feeding Mothers and Adolescent girls. The first dose of vaccination is taken by 90% of villagers whereas the second dose of vaccination is in progress. During 2021-2022, 21 deaths were recorded and during 2020-21, 100 deaths were recorded.

Village: Hanuman Nagar

This Village is resettled and rehabilitated due to Dhamani Dam. The information of this village is received from Administrator. The Village Development Officer name is Anand Sankhe. The population of the village as per the Administrator Mr. M.M. Sheikh is around 1691. There are 02 major Anganwadies with 02 Sevika & 02 Helpers. Primary schools & Middle School is Up to 7th Standard. For graduation studies children have to go to Vangaon. Ashram School up to 12th standard is at Khutad, Shigaon and other than tribal students go to Vangaon High School.

The Communication facilities like Post-Office is at Shigaon where as 50 % people use Television and Radio for communication and some People uses Mobile and vary few internets. Police

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station is at Boiser which is 7 km away. 01 ration shop from where they get Rice, wheat and sugar. There is no Co-operative society in the village, the banking facility is at Boiser and Vangaon. The cremation ground in the village is not in good condition. 100 % household have electricity connection and also, they use same in their farm for ground water extraction. 100% villagers have LPG gas cylinder which they received under PM Ujwala Yojana.

For drinking water facility there are 08 Bore Hand pumps, and 01 bore well connected with solar pump. There is no treatment facility for drinking water through Grampanchayat. The respondent said that the taste of drinking water is good but they face the scarcity of water during summer and moved around here and there to fetch water at different hand pumps and bore wells. 100% households have toilet with soak Pit at their houses. Most of the people disposed the domestic used water in soak pit while some of them disposes in backyard. The village face problems of Mosquitoes and Rodents but they do not have Fogging machine for spraying insecticides.

The approach road to this village is very bad condition. Railway station is at Vangaon which is 3.5 km away. There is no state transport, bus Facility and only 02 Private magic Rickshaws are available. The road towards Boiser is worst. Around 30% of population is working at Boiser MIDC & they faces lot of problems to travel by their two wheelers. People are complaining for backache. There is no such special facility for recreation, some people have TV and Radio with help them in entertainments.

There is only one temple of Gramdevi. The tribal celebrate a festival of Kawali Bhaji after Diwali. Respondent said that they experience irritation at eyes and nose frequently. This is due to air pollution from Boiser Industrial Area.

Primary Health center is at Shigaon and sub-center is at Hanuman Nagar. But people prefer to go to Tarapur which is 20 kms away to get medical facilities during illness. They get vaccination and Nutritional foods through Anaganwadi and around 90% of Population is vaccinated for Covid 1st dose. 17 deaths were registered but no birth at home. There are 60 graduates and ample of youth completed their Computer & ITI Courses. All these employable youth are expecting employment from the Authority of Port. Respondents said that they will be

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considered to be positive for Vadhvan port Development only after getting Job offer Letters from the Proposed Project Authority.

Village: Ghol

The Village Ghol is in the group Gram Panchayat of Kasa, Ghol and Bharad. The Gram Panchayat office is at Kasa and the information is received from the administrator Mr. Sandeep Jadhav. The population of the village is 1655. The tribal population is 1596. The tribals are from Malhar Koli, Kokana and Katkari community.

There are 02 Anganwadies 01 is Major and 01 is minor. The primary school is for the namesake, but there are 02 ZP and 02 Private primary school at Kasa. 01 government aided Private high school and junior arts college. For further studies goes to Talasari 26 kms, Dahanu 25 kms and Palghar 30 kms.

The Gram Panchayat Kasa is a commercial village in the study area having their big market similar to Dahanu & Palghar. There are several private doctors having their clinics & hospitals. The village have TV showroom, Mobile shops, and TV & Mobile repair shop, Restaurants, Jewelry Shops, Cosmetics Shop, Beauty Parlor, and Medical Shop etc. There are more than 50 Auto Rickshaws in line at Auto rickshaws stand. The village has big state transport bus stop, Sub district Civil hospital and many more.

Villages: Rawate and Akoli

The group Gram Panchayat Rawate and Akoli have population of 927 and 690 respectively. 99% of population is tribal, especially from Malhar Koli and Katkari Community. There are 02 Anganwadies and 01 Primary school at each village. For further studies up to 12th class students go to Lalunde which is 9 km away. The school has school bus facility and hence there is no problems to student go to school. For further studies students have go to either Boiser 20 km or to Palghar 30 km and Chinchani 35 km.

The communication facilities like Post office are at Borsheti 2 km away. Newspaper, TV and Radio are used by very few people. Mobile phones are their but connectivity is very week. There is no internet facility in the village. Police station and Bank facilities are at Boiser whereas Credit Co-operative Society is at Nagziri. There are 02 cremation grounds.

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50% household in village have electric connection at their houses whereas only 02 persons to use electric pumps on their bore for irrigation. 28 household have LPG Gas connection whereas remaining are using wood and kerosene as a fuel for cooking. The total agricultural land of village is irrigated through the canals from River Surya. The drinking water facility is under progress in the scheme of Jal Jivan Mission, present hand pump, solar pumps and wells are available for drinking water purpose. Some bore well as have odour while some have spoiled taste. Respondent complaint that if bore well is dug more than 200ft. they get brackish water.

100% households are facilities with toilets at their house. The domestic waste water is disposed at backyard (Parasbag) Management of Sewerage Water is proposed by Soak Pit and Compost.

The transportation facility is at the doorsteps of village and have 08 trips of State transport bus daily. Private vehicles and Share rickshaws are ample in the village. There is road condition is moderate.

The education levels of villagers are poor and hence the most dominant occupation is agriculture. The village has a very good library having MPSC book but as there is no aspirant the library is not in use. The social and aesthetic environment is good. PHC is at Somta which is 16 kms away and sub center at borshethi which is 2 km away. There is no ambulance facility and Nurse Visit the village once in a week. 15 deaths were recorded and 25 Births. The number of home deliveries shows the literacy level of people and medical facility in village.

Village: Shigaon

The Population of village is around 8000 but as per the census 2011 population of village is 6310. The information of these village is taken from the village development officer Ms. Ashwini Raut. There are 13 Anganwadis, 06 Primary Schools and ashram school up to 12th class. For college facility student go either Dahanu or Vangaon. The basic communication facility like Post office is the village were as Police Sation and Bank is at Boiser which is 5 km away. Almost all households have TV and Radio, Mobile with internet connection. There are 03 fair price shops and 07 cremation ground. The villagers cremate the dead bodies at

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different cremation ground as per the community. Around 90% population is Tribal specially waril and katkari.

Around 80% of household in village have electricity connection and only 05 farmers use electricity to extract ground water for irrigation purpose. Around 90% of households have LPG gas connection but the villager's faced difficulty for refilling the cylinder. Hence, most of them used kerosene and wood as fuel to cook food. 05 solar pumps and few stand post for drinking water. The overhead tank is purposed almost all employable villagers fetch their employment MIDC Boiser.

95% villagers have toilet at their home while remaining 5% go to open defecation. Disposal of sewage water is at back yard (Parasbagh). The spray of insecticides done by Gram Panchayat.

Transportation and communication facility at village is good. The village has 05 trip of state transport bus per day. Railway station at Boiser 5 km away. Internal and approachable road condition is good hence share rickshaws facility is very helpful to villagers. Agricultural is only source of income in these village.

For entrainment and recreation villagers enjoy TV program only; there is one temple of Mahalaxmi. The Jatra is organized on Gudhi Padwa, Hindu New Year's Day for one day. They also enjoy Ganpatin Utsav.

The primary health center at Tarapur whereas sub-Centre is present in the village. 01 doctor and 02 nurses is present daily. The facility of pregnant woman delivery with three bed indoor patient is available. 02 malnutrition children are present. They are provided proper nutrient food by gram panchayat. Anganwadi worker and ASHA workers are very active and always conduct health camps proper nutrition camp for adults and girls, feeding mother and awareness for epidemical diseases. 48 death and 72 births where record in the previous financial year.

There are around 25 employable youth in village. All the villagers are aware about proposed port project and they are expecting employment is this facility.

Villages: Kolavali and Dedale

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These is group Gram Panchayat and in near vicinity Vadhvan Port Project. The village Kolavali has population of 2060 and Dedale has 1009 population. The information is obtained from village development officer Ms. Rupal Rajendra Sanke. The Kolavali and Dedale have 01 and 02 Aganwadis respectively. There is 01 common Primary School for both villages as both are 1.5 km away from each other. For high school and college education student go to Chichani 05 km away and Vangaon. The post office is at Bawada. 30% have Television. The gram panchayat has the facility of WIFI whereas villagers use internet on their mobile. Police station, Bank and Co-operative society is at Chinchani. 01 Ration shop and 02 cremation ground are present in the boundary of village at kolavali.

100% of household have electric connection at their houses where as 30% to 35% farmer used electricity to irrigate their farm. 50% household have water supply scheme at their door step. The village has over head tank of 40 KL these tanks receive water from the Sakhare Dam. The respondent is fully sanctified with their taste, odour and quality of their water.

The sanitation facility in the village is at satisfactory level 100% household Villages have toilets with soak pit at their door step. Kolavali has 04 public latrine and Dedale has 02 latrine. The village have underground drainage system hence no stagnation of waste water is found. The Gram Panchayat Pulbic Health Deparment spray insecticides 20 to 03 times is year and several times in rainy season.

Nearest railway station is at Vangaon and Bus stop is 01 km from village which is at Bawada. Road condition is very good which helps people to fetch their employment to Boiser MIDC 20 km away. 80% populations employed in these MIDC.

For recreation people used easy and cheap mode that is television. Children enjoy sport on sport ground. There are 05 temple in the village and villagers enjoy 1 day Jatra on the occasion of Hanuman Jayanti.

The villagers experience noise pollution and air pollution once a while form TABS and BARC. PHC is at chinchani is at 04 km away having 02 doctor and 04 nurses with ample medicine. They served for people 24 hr. The anganwadi sevika and ASHA worker with the help of PHC Chinchani conduct camp for health education proper nutrient, maternal and child care. 100%

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of population is vaccinated for Covid 1st dose and around 70% for 2nd dose. 04 death and no birth are recorded in previous financial year. The villager has strongly opposed to the Vadhvan port activities.

Village: Khaniwade

The village Khaniwade is dominated with tribal population. Out of 966 only 22 Persons are Kunabi & remaining 944 are either Malhar Koli or Katkari community of tribal. The Sarpanch Mrs. Sujata Santosh Dalvi who is from Malhar Koli Community, share information to our survey team. There are 03 anganwadies & 03 Primary school in the village Khaniwade. There is Ashram Shala 04km away from the village where tribal students prefer to go for their education from 5th to 12th standard. Students from other community either go to Shigaon 04 kms or Boiser 12 kms. They continue their college education at Boiser or Palghar 24 kms away. The Village have very less Communication facility within their boundary. Post office, Police Station, Bank and Co-operative Society are at Boiser.

Only 60% of households have Television, 01 Ration shop, 05 Cremation ground but are not developed. Internet connection is there in Grampanchayat but the Clark complaints that it never works. 100% of household have Electricity connection and LPG connection. There is no use of electricity in agriculture for irrigation. The total Agricultural land is rain faded. Village panchayat provides drinking water through Bore well connected with solar pump and Dug wells. The villagers are satisfied with Taste, quality & quantity of drinking water. 100% village household have toilets at their house most of them are with soak pit and few are with safety tank. Sewerage Water is disposed at backyard (Parasbag). Transportation & Communication is moderate because internal and approach road is kuccha. Bus Stop is 04 kms away and state transport operate 04 trip of bus service. Railway station is 12kms away from Boiser. The prime transportation aid is share Rickshaw. There are few temples like Sai Mandir, Santoshi Mata Mandir, Ganapati Mandir & Gaodev Mandir.

Villages enjoy the Jatra on the New Year’s Day of Hindu (Gudipadawa) & one day Makhar Ustav at Gaodev temple during the month of December. This Makar Ustav is the festival of Tribal. During this ustav all women, Children & men go out of the village on the eve of festival.

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Stay the whole night outside the village. Few men stayed in the village perform Puja and after their puja in the evening of festival day all villagers came back. Worship the Gaodev and enter their respective houses. The aesthetics and social environment of the village is satisfactory.

Primary Health Centre is 22 km away at Tarapur and Sub center at Shigaon at 4 kms away. Ayana the government dispensary is present in village. where weekly visit of nurse and doctor is observed. The Sarpanch has given us the land use pattern of village having area of 215.70 Ha. Out of which 47.5 Ha. for agriculture, 30.86 Ha for grazing land, 1.13 ha for village dwellings, Waste land 13.28 ha. 0.01 Ha. for cremation ground and 14.0.8 Ha for Rivers and Nalhas.

Villages: Tawa, Kolhan and Dhamatane

The Village Tawa is in Group Grampanchayat of villages Tawa, Kolhan & Dhamtane. The Total Population of this group Grampanchayat is 4663. The information is provided by Clark Mr. Lahanuji Kamadi. There are 04 Anganwadies, 03 major & 01 minor Anganwadies. 03 Primary school in Tawa, 01 in Kolhan & 02 at Dhamatane. For further studies up to 12th class students go to Government Ashram Shala. The students other than tribal go to Kasa 5kms or at Dahanu or Palghar in Hostels School. The communication facilities like Post office, Ration shop, Co-operative Society name Adivasi Vividh Karyakari Sanstha & Cremation ground is in Tawa, whereas internet connection News Paper, police Station & bank Facility is at Kasa.

Only 50% Villagers have electricity connection at their houses & very few are using electricity for agricultural purpose. 90% households have LPG connection through PM Ujwala Yogana. Villagers are not in financial position to afford LPG Cylinders refiling; hence they have turned to the conventional fuel like Wood and Kerosene. Drinking water facility through tap is provided through in Tawa Grampanchayat. It has 02 tanks of 20,000 lit. The remaining villages get drinking water through Grampanchayat Hand pumps. The villagers face scarcity of water in summer. They get water for irrigation & domestic use through the canal of Dam constructed on Surya River. Around 70% of households have toilets at their home with safety tank constructed under the Swachha Bharat Abhiyan (Mission). People used to go to River Surya for

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bathing and washing clothes. The domestic water produced through kitchen is disposed to backyard (Parasbag).

Transportation & Communication in the village is very poor. Villagers have to travel to Kasa to get further travel. Respondent complaints that they have to wait for 2-3 hours for magic or Auto Rickshaw.

The mode of income in the village is agriculture, Brick Kiln and agricultural Labour, paddy is the dominant crop in the area whereas some farmer harvests some Gawar & Chili. Sai Mandir and the Gaodevi are the temples present in the village, these villagers also celebrate Makhar Ustav as explained in above village Khaniwade.

The PHC is at Tawa and the information is collected from the Dr. Pankaj Vansha (Medical Officer) is as follows. 30 villages are link with this PHC. There are 03 doctors, 02 MBBS & 01 BAMS. The Co-morbid Diseases found are 223 BP Patients, 133 Diabetic Patients, 08 Asthma, 03 Cancer, 03 paralysis, 59 Lapracy & 33 TB. 03 Malnutrition children are also in record. 958 births were recorded in the previous financial year where as 108 deaths were recorded. Infant death 0-1 year were 07 & 1-6 were 05. Nil death is recorded of mother. 01 ambulance is available with all required facilities. Tribal special disease of Sickle cell is very common in the area.

Village: Chinchare

The villages have 100% tribal population is 913. There are 02 anganwadi 02 primary School. Children go to Ravate where they get education facility up to 08th std. for further education they go to Chandipur. Post office is at Boresheti, Police station at Manor, Ration Shop is at Ravate, Bank at Nagzari and Boiser and villages have 02 cremation ground. 100% villagers have electricity at their home and one is using this facility for agricultural.

90% household have LPG connection but respondent complained they couldn't afford the cost of refilling hence villagers turn to conventional source of energy that is Wood, and Kerosene. 50% of household have tap connection at their door step while other getting water from the 04 village wells and 10 hand pumps. Now, 01 villages well is acquired by the Vadodhara Express way. The villagers complaining about the scarcity of water.

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100% of household have toilet and soak pit whereas disposal of water is done by soak pit.

Transportation and communication in the villages is ordinary through the internal and approach road are good. There is only one state transport bus trip to Boiser in the day. Railway station at Boiser which is 25 km away. Other that agricultural people get employment at MIDC Boiser. There creation facility is Available. People also enjoy Ganesh Utsav and one day Jatra during holy a colour festival of Hindu at Gavdeo temple. There are two Gavdeo temple and 01 Samaj Mandir. A temple of Mahalaxmi is a monument from around 10,000 years old the respondent said that the temple was constructed in the Dwapar youg in the era of Pandavas. The PHC is at Somata and subcentre at Nanivali and Nagzari 06 km away each.

The Respondent Miss. Bandhini Baban Jadhav health worker educated up to 9th class gave information about the village. The villagers harvest Paddy, Channa, Green vegetables and fruits like chikuu and mangoes. Nanivali have 07 Aganwadis with their 07 Anganwadies worker and helpers. 10 ASHA workers. The PHC at village Somata 09 km away having 11 beds indoor facility sub centre nanivali has facility of 02 bed and rural hospital Kasa 14 km away. People prefer to go to Kasa to get medical treatment. 02 BAMS Private practitioners also provide medical facility in the village there are 13 leprosy patient 06 TB patient in the village.

After primary education student go to Nagazri to get education up to 12th std. There is 01 Ration shop from there they get only rice and sometime wheat. They used to make mix Bhakari of rice and Wheat. Villagers have their personal bore well with electric supply.

The Post office is at Somta and almost all people used mobile facility. There is 01 cybercafé which helps people to complete their online work. River Surya is flowing around the village who always provide prosperity but this year it was cursed due to heavy rain and flooding.

The direct project affected villages are Chinchani, Vadhvan, Varor, Dhumket, Bala Pokharan, Vasgaon, Tadiyale and Tarapur.

The people in these village have strong opposition to the project and there are registered committees of NGO to oppose the same. They are not at all ready to share any information regarding their living status and village and their income source. According to them, every person who come to their village to ask anything about Vadhvan Port is their enemy. The

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survey team have very good interaction with Mr. Jagannath Waze who belong to Mangela community (Fisherman) Chairman of Chinchani Machhimar Vividh Karyakari Santha. He said that the area is dominated with the communities like Mangela and tribals viz. Warli, Kokana and Katkari. The Warli community is progressive whereas Katkari's are Adim Jamat.

The fisherman in the village has 26 boats registered with the society. The Boat owners are from Mangela Community and the fish catchers to set and spread nets in the deep sea are known as Khalashi (tribals). One trip is of at least for 10 days having expense of Rs. 1 lakh. But now days there is no guarantee of getting fishes of such worth as there is very a smaller number of fishes left in the sea. This is because of using laser beam to catch fishes.

Government of India, fishery department never help or educate them for any process and safe finishing techniques 99% of villagers have toilets at their home and the domestic water is disposed at back yard. The Chinchani village have PHC and good educational facility till graduation and this is the result of the efforts of Mr. Waze. The main source of Income is fishing, some people from Mangela community do fish farming of Kolambi fishes.

The females of the village engaged in fishing or in the business of EMBOSS and Cutting DIE making. Almost all household have table of the Die making. Not only Chichani but also 100% households from Bal Pokharan, Vadhvan, Tadiyale, Tarapur etc. are engaged in Emboss and cutting Die making. Some are doing this in traditional way maximum number of people in Vadhva, Tadiyale, Chinchani are doing this with the help of modern machines like CIVC machines. During interaction with Mr. Jagdish J. Raut from Baal Pokharan, he describes the method of their work to our survey team in detail. The earn minimum 2500 to 1.5 lakhs per month per working persons as per the facilities available with them. This business is the backbone of the area with fishing as the fishing is seasonal business. Not only in India but also from foreign countries they have clients for buying their Die.

Village Dhakti Dahanu, Dhumket and Varor is fully depend upon the fishing in the sea. The responds inform that the fisherman from Dhumket do fishing in the estuary and go to Dahanu for deep fishing where they have 293 boats out of which 178 are registered with state fishery offices and 115 have licensed. Dhakti Dahanu have highest number of boats 345 for fishing.

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The female of Dhumket, Dhakti Dahanu and Varor. Village vadhvan has very vast sea shore or beach with very good mangros developed on it.

The survey team discuss with some eminent personalities in the area like Mr. Dharshan Bhai shroff (Infra structural developer) and with Mr. Rajesh Kute (Executive Member of All India Mangela Parishad). They shared information than the port authority shall explain and publish the criteria of R & R policy for land looser, encroachers and the landless and boat less labors. CSR facilities they are going to establish implement and maintain for the welfare of villagers. Commitment of employment to project affected family with offer letter and education to the youth to enhance the skill and absorb local candidates.

Fig. Discussion with Infrastructure Developer at Vangaon Village

The authority not only issue them the certificated of project affected person but also issue them offer letter for employment. Even they shall develop Jetty for fishermen. The authority shall establish Ice factories and cold storage and provide this facility at subsidized rate.

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PHOTODOCUMENTATION - INTERACTION WITH LOCAL OFFICIALS



MAHALAXMI TEMPLE AT AKEGAVAN VILLAGE (ERA OF PANDAVAS)



SCHOOL BUILDING, VILLAGE CHANDIGAON



DIE MAKING AT BALAPOKHARAN VILLAGE



INTERCATIONS WITH DYE MAKER - VILLAGE BALAPOKHARAN

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DYE PRODUCTS – BALA POKHRAN



INTERACTIONS WITH OFFICIALS (VILLAGE DEVELOPMENT OFFICER) VILLAGE ASANGAON

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GRAM PANCHAYAT OFFICE, ASANGAON



GRAM PANCHAYAT, HANUMAN NAGAR

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Latitude: 19.851221
Longitude: 72.778488
Elevation: 3.18±16 m
Accuracy: 67.5 m
Time: 09-02-2022 14:24
Note: Gram Panchayat Hanuman Nagar 10

Powered by NoteCam

GRAM PANCHAYAT OFFICE, HANUMAN NAGAR



Latitude: 19.828913
Longitude: 72.847799
Elevation: 17.53±11 m
Accuracy: 9.6 m
Time: 08-02-2022 16:34
Note: Gram Panchyat Ravate Aakoli2

Powered by NoteCam

GRAM PANCHAYAT OFFICE, RAWATE AND AAKOLI

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INTERACTIONS WITH VILLAGE DEVELOPMENT OFFICE, VILLAGE RAWATE



INTERACTION WITH ANGANWADI WORKERS, RANI SHIGAON

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INTERACTIONS WITH VILLAGE DEVELOPMENT OFFICER, VILLAGE SHIGAON



GRAM PANCHAYAT OFFICE, VILLGAGE SHIGAON

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GRAM PANCHAYAT OFFICE, KOLAVALI AND DEDAHE



INTERACTION WITH VILLAGE DEVELOPMENT OFFICER, KOLAVALI AND DEDAHE



GRAM PANCHAYAT OFFICE, VILLAGE TAWA



INTERACTION WITH GRAM PANCHAYAT OFFICIALS, VILLAGE TAWA

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PRIMARY HEALTH CENTRE, VILLAGE TAWA

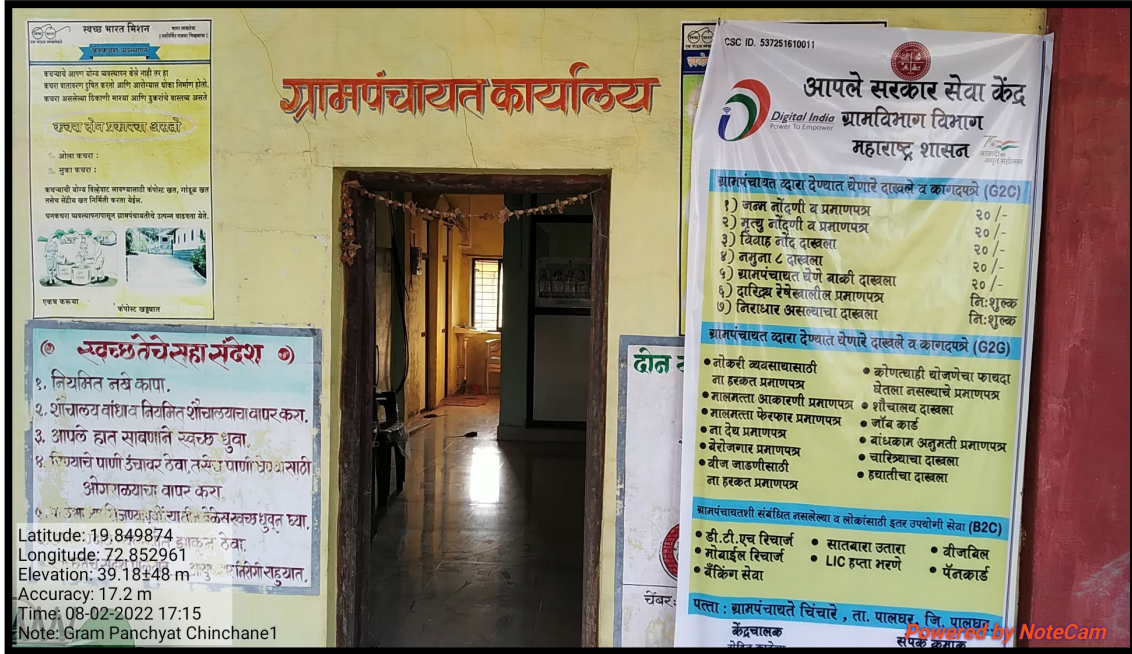


INTERACTIONS WITH HEALTH OFFICIALS, PHC, VILLAGE TAWA

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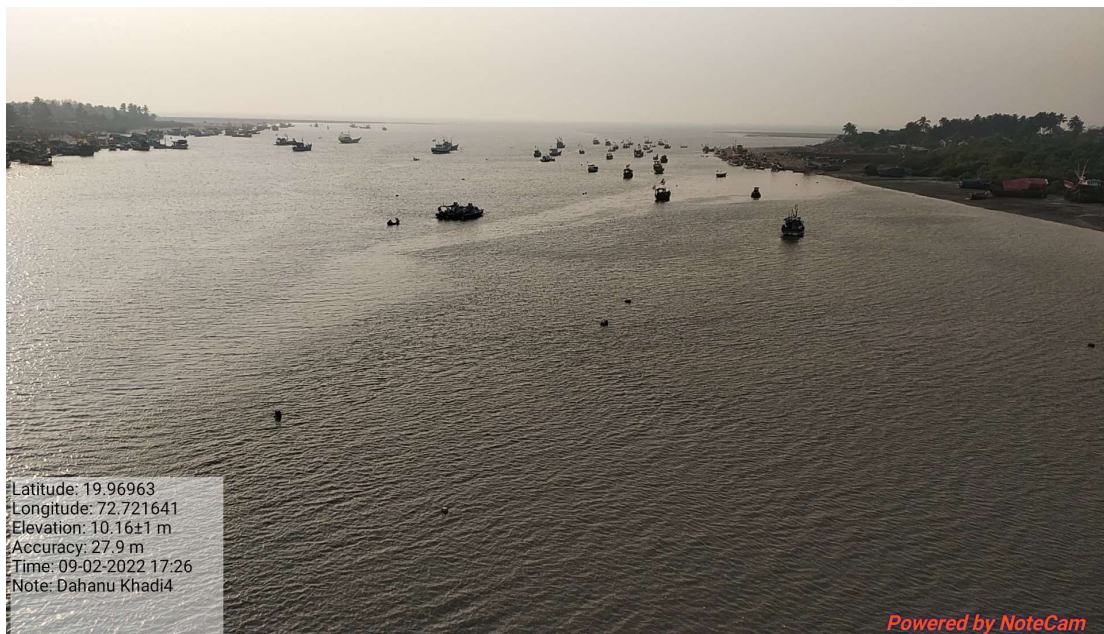
GRAM PANCHAYAT OFFICE, VILLAGE CHINCHANE



INTERACTIONS WITH VILLAGE DEVELOPMENT OFFICER, CHINCHANI



INTERACTIONS WITH LOCALS- VILALGE NANAVALI



FISHING ACTIVITY IN DAHANU KHADI, DHAKTI DAHANU

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SUNSET AT VADHVAN BEACH



INTERACTION WITH LOCAL BUSINESSMAN, VILLAGE VANGAON



VIEW OF VADHVAN BEACH



VIEW OF VAROR BEACH



VIEW OF DAHANU BEACH



PROJECT BRIEFING BY JNPT AUTHORITIES IN BDO OFFICE, DAHANU



PEOPLE ATTEENED THE PROJECT BRIEFING BY JNPT AUTHORITIES AT BDO OFFICE



GROUP DISCUSSION WITH PEOPLES IN KOLAVALI-DEDADE



GROUP DISCUSSION WITH PEOPLES IN KOLAVALI-DEDADE VILLAGE



GROUP DISCUSSION WITH PEOPLES IN TARAPUR VILLAGE



VISIT TO PUBLIC DISTRIBUTION SHOP IN AAKOLI VILLAGE



GROUP DISCUSSION WITH PEOPLES IN AMBEDHE VILLAGE



GROUP DISCUSSION WITH PEOPLES IN RAWATE VILLAGE



VISIT TO CHINCHARE-AAKEGAVHAN GRAM PANCHAYAT OFFICE BY JNPT TEAM

CHAPTER 4

SOCIAL IMPACTS OF PROPOSED PORT ACTIVITY

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	Chapter-4 Social Impacts of Proposed Port Activity

4.0 Social Impacts of Proposed Port Activity

4.0 Impact on Socio Economics

4.1 Impacts during Pre-Constructional Phase / Constructional Phase

For construction of the deep draft port facilities and related facilities which are in port limit area consists 16,900 Ha of area out of which 15363,5 Ha is of water front area and balance area is comprised of intertidal zone. 571 Ha of land to be acquired out of port limit to develop infrastructure facilities such Rail connectivity system from villagers /households. As per records of Governments and physical verification through primary and secondary surveys indicates that no displacement of persons or families in port limit area and out of port area. It is proposed to resettle the project affected persons in all impacted villages. Suitable measures for rehabilitation and resettlement of project affected persons/families are provided in the R&R Package and to be approved by State Government of Maharashtra.

Sources of major socioeconomic impacts during pre-construction phase are activities like land acquisition, and resettlement of project affected persons in port limit area and facilities linked Port Project.

- **Land Acquisition and Displacement**

Land acquisition shall result in loss of agricultural fields of the PAPs and loss of livelihood who are dependent on particular land and shall create loss of agricultural income to those directly and indirectly depended on it. As no houses are displaced in Rail and Road corridor and port projects no displacement impacts due to proposed port activities

Loss of Agricultural Income Due to Project Land Acquisition-Rail and Road Corridors

Loss of agricultural land will lead to a reduction in the regular household income for all the PAPs. The losers will be compensated for their loss. As per the R&R package of JNPA, compensation as fixed by the government will be given to the PAPs and preference will be given to the PAPs in the company for eligible suitable employment, taking into consideration their skills and also create new employment avenues by creating trailing programmes. These measures will compensate the loss of agricultural income.

Loss of Employment for those Dependent on Agriculture

About 1237 landlords are dependent only on agricultural activity and related activities without having any other skills. Loss of agricultural land has a multiplier effect on them.

The major occupation of PAPs is mainly agricultural activity and impact is significant. This impact can be mitigated by employing the measures suggested earlier, for the case of loss of agricultural land.

As per primary survey by CMFRI and other surveys reveals that, it is important to provide preference in the development programs of JNPA in agriculture, horticulture, pisciculture, social forestry, mushroom cultivation etc. JNPA CSR groups will under undertake various activities/self-employment schemes including Tailoring training, Assistance for grocery shop, Cycle repairing, Training on Mushroom and food preservation, Pottery Training, etc. to improve financial position. These efforts will enhance the socio-economic condition of people.

Loss of Fisheries due to Development of Port Facilities

An area of 16000 Ha of area and also good amount of amount of surrounding area of proposed port area is not available permanently to locals especially to fishermen who are dominant in port area villages Varor, Vadhwan, Tudiwali and Gungwada and also 12 villages which are dependent on fishing and related activity due to development of port project. Development activity of port will affect livelihood of dependent on waterfront intertidal zone which harbours variety of fishery resources. Suitable training and improvement of skills in fishing and related activities These population will be trained in various fishery related development skill to PAPs as per fishery development programmes under JNPA fishery community development packages.

Cultural Impacts

The total population in 10 km radius is of 140070. Most of these people belong to scheduled tribe and scheduled tribe. Apart from this, the population of migrant construction manpower and is significant due to construction activities (10000) and is significant. They may also belong to different caste groups. Hence, these people may cause significant disturbances to the cultural fabric of the project site. To avoid this, the construction workforce will first be housed in construction camps and they will be trained to understand the local culture. This may be done as part of the safety training carried out by contractors. Strict action will be taken against those committing human right violations, especially when the migrant construction workers interfere with the locals of the impact area.

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In addition, local population will also be trained on possible fallout of construction workforce. JNPA can take up this training through its developmental activities, or through Self Help Groups)

It can be concluded that, the impacts on social environment due to various Pre-Constructional / Constructional operations, is varying in nature, but with proper planning and mitigation measures, the negative impacts can be minimized.

4.2 During Operational Phase

- **Loss of Agricultural Income**

As the JNPA port and related facilities will use some agricultural land, an equivalent amount of agricultural production will be lost on a permanent basis. Total private land acquired for the plant is 298.44 ha. As an upper estimate, if one assumes that the entire private land is agricultural land (though it also contains some residential area), and the major crop, namely paddy and vegetable crops like, capsicum tomato etc. are grown in the entire area at an average yield of crops are very low comparative to others areas of district and state, there will be a loss of considerable amount of paddy production thousand and crops per year. Note that this loss of agricultural production can be compensated by increasing agricultural productivity of the remaining agricultural lands, as the present productivity of agricultural lands in the project area is small. JNPA as part of its developmental activities, is training local farmers to utilise latest farming technologies and fertilisers to improve agricultural productivity in the area. This will increase agricultural productivity in the area, and hence the adverse impacts can be mitigated.

- **Operational Manpower**

The project is expected to employ about 5,000 people for its port operations and as well as for security and supporting services. It is proposed to be give PAPs in employment on basis of educational and eligibility to one member per family.

The requirement of unskilled manpower in the plant operation will also be met from nearby villages. The project will also help in generation of the indirect employment to the study area. This will be a positive socio-economic development for the region. There will be a general upliftment of standard of living in the region.

- **Amenities Required for Operational Manpower**

The operational manpower including support services need housing, water, sanitation, health, travel, electricity and other infrastructure in the project site. To accommodate this operational manpower, a township for an estimated population of 5000 peoples is planned as part of the project. The township will be designed self sufficient with school, hospital, sanitation and other necessary infrastructure facilities.

As most of the manpower needed during the operation phase will be housed in the self-supporting township, the associated impacts on the project locality are expected to be minimal. There will not be much additional demand on the existing infrastructure at the locality, such as housing, educational and medical facilities.

- **Transportation**

Township is located about 1.0 km away from the port limit. Hence, most of the employees need not travel for longer distances, and accordingly, the impact of transport of personnel on the local system is very minimal.

- **Health Issues**

The existing medical infrastructure in the project site is very meager. JNPA is improving some of the facilities in local medical centres as part of its developmental activities. Project authorities have been organizing free health check up camps and eye camps every year. Through these camps medicine is distributed freely. Care also been taken treatment of common ailments through the health workers, which are trained by JNPA Hence, the impact of JNPA on the locally available health infrastructure will be beneficial.

- **Impact on Other Infrastructure**

The project area will be positively benefited in terms of education and sanitation because JNPA is helping to improve these infrastructures in the project area.

4.3 Possible Impact of Proposed Project on People in the Area

The impact of the project on PAPs would depend upon the nature and size of the project, greater the size of the project larger the requirement of land and displacement of population. Generally, greater the capital intensive and high-tech project lesser the requirement of manpower from among the uneducated rural lot of the population. Moreover, greater the extent of project with chemical pollutants, higher the intensity and all-round environmental impact in the area.

The setting up of any kind project would undoubtedly include significant impact on socio-economic and cultural life of the people in the project area. These impacts will be largely positive associated with some adverse effects as well. Here, an attempt is made to visualize and discuss such tentative impacts likely to be induced by the project. Prediction of qualitative impacts on socio-economic environment is presented in **Table 4.1**.

Table 4.1
Prediction of Qualitative Impact on Socio-Economic Environment

S. N.	Parameters	Local	Regional	Direct	Indirect
1.	Employment	+	+	+	+
2.	Income	+	+	+	+
3.	Water supply	+	+	+	+
4.	Transport	+	+	+	•
5.	Education	+	•	+	•
6.	Medical facilities	+	•	+	•
7.	Communication	+	+	+	+
8.	Fuel availability	+	+	•	•
9.	Power supply	+	+	+	+
10.	Sanitation	+	•	+	•
11.	Housing	+	•	+	•
12.	Health	–	•	•	–
13.	Recreation	+	•	•	•
14.	Agriculture	–	•	–	•
15.	Fishing	–	•	–	•
16.	Fishing Allied Activities	–	•	–	•

17.	Cost of living	+	+	+	+
18.	Business	+	+	+	●
19.	Per capita income	+	+	+	●
20.	Environmental population	-	●	-	●

+ : Positive Impact

- : Negative Impact

● : Insignificant

4.3.1 Positive Impact

Employment Generation

In its initial phase, the project will generate immense employment opportunities for the people. The entire area will have to be suitably developed according to the need and requirement of the project, so there will be labour intensive work opportunities. Post establishment of the project should also create large scope for good jobs, self-employment, trade & commerce.

Enhanced Agricultural Production in the Peripheral Villages

The present agricultural production mainly comprises of Paddy, Vari, Bean-Legume and Vegetables.

Moreover, under the prevailing circumstances, farmers in the impact area of project may go for commercialization of their agriculture. Green vegetable, fruits and Legume of different kind may substitute major cropping pattern of the present time. However, the farmers from amongst the displaced PAPs may not be able to reap the benefits of such opportunities. However, they may take benefit from other diversified opportunities. There will be a wide scope for development of animal husbandry, such as dairy farm, poultry farm to meet the daily requirements of township population.

Generation of Newer Self Employment Opportunities

The development of port project will generate tremendous opportunities in the service sectors. Practically all kind of services will be needed which will have to be fulfilled by the local populous. Service sector, being labour intensive, will generate self-employment and employment opportunities of newer kind.

Enhancement of Educational Status of People

At present the technical educational level amongst the project affected people is not up to the mark for absorption in employment by Vadhvan Port. Therefore, proponent should provide them such education on priority. This will help PAPs to fit them with requirement of Vadhvan Port when project starts production.

The development of township will definitely lead to setting up of better educational institutions, technical and vocational training centers. Children and youth in study area aspiring to gain better educational qualification will be benefited. There may be motivation amongst girls and women to take up education for their personal development.

Wider Employment Opportunities of Global Nature for the Youth

With the better educational facilities and training available due to development in the area, the youth can prepare themselves to acquire suitable jobs in different big firms other than Vadhvan Port. Such opportunities will not only benefit the youth at present but also the new generation to come.

Enhancement of Cultural Status

The project envisages bringing various other communities to the area and thereby enabling rapid enhancement of an urban environment.

Better Connectivity through Developed Infrastructure

Actualization of the proposed project will further augment the development of infrastructure, such as communication network (post & telecommunication), road and railway, etc. these better means of communication will further boost not only the economy of local populace but also the whole region and thus strike a balance of regional development in the state.

Improved transport network will inevitably enhance the mobility of people and thus raise educational status of local populace.

Beside the communication network, health facilities also will increase. Right now, only Dahanu which is nearly 13 km from study area has better health facilities. The establishment of the new project will indeed add to health facilities.

At present the villages in the study area do not seem to have any significant medical institution, like any measure hospital apart from Dahanu. The advent of the proposed

project with varied infrastructure development will no doubt result into transformation of the economy of local populace as well as the region as a whole.

Augmentation of Potable Water Available

Project authorities will require taking step to augment water supply to meet the need of the project. They may deploy latest techniques of water conservation and management. This is bound to alleviate the perennial contaminated water faced by the PAPs.

As such the positive impact would consequently lead to an upliftment of the quality of life both subjective and cumulative of the people in the area is depicted in the **Table 4.2** and **Table 4.3** respectively.

Table 4.2
Expected Changes in Subjective Quality of Life Indices

S. N.	Villages	QoL _(s) existing	QoL _(s) after implementation of EMP and welfare measures
1	Chinchani	0.62	0.64
2	Tarapur	0.62	0.65
3	Shigaon	0.58	0.60
4	Chandigaon	0.55	0.58
5	Asangaon	0.54	0.57
6	Ghol	0.52	0.55
7	Tava	0.53	0.56
8	Kolavali	0.56	0.59
9	Dedale	0.55	0.57
10	Varor	0.52	0.57
11	Vadhvan	0.60	0.63
12	Akoli	0.53	0.57

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13	Hanuman Nagar	0.55	0.59
14	Nevale	0.53	0.56
15	Ravate	0.54	0.60
16	Khaniwade	0.58	0.60
17	Chinchare	0.59	0.62
18	Nanivali	0.59	0.61
19	Kolhan	0.51	0.55
20	Dhamatane	0.52	0.55
21	Vasgaon	0.53	0.57
22	Bal Pokharan	0.58	0.61
23	Dahanu	0.66	0.68
	Average QoL	0.56	0.59

**Table 4.3
Expected Changes in Cumulative Quality of Life Indices**

S. N.	Villages	QoL(c) existing	QoL(c) after implementation of EMP and welfare measures
1	Chinchani	0.63	0.66
2	Tarapur	0.63	0.66
3	Shigaon	0.59	0.61
4	Chandigaon	0.57	0.60
5	Asangaon	0.55	0.58
6	Ghol	0.54	0.57
7	Tava	0.54	0.57
8	Kolavali	0.57	0.60
9	Dedale	0.57	0.59
10	Varor	0.54	0.58
11	Vadhvan	0.62	0.66
12	Akoli	0.53	0.57
13	Hanuman Nagar	0.57	0.60
14	Nevale	0.54	0.57
15	Ravate	0.55	0.59
16	Khaniwade	0.58	0.60
17	Chinchare	0.59	0.62
18	Nanivali	0.59	0.61
19	Kolhan	0.53	0.59
20	Dhamatane	0.54	0.59

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21	Vasgaon	0.53	0.57
22	Bal Pokharan	0.60	0.65
23	Dahanu	0.68	0.70
	Average QoL	0.57	0.61

4.3.2 Adverse Impact

Land Alienation

Acquisition of land for the project will alienate the village population from their own ancestral land. However little, land has been their primary means of livelihood for the people. Apart from the sentiments, it is the land to which they depend as a security of their livelihood for upcoming years to come. Therefore, land acquisition may affect them adversely.

Change of Primary Occupation of PAPs

Land alienation and Sea Shore Custody by the management of Vadhvan Port automatically results in change of present primary occupation of the people. For a large number, fishing, agriculture and its allied activities is the chief occupation. As such, to adopt any other occupation may not be easily accepted to the PAPs. Moreover, they may not be quite equipped to undertake nonagricultural or other occupation than fishing and its allied activities.

Beside the landowners, there are other sections of population in the villages especially the landless laborer, marginal and small farmers who make their living on the land of other owner by way of share cropping or daily wage agriculture labour as well as fishermen have boat for fishing or boat-less fishermen who help the boat owners for fishing as well as allied activities. They too may need to adapt a new job opportunity.

Emergence of Crime

The entire project area & its surrounding villages are very peaceful and have religious environment. Crime of any kind is absolutely rare and unheard. However, various types of crime may creep in along with the process of development and urbanization. The project may create a cash economy and in flow of migrants from outside. As happened elsewhere, the possible prosperity may also bring its negative side of life.

More Domestication of Women

At present women folk in the project area are equal partners with men in the fishing and agricultural activities. The land alienation of the villages and Sea Shore Custody by the management of Vadhvan Port may automatically induce the women folk to work within their houses. They are not equipped in skills to get employment elsewhere – other than agriculture and fishing allied activities.

4.4 Changing Trends Due to Vadhvan Port in the Study Area

- **Environment**

People in the study area could not respond in a scientific way to environmental changes, due to lack of knowledge but senior citizens in the area shared their experience in changing trends of environmental conditions.

Environmental condition in the study area is changing very drastically. Decreasing vegetation is responsible to enhance air pollution as well as soil erosion; change in land use patterns is also responsible for environmental degradation. Surface water contamination is due to urbanization and the wrong way of disposal of sewerage and municipal solid waste. Groundwater contamination is prominently due to industrialization in the area. Respondents in the study area are stated that day by day groundwater table is declining. The diseases are mainly occurred due to water contamination. People in the area blamed industrialization and change in coastal activities for this degradation. People are not considering their responsibility and Palghar Municipal Corporation towards disposal of Municipal Solid waste and urban disposal of sewerage in the sea.

An increase in rapid industrialization and other activities like port development results in an increase in population density in the area. Increase population results in various demands like transportation, owned vehicle, residential complexes, and facilities for entertainment and recreation, all these activities end result in an increase in noise level, contamination in air and water quality the area as well as decrease in vegetation which is responsible for maintaining biodiversity and the control of ambient temperature in the area.

- **Social Changes**

Changing scenarios of social status is also reflected in the study area. Mode of entertainment and recreation alters from Theaters, fishermen's dance & singing and Tamasha Fad to Television, Radios, and Multiplex Culture.

Industrialization and development of port in the area will create various openings in career opportunities, resulting in a decrease in the percentage of immigration among educated youths. The advantage of this will reflect in the adoption of modern agricultural techniques. Hence people demand higher and qualitative educational facilities for the future generation in the area to fulfill their thirst. Non-Governmental Organization comes forward at their doorstep to provide excellent requirement.

Modern industrialization will prove to be a boon in the study area as it provides a primary and secondary source of income to most of the people who desire to work. They can concentrate simultaneously on both sources of income.

The project authority shares the information to the survey team that there will be a requirement of about 2000 workforce (excluding service providers) during the construction phase (about 48 months). With regards to the impacts due to construction worker camps, to ensure there is no strain on the existing infrastructure, the worker camps will be self-sufficient and would not rely on any local resource. This would also ensure that there is no conflict with the local population. To mitigate impacts from health hazards, sanitation facilities will be provided.

- Worker camps will be adequately equipped with necessary facilities such as water supply, power supply, wastewater collection, solid waste collection and sanitation, fuel supply, etc.
- Domestic wastes generated from worker camps will be collected properly treated and disposed of after complying with the norms stipulated by statutory authorities
- Cooking fuel will also need to be provided for by the contractor to the workers in the camp to avoid the destruction of local green cover.
- Project shall have its own STP for treating wastewater generated in labor camps and other processes.

- **Economic Changes**

Boon of industrialization and Vadhvan Port for domestic and international communication to the area of Dahanu gives various opportunities for area development to the people. This area becomes an important part of revenue generation in Maharashtra State.

Industrialization and hub for domestic and international cargo getting established will give a special class of educated people in area results information of various financial co-operative societies. These societies will help farmers as well as other businessmen to provide finance for their work. This financial help will not only enhance the business but also encourage them to adopt the modern technique for their progress.

Adoption of modern farming increases their per capita income and economic condition. The new mode of employment i.e., transportation will be an opportunity to the budding employable youths in the Study Area. The authority of the Vadhvan Port (JNPA) has already started providing practical education on driving light and heavy vehicles to the employable budding youth in the study area. With this primary source of income, secondary sources like transportation of materials received on the port, loading, and unloading of material in the trains as well as in trucks will also be employed for less-educated persons in the area.



Figure 4.1

The Practical Education of Driving Light and Heavy Vehicle

An increase in migrating population will enhance the hospitality industry in the area which may have unlimited potential. Allied activities have also a good scope as the gigantic market of Mumbai and Surat is at the doorstep of this area.

During the construction phase, there will be a requirement of about 10,000 skilled and unskilled personal daily whereas after the construction phase during the operational phase the requirement of around 6000 personnel is estimated.

The proposed port would have beneficial impacts through the provision of direct and indirect employment opportunities. At the time of construction and operational phases, there would be a requirement for a large number of skilled, semi-skilled, and unskilled workforces. Vadhvan port will open up new avenues of development through the creation of direct and indirect employment opportunities. It is imperative that local people would be employed based on their skills and educational qualifications. The employment potential from the construction phase of the proposed port is estimated as 2000 persons and expected direct employment during the operation phase will be 6,000 persons during Phase 1 increasing to 12,000 over master plan and 40,000 persons of

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indirect employment truck driving, truck repair, taxi service, eateries, cruise service, navy/coast guard base service, CFS service, etc.).

In addition to this, there would be:

- Container Freight Stations – with supply chains to the whole of Maharashtra
- Transport of building materials (steel, cement, tiles, timber, etc.) from various ports of India
- Stuffing/de-stuffing & supply chain management

There would also be a significant number of spin-off opportunities created within the region in other establishments catering to the needs of the port that will also employ a substantial number of people. The proposed project is likely to have a positive impact on the socio-economic condition of the region overall. Indirect employment will be generated due to the overall improvement of the socio-economic growth of the project region.

The Vadhvan port including the road and rail connectivity will increase employment opportunities. The proposed project will provide direct as well as indirect employment to the local people. The employment opportunities will be there in all phases of the project i.e., preconstruction, construction, and operational phases.

During the preconstruction stage, the various studies, design, surveys, and investigations including clearing of the area are going to add opportunities for both highly skilled as well as unskilled workers.

There will be a demand for skilled, semiskilled, and unskilled workforce during the construction phase of the road and rail connectivity and it is imperative that most local people would be employed based on their skills and educational qualifications. The employment potential from the construction phase of the proposed port connectivity (rail/road) is estimated at more than 300 persons for a period of two years.

The expected direct permanent employment will be 100 persons during the operation phase. The proposed project will have a direct positive impact on the socio-economic condition of the region that will bring opportunities to many sectors like tourism, health, hospitality, transport, commerce, trade, etc. With the addition of this employment potential, the indirect employment will be increased by many folds. Overall, the project is

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going to be an important asset for the Nation as well as for the State of Maharashtra which will develop the region with much better employment opportunities.

As per JNPA’s BOT Agreement: Personnel and Labor Requirements

Concessionaire shall employ personnel project. However, first preference shall be given to current JNPA employees who wish to seek employment with a new terminal operator. Then, preference should be given to JNPA Project affected Persons (PAP) to the extent qualified PAPs are available and willing to join the Project. The process of selection of Project Affected Persons shall not be less favorable than that for other candidates. In the event, the Concessionaire employs PAP through the contractors appointed by the Concessionaire. The same satisfy the obligations of Concessionaire as required under the terms of this agreement.

First preference will be given for employment as per their educational capacities to project affected families as per Government policy for 41 identified villages within 10 km radius and along the road, rail alignment, to the land losers for 21 villages and the persons who will be losing their livelihood (Fisherman).

Ministry of Corporate Affairs, Government of India has released Corporate Social Responsibility (CSR) Voluntary Guidelines in year 2009 which focuses on integrating social, environmental, and ethical responsibilities into the governance of businesses to ensure their long-term success, competitiveness, and sustainability.

Most of the local communities and elected representatives are looking at GoM-CSR activities as an opportunity to address local peoples’ day-to-day issues/problems. Initially, as a part of CSR, JNPA/ VPPL will propose to take up the following activities for improving the way of living of people of Vadhvan and other nearby villages in the 2 km radii area, and in later stages, JNPA/ VPPL will extend these activities to 15 km radius.

Fisher Folk

The fisherfolk is a very important factor to be considered during the study of Social Impact Assessment. The Population from 11 villages in the study area has their livelihood on the fishing.

Most of the fisher population seems to be congregated in Dhakti-Dahanu village (21.0%) followed by Dahanu (9.3%), Chinchani (8.7%), Ghivali (8.7%), Gungwada (8.6%), Dhumket (7.5%). The remaining 7,525 fisher population (36.2%) resides in the remaining 10

villages. The study by CMFRI revealed that 3,537 (17%) of the total fisher population is involved in actual fishing activities. Among them, 1,734 fishers (49.0%) are engaged full time and the remaining 1,803 fishers (51.0%) have part-time involvement in fishery-related activities. A total of 7,580 fishers are engaged in fishing-associated activities viz. marketing of fish, making/repairing of nets, curing/processing, peeling/cutting, laborer, and other activities such as the collection of bivalves, seaweeds, collection of ornamental fishes, etc.

Predicted Impact on Fisher Folk

1. Loss of fish and productivity of the area due to increased turbidity during the construction and operational phase of the proposed port. Increased rate of turbidity (TSS) affects the light penetration which impacts the primary productivity, water quality, disturbance to marine life affecting total biological productivity causing fishery decline, which will in turn lead to fishing location changes and affecting income per trip. However, the nearshore waters are highly turbid due to sandy bottoms and strong tide and coastal currents.
2. In the operational phase the deterioration of water quality in and around port facility is expected, which in turn increases the stress on marine organisms, people. Additionally it will also affect the quality of open-air fish drying.
3. Reduced fishing area, crowding and conflicts -may lead to increased pressure in the available fishing locations and sectoral conflicts due to crowding effect increase the competition for fishing space in the other nearshore waters.
4. There is a visible loss of fishable areas, which will be further enhanced if any restriction on activities is further related to development/security. Larger development plans and security concerns can further create access restriction.
5. Destruction of the rocky bottom and sedimentation/siltation and reclamation will affect the bottom set gillnet fishery targeting lobsters.
6. Any possible change in currents due to the construction of large breakwater will affect the fixed fishing gear operators beyond the port limit. If any such concerns are raised, they may be compensated adequately.

7. Reduced fishing time -With the increased vessel traffic in the nearshore waters fishing time will be reduced highly and higher chances of operation disruption causing increased risk to fishers.
8. Another impact includes, increase in traffic, affecting fisher accidents, high waves which necessitates exclusion zones. The vessels operate in the region are smaller, which makes it difficult to observe, besides, these vessels don't have AIS or VMS systems.
9. The impact on the resources may also impact the value chain, from harvest to endpoint consumer. It will affect the income to fish drying units, women vendors.
10. The long breakwater in the north side between the coastal Increase in operational cost and loss in total fishing time due to the blockade created by break wall, they have to travel additional distance during construction and the post-construction phase. As mentioned, fishing is the primary source of livelihood and will be affected. 11.2 km-long breakwater, whose tail would rest near the shore, while the head would be in the sea at a depth of 18 meters, which will increase the navigation route fishers of immediate south of the port
11. Decrease in fisheries participations- Due to expected new opportunities, moving out from sector is expected and also due to income change, till finding advantages of situations
12. During the construction phase, a lot of equipment, construction material, etc. transportation between the site is expected through sea and land, these changes and or pollution, which may create behavioural and health issues in the coastal community.

The project authority will not become free from their responsibility after providing compensation in terms of money. They should Plan to resettle and rehabilitate then with alternative livelihood.

Fisheries Sector

- Construction of fishing harbor to promote fishing activity in the region.
- Construction of breakwater to provide more tranquility and increase in operable days.
- Enhance the infrastructural facilities for fish landing, auction, boat parking, net storage, outboard engine storage, vehicle parking, etc,

- Development of Sea Food Park in the association of State Government for export-oriented value addition of marine resources with the aim of employment to the marginalized.
- Skill development centers for fisheries and container operation related logistic courses like truck terminal, driving and related repair facilities /training in association with CMFRI

Agriculture Sector

- Provision of adequate subsidy and financial supports for farming items, equipment and marketing tie-ups, in consultation with various govt. departments like Horticulture, Agriculture, Animal husbandry departments.

Tourism Sector

- In association with the State Tourism Department to chart out programs for developing the Vadhvan as a tourism local corridor.
- Starting govt. approved tourist guide course in the region which may provide livelihood supports and alternate employment opportunities to the people.
- Establishing small-scale commercial ventures like eateries, antique shops, taxi service outlets, lodging services, etc.

Common Infrastructure Facility

Development of new facilities as well as maintenance of existing common infrastructure facilities is a very important part of the CSR plan of JNPA/ VPPL. Following are the details of such CSR activities:

Water Supply

In consultation with Maharashtra Jal Pradhikaran (MJP), the development of a water supply scheme is being augmented to provide drinking water in fishing villages.

Groundwater recharges through infiltration ponds and controlled outflow of water to sea will be practiced.

Recycling and reuse of the water in the port buildings and storage tank & pumping facilities for reuse of wastewater generated in the Vadhvan area.

Environmental Sanitation

Separate community latrine complexes for men and women in each location will be provided and may be maintained by a team of locals on a pay and use basis of operation.

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Total sanitation within 2 km radii of the project site shall be implemented in association with the Maharashtra Swachata Mission.

Decentralized Wastewater Treatment

Decentralized wastewater treatment like soak pits, digestion tanks, advanced compact treatment units may be developed to treat the wastewater at the site within the 2 km stretch of the project, by dividing it into 4 area/ commercial centers over and above that for the JNPA/ VPPL requirements.

Solid Waste Management

Developing community-based vermin composting plants for biodegradable waste management.

Plastic waste management with the help of local NGOs/ SHGs.

Educational Facility

- Upgradation of Upper Primary school.
- Financial assistance for educating the children of project-affected people.

Medical Facility

- Up-gradation of the
- local public health center at Vadhvan to a fully-fledged hospital equipped with an ambulance.
- Establishment of Rural health center.

Promotion of Renewable Energy

Following the concept of sustainable development and reducing the carbon footprint, JNPA/ VPPL proposes to promote use of renewable energy in the region like, biomass, wind, solar, wave, etc., for its energy requirements to the extent possible.

Self Help Group (SHG)

Self Help Groups (Female) is a plan in which SHG will lead the way by enabling in customers with insight and capabilities that boost their freedom to achieve superior results & always plan to work with female unemployed youth and senior citizen to develop new way of income.

Self-help groups (SHGs) play today a major role in poverty alleviation in rural India. A growing number of poor people (mostly women) in various parts of India are members of SHGs and actively engage in savings and credit (S/C), as well as in other activities

(income generation, natural resources management, literacy, child care and nutrition, etc.). The S/C focus in the SHG is the most prominent element and offers a chance to create some control over capital, albeit in very small amounts. The SHG system has proven to be very relevant and effective in offering women the possibility to break gradually away from exploitation and isolation.

Females in the study area are also not behind the men in supporting economic growth. All over the study area, it is observed that there are a number of female self-help groups. All these groups are very active. Most of the self-help groups are involved in the Mid-day meal program of Sarva Shiksha Abhiyan.

- **Cultural Changes:**

Dahanu Taluka of Palghar district is bounded by Talasari taluka of Palghar along with Gujarat state in north and by Palghar Taluka in the south, Jawhar Taluka along with Nashik district at east, Vikramgad at South-East along with Thane district and Arabian Sea in West direction respectively. The formation of this district was done recently on 01/08/2014 and hence no separate census of district has been established, therefore the cultural status of the district is similar to the parent district i.e. Thane district. The increase in migrating population during construction as well as during operational phase may result in drastic cultural change in the study area.

4.5 Quality of Life

There is a change in every aspect of quality of life in the study area. This can be measured in different examples like:

- Change in Economic Growth
- Change in Social Status
- Change in Cultural & Aesthetic
- Change in Environmental Conditions
- Change in Clothing
- Change in Cropping Pattern
- Change in Educational Pattern
- Modernization
- Change in Lifestyle (Fundamental needs to Recreational & Entertainment Facility)
- Change in Needs and Demands

- xi. Change in Housing Pattern
- xii. Change in Business
- xiii. Change in Sanitation Facility
- xiv. Change in Transportation Modes
- xv. Evolution of Thought Power
- xvi. Involvement in Global Advancement

Positive impact would consequently lead to an upliftment of the quality of life both subjective and cumulative of the people in the area is depicted in the **Table 4.4** and **Table 4.5** respectively.

Table 4.4
Expected Changes in Subjective Quality of Life Indices

S. N.	Villages	QoL _(s) existing	QoL _(s) after implementation of EMP and welfare measures
1	Chinchani	0.62	0.64
2	Tarapur	0.62	0.65
3	Shigaon	0.58	0.60
4	Chandigaon	0.55	0.58
5	Asangaon	0.54	0.57
6	Ghol	0.52	0.55
7	Tava	0.53	0.56
8	Kolavali	0.56	0.59
9	Dedale	0.55	0.57
10	Varor	0.52	0.57
11	Vadhvan	0.60	0.63
12	Akoli	0.53	0.57
13	Hanuman Nagar	0.55	0.59

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14	Nevale	0.53	0.56
15	Ravate	0.54	0.60
16	Khaniwade	0.58	0.60
17	Chinchare	0.59	0.62
18	Nanivali	0.59	0.61
19	Kolhan	0.51	0.55
20	Dhamatane	0.52	0.55
21	Vasgaon	0.53	0.57
22	Bal Pokharan	0.58	0.61
23	Dahanu	0.66	0.68
	Average QoL	0.56	0.59

Table 4.5
Expected Changes in Cumulative Quality of Life Indices

S. N.	Villages	QoL(c) existing	QoL(c) after implementation of EMP and welfare measures
1	Chinchani	0.63	0.66
2	Tarapur	0.63	0.66
3	Shigaon	0.59	0.61
4	Chandigaon	0.57	0.60
5	Asangaon	0.55	0.58
6	Ghol	0.54	0.57
7	Tava	0.54	0.57
8	Kolavali	0.57	0.60
9	Dedale	0.57	0.59
10	Varor	0.54	0.58
11	Vadhvan	0.62	0.66
12	Akoli	0.53	0.57
13	Hanuman Nagar	0.57	0.60
14	Nevale	0.54	0.57
15	Ravate	0.55	0.59
16	Khaniwade	0.58	0.60
17	Chinchare	0.59	0.62
18	Nanivali	0.59	0.61
19	Kolhan	0.53	0.59
20	Dhamatane	0.54	0.59

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21	Vasgaon	0.53	0.57
22	Bal Pokharan	0.60	0.65
23	Dahanu	0.68	0.70
	Average QoL	0.57	0.61

CHAPTER 5

SOCIAL MANAGEMENT PLAN

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5.0 Introduction

The primary output of Social Management Plan is a comprehensive Social Management is the go-to document for a clear overview of the site's social performance context, issues, and objectives. The SMP defines and drives progress towards the site's long-term social performance objectives. The SMP is subject to a substantial refresh every five years as a result of a review/update of the baseline and context analysis, or more frequently owing to significant changes in the management Plan. SMP also includes an annual implementation plan, which should be updated every year as it reflects the priorities and activities from conceptual stage to entire project life. The process of developing the SMP should be cross-functional.

To develop a realistic social Management plant, the survey team comes to the conclusion that the people in the study area need help to get benefited from the government schemes available for them. Very few of them are aware of the government schemes. Therefore, it is recommended that the project authority shall identify the CSR team from their welfare department and become the bridge between villagers of the study area and government authorities for the benefit of the people.

Implementation of the following schemes shall be done with the help of constituting a bridge between Project Affected Peoples and the Government of India. For this purpose, The Vadhvan Port Authority shall constitute a Corporate Social Responsibility Action Plan Implementation Committee as below,

1	Dy Chairman, JNPA	Chairman
2	Collector Palghar District	Member
3	Dahanu Environment Protection Agency	Member
4	A representative from the Project Affected Villages	Member
5	All Section Head of JNPA	Member

The committee will help the villagers to get benefited from the following scheme for the upliftment in their Quality of life.

The Survey Team has suggested government schemes with detailed features for the welfare of the people of the study area of Vadhvan Port.

The suggested Schemes are as follows

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1. Village Adoption Scheme
2. Tribal Development Framework (TDF)
3. Rural Development Scheme
4. Youth Development Plan
5. Out of School Youth Development Scheme
6. Development of Adolescents Schemes
7. Women Empowerment Plan
8. Disabled-Person Development Schemes
9. Health Schemes/Programs
10. National Scheme of Welfare of Fishermen

5.1 Village Adoption Scheme

“A Model for Rural Development” in a metamorphic sense where the villages are adopted by various institutions for a period of five years or so, during which the villages are the subject of various degrees of interventions are so designed that the villages would slowly evolve to a level of sustainability and continue their developmental progress even after the institutions, systematically withdrew from direct participation in their daily affairs.

- a. Socio-economic and physical condition of the villages before the project.
- b. Study of the villages and interventions carried out on the basis of the study.
- c. Socio-economic and physical condition of the villages after the project.

In the study area cement factory continuously expanding. This expansion takes place with the land acquisition of farmers. These activities change the livelihood of farmers and people having secondary employment in farming. As the educational level of the villagers is very low, it is very difficult for them to change over their employment patterns. Hence the graph of poverty increases day by day and deviates towards human suffering. To reduce the poverty following strategies should be adopted

- I. Rural Economic Growth
- II. Development of Human Resources through Education

In the Village Adoption Scheme, the different layers of rural society come together for development.

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To encourage traditional village arts and crafts exhibitions of individuals, villages are encouraged where the crafts would be made and sold to whoever was interested in buying to reduce the poverty of the village. The main stakeholders in the project were the villages.

Methodology for Implementation of Village Adoption/ Village Development Plan

5.1.1 Rationale

A majority of the villages in the study area still face constraints such as access to education, health facilities, drinking water, power, roads, Credit, Information and Market. Against this background, adoption of especially villages having poor quality of life through preparation of Village Development Plans (VDPs) would go a long way in ensuring holistic and integrated development of the villages concerned and shown in **Table 5.1**.

5.1.2 VDP – The Objectives

The objective of Village Development Plan is to develop the selected village in an integrated manner. This would include economic development, infrastructure development and other aspects of human development i.e., education, health, drinking water supply, etc., besides access to credit.

5.1.3 Need for an implementing Agency

For a holistic and integrated development of a village through synergy and convergence, involvement of various agencies such as Government departments, Panchayat Raj Institutions, Banks, NGOs and other Peoples’ Organizations and developmental agencies is considered imperative. In order to synergize and coordinate this process, identification of a nodal agency is considered essential, but not a pre-requisite for implementation of the plan.

5.1.4 Who can become the Nodal/Implementing Agency

Any willing Government/Non-government agencies including Agricultural/Rural based Universities, KVKs, Farmers’ clubs, SHGs, Village Development Committees, Individual Rural Volunteers (IRVs), Cooperative Societies, Post Offices and bank branches.

5.1.5 Selection of Nodal Agency

Vadhvan Port Private Limited (VPPL) can either directly take up the VDP or can identify any of the nodal agencies listed above and finalize the same in due consultation with Chief Engineer of that particular plant. Due care may be taken to ensure that the agency so

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selected, is locally based to mobilize the requisite support from other stakeholders to deliver the intended results.

- i. Building of personnel from banks, Government Departments and community-based organizations
- ii. Coordination with Government Departments for social development, i.e., education, health, women and child development, youth, etc.
- iii. Implementation of development programmes envisaged under Government Plan.
- iv. Marketing related intervention
- v. Environment/Ecology related interventions
- vi. Value chain management

5.1.6 Broad Roles and Responsibilities of Nodal Agency

- i. To create awareness in the village and play effective leadership role in building People's Organization/ Groups for various developmental activities.
- ii. To facilitate convergence/integration of various programmes of NABARD, State/Central Government and other agencies in the village.
- iii. To help/prepare a Village Development Plan to ensure socio-economic and livelihood advancement with enhanced credit support and financial inclusion of all families in the village.
- iv. To identify capacity building needs of the villagers.
- v. To assist in infrastructure development in the village through participation of people/local institutions.
- vi. To protect forests and preserve the village eco-system and conserve soil health and other natural resources.
- vii. To monitor progress of implementation of the plan

5.1.7 Selection of villages – Broad Criteria

- The selected village should be within the PPID block/DDM district (Non DDM district will also be considered on merit) (in the case of NABARD). Banks can have their own choice.
- The selected village should have responsive panchayat machinery.
- The selected village should be well connected with the district head quarter.

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- The village which volunteers for higher level of participation/ contribution may be given priority.

Preference may be accorded to backward villages which have the potential and need for development.

5.1.8 VDP – Broad Activities

- i. Interface with village communities and assessing their varied needs through Participatory Rural Appraisal (PRA) techniques.
- ii. Meeting credit needs of poor through formation of Self-Help Groups/Joint Liability Groups/Farmers clubs initiatives.
- iii. Watershed Development/Multi-activity approach/Livelihood based activities.
- iv. In tribal dominant villages, development through “Wadi” approach.
- v. Off Farm/Non-Farm activities including Rural Haat, cluster development around the village, skill development, MED (Micro Enterprise Development), Entrepreneurship Development Programme (EDP).
- vi. Assessment of credit needs/formulation of projects for Agriculture/Rural Development.
- vii. Creation of Infrastructure with the support of Government Sponsored programmes, if any, in this regard. (Rural Infrastructure Development Fund (RIDF) support by NABARD may be prioritized for connectivity, irrigation, social infrastructure, etc. in the village).
- viii. Assessment of credit plus requirements i.e. promotional needs including capacity building of personnel from banks, Government Departments and community based organizations.
- ix. Coordination with Government Departments for social development, i.e. education, health, women and child development, youth, etc.
- x. Implementation of development programmes envisaged under Government Plan.
- xi. Marketing related intervention
- xii. Environment/Ecology related interventions
- xiii. Value chain management

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5.1.9 VDP - Preparation of a Plan document

Plan should contain:

- **Basic information** – Gender wise population features, literacy and other data from census, area of village, land use pattern, trend of production and productivity of major crops, milk, fish, fruits, vegetables and other major products Forest cover, water resources, etc., social structures, families belonging to backward classes, access to health, safe drinking water, power, etc.
- Existing situation – problems/constraints including those relating to Gender,
- Environment, infrastructural gaps, communication facilities, etc.
- Information relating to presence and support of institutional agencies such as Banks, NGOs, Pos, etc.
- Credit flow details including recovery position.

A Plan Document may be prepared by Nodal/Implementing Agency covering the following broad areas:

- i. Developmental Activities with credit support from Banking institutions.
- ii. Promotional support in the form of grant or soft loan assistance from NABARD (National Bank for Agriculture and Rural Development) and other agencies including State/Central Government agencies/Line Departments.
- iii. Creation of Infrastructural facilities with support from NABARD under RIDF through State Government Departments or otherwise directly by State Government/PRIs, etc.
- iv. Promotional activities relating to adoption of villages (e.g. conduct of meetings/workshops, publicity, etc.) - to be funded under the plan through grant support.
- v. Any other activities/programmes/schemes to be undertaken specifically other than the above.

Note:

- a. Dovetailing of various schemes / programmes for which Grant support is available from Government/other agencies (including NABARD) and

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- b. Government schemes for social development like education, health, drinking water, etc. may be attempted for synergy and convergence. A broad framework for the design of the plan is indicated below.

While formulating the integrated plan, the following points may be kept in view:

(i) Family centric approach to lending:

While assessing and meeting varied credit needs of the village communities in the identified village, ‘family-centric approach’ should be adopted as far as possible.

(ii) Coverage of borrowers under KCC (Kent County Council, 2003) – Financial Inclusion

All possible efforts should be made for identifying and bringing into the fold of KCC those farmers who are so far not covered by the KCC scheme including tenant farmers, oral lessees, share croppers, defaulters. The banks should be impressed upon the need to ensure that all the crop loans are routed through KCC only with at least 2% of their crop financing directed towards tenant farmers/oral lessees.

(iii) Peoples’ involvement

The success and sustainability of the Plan would depend upon peoples’ participation and ownership of the plan. Hence at every stage, involvement of people should be ensured.

(iv) Scope of the Plan

The Plan should aim at developing the selected village in such a manner that it becomes a replicable ‘model’ for holistic development.

5.1.10 VDP - Key Strategies

Developmental activities will be implemented through people’s participation involving Gram Panchayats (Panchayat Raj Institution’s; PRIs), Self Help Groups (SHGs), farmers’ groups and other people’s organizations. The ‘Integrated Development’ will include creation of infrastructure by concerned State Government, assisted by Nodal Implementing Agency, if necessary, as also other activities leading to human development like education, health, drinking water supply, etc. Economic activities will be taken up by people through individuals, SHGs, Farmers’ Clubs, PRIs, etc. based on local resources and with assistance from banks and support from Government and Non-Government Organizations (NGOs). The

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Nodal Agency would coordinate, facilitate and provide financial support either directly or through networking with banks/Government, etc.

5.1.11 Duration of the Plan

The period of VDP will be 3 years with scope for extension for another 2 years. The implementing agency/other agencies will strive to implement the plan within this period so as to have socio-economic impact on the lives of the village community.

5.1.12 Benchmarking the Impact

It would be desirable to have a benchmarking strategy to measure the impact of the Plan for a three-year period as under:

- Reducing the % of families BPL by %
- Increasing the literacy level by%,
- Reducing migration from the present level of% to% by creating avenues for additional employment.
- Achieving all-weather road connectivity to the village
- Ensuring 100% financial inclusion and doubling the credit disbursement
- Promoting units for rural industries, post-harvest handling, value addition including processing, and other economic units under rural non-farm sector.
- Gender-related vision
- Protection of environment/Ecological balancing/restoration. The expected position at the end of each year for the three years may be indicated
- To achieve the targets under various indicators, the input providers could be broadly grouped (indicating resources available from various departments, banks and other agencies, including the nodal agency) as under:
 - Deployment of credit
 - Targets projected by various Government Programmes under different schemes/programmes
 - Activities that could be assisted out of various promotional funds with NABARD or other agencies

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- Any other activities.

5.1.13 Tentative Budget for Three Different Models

For the purpose of coordinating various activities and convergence of various schemes/programmes with the help of identified nodal/or implementing agency in the selected village, it would be desirable to arrive at an estimated cost for different promotional purposes based on the population of such villages for a period of say 3 years which can be extended by another 2 years, if necessary. The cost estimates may have built-in flexibility to be adopted for individual villages, suiting to local needs/ requirements.

5.1.14 Operational Mechanism

- Conducting workshops by Nodal Agency or bankers to explain the concept and discuss ways to operationalize the same.
- Conducting workshop at the local level for Government officials concerned, banks, NGOs, local Panchayats and other development agencies and explain the concept and discuss ways to operationalize the same
- Assigning responsibility to a team of officers (need not be on exclusive basis) and designating a nodal officer to coordinate the village development work at ground level.
- Setting up a committee to be called Village Development Committee (VDC), involving the relevant Government Departments, banks, NGOs and selected academicians/social workers etc., to help in the formulation of plans, networking, implementation, monitoring etc.
- The members of VDC will elect/choose their leader from amongst themselves through consensus, to head the VDC
- Since the Village Development Plan would aim at the convergence of all schemes of Government as well as other agencies, involvement of Government at the local level is a must.
- Since Village Panchayats play very important role in the development of the village, they could be involved right from the beginning of the exercise.

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- Separate meetings for creating awareness among village people and seeking their suggestions to operationalize the plan may be held. Discussions of the concept with local leaders to explain to them the possible benefits etc. may be undertaken.
- Identification of needs of the village, based on discussions with the villagers /PRA exercise. It may be prudent to explain the objective of the plan as well as its pilot nature to the people, so that their expectations are not raised too high.
- Since credit flow is crucial in the plan, involvement of bankers at local level is imperative at the planning stage itself. The credit target should be arrived at based on bottom-up approach.
- As improvement in recovery of bank loan is one of the keys to improve credit disbursement, a strategy needs to be worked out to substantially improve recovery of loans in the village by discussing with all the stakeholders. However, this could be the resultant factor of implementation of the Plan through peoples' participation/involvement.

**Table 5.1
VDP – A broad Framework of the Design of the Plan**

Support for infrastructure, Watershed development	Credit from banks, including Credit coop.	Extension services from Government Depts. like Agriculture, Horticulture, Animal husbandry, and other district-level agencies
SHGs / JLGs of poor and women for saving/ credit through banks or NGOs		Farmers's Clubs, NFS support for skill development, marketing etc.
Lending through farmers' groups/ activity groups		
Other agencies which can collaborate / contribute like corporate bodies, industry associations, etc		Facilitation by NGOs –social mobilization, awareness creation (escort services), technical services, backward/ forward linkages

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	Government Corporations/ other expert bodies for activity-specific support (linkages) like marketing, storage, agro-processing	
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5.2.1 Incentive to Nodal/Implementing Agency

It would be desirable to consider provision of some incentive to the nodal agency, if inducted for implementation of VDP on mutually agreed terms.

5.2.2 Monitoring Mechanism

VDC (Village Development Committee) will monitor the programme and a separate Monitoring Committee will be put in place at the district level, which will include lead banks, NGOs, NABARD and other concerned agencies. Meetings will be held on quarterly basis.

5.2.3 Key Steps Involved

- Interface with people of identified village
- Undertaking PRA exercise
- Identify people's needs
- Prepare a Plan document (for socio-economic, infrastructural development of the village)
- Place it before the stakeholders – Village Development Committee, NGOs, Banks, Government Departments, PRIs, NABARD and other agencies.
- Coordinate and network for physical, financial and promotional support.
- Obtain firm commitments from each stakeholder.
- Commence implementation in right earnest.
- Implementing Agency by accepting support from various agencies including NABARD.
- Support to NGOs for formation of - Farmers Groups/Joint Liability Groups or Artisan Groups.
- Coordinate with Government and Agricultural Universities/Research Organizations to provide extension services to motivate farmers to take up remunerative cash crops
- Improving cash flow of farmers/villagers through subsidiary occupations such as animal husbandry/fisheries.

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- Facilitating linkages with corporate bodies
- Encouraging Income Generating activities by individuals/youth.
- Arranging exposure visits/programmes for capacity building
- Capacity building and motivating local bankers by conduct of Workshops trainings and helping them in recovery of over-dues.
- Facilitating IT related initiatives in the villages etc.
- Encouraging environment related initiatives leading to protection of environment ecological restoration and achieving the concept of “green’ villages.
- Facilitating value chain management.

5.3 Tribal Development Framework (TDF)

Component 1: Social Empowerment

The objective of this component is to empower the rural communities, create sustainable community-managed institutions of the poor, so that they manage common interest activities around microcredit, community infrastructure, livelihoods, and natural resources.

Component 2: Economic Empowerment

The objective of this component is to develop the capacity of rural communities to plan and provide funds to them to undertake various economic initiatives and common public-good activities.

Component 3: Partnership Development

The objective of this component is to partner with various service providers, resource institutions and public and private sector organizations to bring resources such as finance, technology, and marketing into the project so that the community groups and organizations are able to improve their livelihoods.

Component 4: Project Management

The component will facilitate various governance, implementation, coordination, learning and quality enhancement efforts in the project.

The key activities to be supported under the proposed NERLP will aim to achieve the following key outcomes:

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- (i) Create sustainable community institutions consisting of Community development Groups (CDGs), women self-help groups (SHGs), SHG village federations, producer organizations (POs), and youth groups of men and women (YGs).
 - (ii) Build capacity of community institutions for self governance, bottom-up development planning, democratic functioning with transparency and accountability. c. Establishing backward and forward linkages for economic enterprises;
 - (iii) Increase economic and livelihood opportunities by:
 - a. Managing natural resources and improving agriculture for food security and income enhancement from farming and allied activities;
 - b. Developing employable skills of youths and establishment of self and/or group managed enterprises;
 - c. Creating access to finance through linkages with banks and other financial institutions;
- Creating infrastructure
- (iv) Develop partnerships of community institutions for natural resource management, microfinance, market linkages, and sectoral economic services.

The objectives and key principles of the TDF are:

- To safeguard the overall interests of the tribal beneficiaries and ensure that the tribal households are not excluded from the community driven developmental process.
- To reach out, support and empower tribal households in project villages in accessing project services and benefit from opportunities for livelihoods improvement.
- Development of economic skills and entrepreneurship among tribal community.
- To support social and economic empowerment of the tribal in the project area with targeted inclusion strategy
- To protect indigenous knowledge and practices

Sub Components	Key Actions	Implementation Responsibility	Supported by
Component 1 – Social Empowerment			

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Support to Project Facilitation Teams (PFTs)	<p>-PFT (Project Facilitation Team) staff engages tribal youth (Trained by Vadhvan Port Private Limited, especially in tribal blocks/clusters</p> <p>-Entry point activities selected on the basis of consultations with tribal communities and leaders</p> <p>- Training programme of PFTs involves special module on identify, culture, inclusion, empowerment, entitlements and and development of tribal households</p>	VPPL Unit: Vadhvan	PFT and External agencies
Community Mobilization, Capacity and Institution Building	<p>-Priority selection of villages with high population of tribal,</p> <p>-Documentation of key natural resource, social services, infrastructure and livelihood priorities and opportunities for tribal and non-tribal households, as part of PRA (Participatory Rural Appraisal) exercises</p> <p>-Participatory wealth grouping and other exercises conducted with full attendance, participation and understanding of the tribal and non-tribal participants, with sufficient advance notice</p> <p>-Project communication activities use local resources, media and community institutions,</p>	VPPL Unit: Vadhvan (CSR) Group	PFT and External agencies

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	<ul style="list-style-type: none"> -Formal consultations with village councils, panchayats and tribal leaders held and their broad community support documented -Group formation and functioning norms adapted to geographical and socioeconomic conditions, including preexisting customary institutions and informal savings and credit groups -Mobilization of men and women from all tribal households in the villages, as beneficiaries -Exclusive tribal community institutions promoted based on pre-existing affinity and local demand -Tribal households represented in all office bearing positions and executive committees of the community institutions; -Tribal subcommittees formed in the CDGs, (Community Development Groups)YGs(Youth Groups of Men & Women), POs, (Producer Organizations) NRMGs (Natural Resource Management Groups) and federations -Community capacity building activities cover rights and entitlements, legal empowerment particularly of tribal people. 		
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	<ul style="list-style-type: none"> -Preference to tribal youth as community service providers -Capacity building of CSPs (Community Service Providers) to include tribal development and empowerment. -PFTs provide intensive handholding support to tribal community institutions. 		
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Component 2 –Economic Empowerment			
SHG Investment Support	<p>Targeted allocation of SHG seed grants and livelihood grants to SHGs with majority tribal members</p> <p>Handholding assistance provided to prepare SHG livelihood plans, CDPs, (Community Development Plan) , NRMPs;</p> <p>SHG livelihood plans, CDPs, NRMPs are prepared following social impact screening and mitigation guidelines and are endorsed by tribal groups</p> <p>Special assistance provided to prepare collective livelihood plans</p> <p>PFTs conduct social impact screening of the SHG livelihood plans, along with the environment screening</p>	VPPL, Unit: Vadhvan (CSR) Group	PFT and External agencies
Community Development Investment Support	<p>Targeted assistance provided for preparation of CDPs that address livelihood priorities of the tribal households</p> <p>Planning and need assessment for CDPs involves full and documented participation and feedback of all tribal and non-tribal households, community leaders, village council, youth clubs and gram panchayat</p> <p>CDPs to benefit majority of the tribal households in the project villages</p>	VPPL Unit: Vadhvan (CSR) Group	PFT and External agencies

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	<p>CDPs to have convergence linkages with government programmes targeting tribal households</p> <p>All CDPs screened for potential adverse impacts on private land, customary rights, concessions, entitlements, existing resource usage, and any required mitigation measures are formally adopted and supported by all CDG members through a transparent, participatory and voluntary process.</p>			
Producer Organizations Investment Support	<p>Producer Organizations and value chains address the livelihood constraints of the tribal households</p>	VPPL, Vadhvan Group	Unit: (CSR)	PFT and External agencies
Youth Skill Development and Placement Support	<p>Consultations with existing youth groups, informal associations and NGOs (Non Governmental Organizations) in tribal villages</p> <p>Allocation for support to tribal youth, both men and women, from project villages</p>	VPPL, Vadhvan Group	Unit: (CSR)	PFT and External agencies
Innovation Support	<p>Innovation proposals focusing on meeting the most tangible social, livelihood, health and food security needs of tribal communities given priority.</p> <p>Proposal to be based on direct consultations and feedback from tribal communities.</p>	VPPL, Vadhvan Group	Unit: (CSR)	PFT and External agencies

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5.4 Rural Development Scheme

Introduction

The main purpose of conducting Rural Entrepreneurship Development Programmes (REDPs) is **to promote entrepreneurship and create self-employment avenues in rural areas**. The programme also provides gainful employment to the surplus labourers in agriculture and land-less labourers with a view to supplement their income. NABARD introduced REDP in 1990 as a major promotional initiative aiming at enterprise and employment creation in rural nonfarm sector (RNFS). **The major objectives of REDP are to develop entrepreneurship and activity oriented skill among the educated unemployed rural youth**. The programmes are conducted through Entrepreneurship Development Institutes / Voluntary Associations/Non-Governmental Organizations for providing sustainable employment and income opportunities in rural areas. NABARD provides promotional assistance to such agencies and Rural Development Entrepreneurship Training Institute (RUDSETI) to successfully implement REDPs. The REDP is an efficient instrument in creating income and employment opportunities for the rural youth especially for women in rural and semi-urban areas. The programme not only rediscovered the economic potentials in the traditional art but also brought life to artisans. It also supported the family with a supplementary income. The added advantage of REDP is that there are large varieties of activities that can be covered under the training programme. It can be organized at any place and can be designed to suit any type / kind of target group.

Mostly REDP is based on target-oriented approach with little attention to improving the entrepreneurial talents of rural and educated unemployment youth. There should not be any mismatch between the skills sought and skills available among the people that might result in growth of unemployment. It is observed that the incidence of discontinuation of the activity by the girls after their marriage is more. Hence, preference may be given to married women who most likely would continue with the activity for a longer period.

The duration of the programme (4-6 weeks) in many activities especially for Pattaachitra palm leaf craft, engraved pictures, zardoshi and embroidery, kantha silk etc. seems to be inadequate. That doesn't fire up the trainee to take up any entrepreneurial activity. The duration of such programme may be increased to three months. The trainees who have settled with activities

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may be facilitated with subsequent exposure-cum training programme for 4-7 days to institutes, experts or enterprise with same or similar trade within or outside the state. The trainees can also get exposed to new design, perfection in skill and market linkages. The exposure visits may introduce the trainees to a group of similar craftsman who can form a cluster and can meet the bigger orders in time. The trainees attached more importance to learn the skill/process of the activities rather than stipend.

Rural Entrepreneurship Development Programme (REDP) is one such programme that **aims at promoting entrepreneurship and self-employment avenues in rural areas**. It also provides gainful employment to surplus labour in agriculture sector as well as to landless labourers with a view to supplement their income. **REDP comprises of 3 distinct phases, viz. Pre-training, training and post-training phase**. Special steps were taken to involve unemployed and under employed youths, and school / college dropouts. The trainees were selected from the age group of 18 to 35 years and preference was given to literate people.

People with no skill can be trained for simple activities like food processing, candle, chalk, agarbatti making or such activity. Youths with education and ability were trained for computer hardware, fabrication, repairing electronics and electrical goods.

Entrepreneurship has been visualized as one of the **strategic development** interventions to accelerate the rural development process in India.

5.4.1 Entrepreneurship Development

An entrepreneur is an innovator who implements change within the markets by carrying out of new combination. This can take the forms like

- i. Introduction of new goods of standard quality,
- ii. Evolving a novel method of production,
- iii. Opening up of a new market,
- iv. Acquisition of a new source of material supply and
- v. Carrying out of the new organization in any industry.

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The rural entrepreneur in rural areas faces the following challenges for development:

- Government policies: Licensing, taxes and tariff.
- Management: In many small firm's same individual is responsible for production and management.
- Finance operations: The entrepreneur has to make a decision relating to each of the above functions.
- Information: Hardly there is any information on prices, technology etc.
- Technology: Lack of awareness on processing technology.
- Marketing: Large firms can afford transport, storage facility, advertising and product development efforts which an individual, more often cannot.
- Credit: Mostly forced to rely on personal savings, borrowing from friends, relatives and money lenders.

Training on rural entrepreneurship, rural innovation and artisan skills not only improved the productivity and efficiency of local farmers and artisans, but also have significant environmental and social impact by developing ecofriendly appropriate solution to local problems.

Corporate houses have also come up with entrepreneurship institutes to inculcate entrepreneurship and innovation among the educated unemployed rural youth.

5.4.1.1 Objectives

Develop entrepreneurial and activity oriented skills among the educated unemployed rural youth, by assisting Voluntary Agencies (VAs) / Non-Governmental Organizations (NGOs) / Development Agencies (DAs), with good track record, to conduct REDP. Set up small / micro-enterprises, for creation of sustainable employment and income-opportunities in rural areas, in a cost-effective manner. The agency conducting the REDP is expected to provide escort services to trainees, monitor the progress in setting up their units, at least for 2 years and also to furnish the requisite information / feedback to NABARD.

Features and Coverage

REDP comprises **3 distinct phases**, viz. **Pre-training, training and post-training**.

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Pre-training includes:

- a) Detailed survey for identifying potential business activities / market,
- b) Publicity, awareness creation and motivational campaign
- c) Coordination with various agencies - especially Banks, Govt. Departments,
- d) Formation of Selection Committee and Project Monitoring Committee and
- e) Selection of trainees.

Training Module Comprises of:

- a) Achievement Motivation Training,
- b) Opportunity Identification Guidance,
- c) Knowledge on Supporting Agencies and Schemes,
- d) Preparation of Project Reports / Profiles,
- e) Management of Resources— Men, Material, Money,
- f) Marketing Aspects and
- g) Book-keeping / accounting. In case of technical / activity based REDPs, inputs on technical aspects / skill development / appropriate technology are also given.
- h) In addition to the above, case studies on potential activities, field visits to successful units, etc. are the part of training programme.

Post-training outlines

- a) Escort services to trainees for ensuring credit linkages for setting up units, which would be a major parameter of success rate,
- b) Constant follow-up / monitoring of trainees and their units for at least two years and
- c) Proper feed back to sponsoring agency.

Facilities required for conducting REDPs cover

- a) Training venue / classrooms (own or hired),
- b) Training equipment like over head projector (OHP), slide projector, television, VCR
- c) Hostel facility for trainees,
- d) Trainer motivator faculty for co-ordinating programme / taking classes and
- e) Skilled trainer and fully equipped workshop to impart skill development programmes.

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5.4.1.2 Activities under REDP

1. **Traditional Crafts**—Bamboo crafts, Kalamkari painting and printing, jute handicrafts, Kondapali toys, Palm leaf crafts, Anjara works, Engraved pictures, Bana fibre extraction and hand -made items, Brass making, Sisal fibre articles making, Appliqué works, Imitation jewelry, Mementos, and shield making, Docra casting.
2. **Automobiles:** --Two/three-wheeler repairing, repairing and servicing of tractors, Auto/Tractor driving.
3. **Computers:** --Computer education, Computer screen printing, DTP, Computer hard ware maintenance and servicing.
4. **Electronics and Electrical:** --Electrical and electronics repairing, motor rewind, Pumpset repairing, Television repairing, Cell phone repairing, Emergency lamp making, Reconditioning and assembling of lead acid batteries, Domestic Appliances repairing, AC and refrigerator servicing.
5. **Farm based:** - Nursery raising and bee keeping.
6. **Food processing:** - Bakery, Food processing, Turmeric powder/ chilli powder making, Mango jelly, Fruit processing.
7. **Hospitality:** -Home nursing, Health care assistance, Hotel cum catering services, Rural tourism and hospitality.
8. **Leather and Rexine Based**-Manufacturing of leather, Utility items, Rexine bag making, Chappals and shoe making, Synthetic leather bag making, Manufacturing of leather utility items.
9. **Tailoring/ Garments making:** - Tailoring and readymade garments, Fashion designing, Dress designing, Gents tailoring.
10. **Zardoshi and Embroidery:** - Machine/ hand embroidery, Zardoshi and Kashmiri works, Maggam and hand embroidery, Hand embroidery and fabric printing, Diwan cot and Decorative cloth materials, Embroidery, Patch work and Garment designing, Embroidery and Bathic printing.

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11. Masonry: - Fabrication, Masonry and plumbing

12. Miscellaneous Activities: - Agarbati, Candle, washing powder making, Cane furniture making, Cycle seat cover making, Design and development of caps, Sanitary nap kins making, Adda leaf plate making, soft toys making, Broom sticks making, Beautician course and Book binding, Spiral bindings, Digital photography/ Video graphy and Lamination, Tailoring, Embroidery, Repair of appliances, Farm maintenance and servicing, Computers/traditional crafts, etc.

5.4.1.3 Impact of REDP

1. The number of new enterprises created by REDP trainees,
2. The creation of new enterprises with and without wage employment,
3. Annual employment generation,
4. Annual incremental income and
5. Attainment of success rate.

Thus, the impact of REDP is ascertained on the basis of changes in income and employment as a result of creation of new enterprises.

5.4.2 Summary and Conclusion

- REDP Programmes have come up as an efficient instrument in creating income and employment opportunities for the rural youth, especially the women in rural and semi urban areas.
- The Executive Development Programmes (EDPs) are the medium for the value addition to the resources and reviving the vanishing arts and crafts in the states.
- REDPs mainly facilitated the rural youth and women to support the family with a supplementary income.

The added advantage of REDP is that there are large varieties of activities that can be covered under the training programme. It can be organized at any place and can be designed to suit any type/kind of target group.

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5.5 Youth Development Plan

5.5.1 Introduction

United Nations' definition of Youth

United Nations' definition of youth is people from 15 to 24 years of age.

Many countries also draw a line on youth at the age at which a person is given equal treatment under the law – often referred to as the "age of majority". This age is often 18 in many countries, and once a person passes this age, they are considered to be an adult. However, the operational definition and nuances of the term 'youth' often vary from country to country, depending on the specific socio-cultural, institutional, economic and political factors.

Age group of youth as per National Youth Policy:

In India we follow National Youth Policy for dealing with the issues of youth. The age group of set out in the National Youth Policy 2003 is 13-35 years. However, it needs to be recognized that all young person's within this age-group are unlikely to be a homogeneous group, sharing common concerns and needs and having different roles and responsibilities. It is, therefore, necessary to divide this age-bracket into three sub-groups:

- The first sub-group of 13-18 years should cover adolescents whose needs and areas of concern are substantially different from youth under the following age groups.
- The second sub-group of 18-25 years includes those youth who are in the process of completing their education and starting, getting a job or looking for a livelihood.
- The third sub-group of 25-30 years comprises young women and men who have completed their education.

The Working Group recommends that 18-30 years of age should be the age criterion for Youth and those between 13 to 18 years should be categorized as Adolescents. Further it is recommended that in the light of the provisions of the Right to Education Act, young persons are to be included in the formal educational system until the age of 14 years. Thereafter, it is anticipated that until the age of 18 years, they would be seeking skill training, vocational education or secondary education. Logically this age group must be the responsibility of Schemes under the School Education Sector and the Child Development Sector. The age for

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exercising adult franchise is 18 years. Therefore, Youth Policy (and the Ministry of Youth Affairs) must focus on youth between 18-30 years.

Every generation experiences change due to enhancement in self development program and the surrounding. Whether the changes are being positive effects or negative effects could not be ascertained unless there is a mechanism to monitor the changes from time to time.

Youth is a plan in which SHG will lead the way by enable in customers with insight and capabilities that boost their freedom to achieve superior results and always plan to work with female unemployed youth and senior citizens to develop new way of income.

The National Youth Policy reiterates the commitment of the entire nation to the composite an all-round development of the young sons and daughters of India and seeks to establish an All-India perspective to fulfill their legitimate aspirations so that they are all of strong body, mind and heart in successfully accomplishing the challenging tasks of national reconstruction and social changes that lie ahead.

This Policy will accord priority to the following groups of young people:

- Rural and Tribal Youth;
- Youth with Disabilities;
- Out-Of-School Youth;
- Youth under Especially Difficult;
- Adolescents.

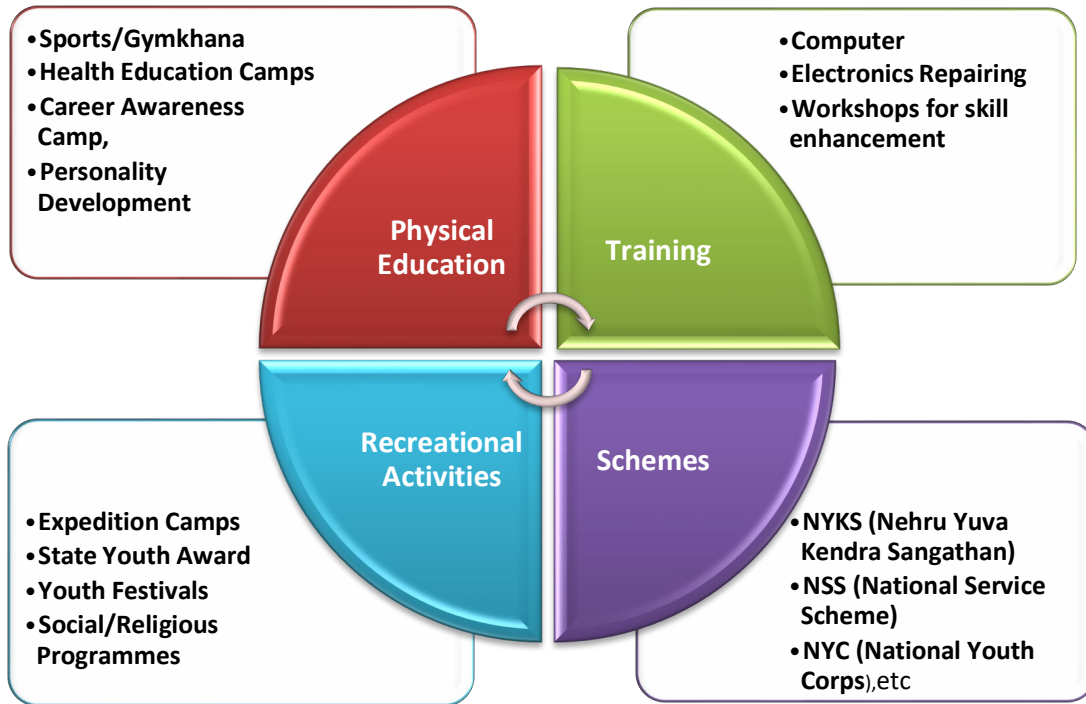
5.5.2 The Objectives of the National Youth Policy are

1. To instill in the youth, at large, an abiding awareness of, and adherence to, the secular principles and values enshrined in the Constitution of India, with unswerving commitment to Patriotism, National Security, National Integration, Non-violence and Social Justice;
2. To develop Qualities of Citizenship and dedication to Community Service amongst all sections of the youth;
3. To promote awareness, amongst the youth, in the fields of Indian history and heritage, arts and culture;

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4. To provide the youth with proper educational and training opportunities and to facilitate access to information in respect of employment opportunities and to other services, including entrepreneurial guidance and financial credit;
5. To facilitate access, for all sections of the youth, to health information and services and to promote a social environment which strongly inhibits the use of drugs and other forms of substance abuse, wards off disease (like HIV/AIDS).
6. To sustain and reinforce the spirit of volunteerism amongst the youth in order to build up individual character and generate a sense of commitment to the goals of developmental programmes;
7. To create an international perspective in the youth and to involve them in promoting peace and understanding and the establishment of a just global economic order;
8. To develop youth leadership in various socio-economic and cultural spheres and to encourage the involvement of Non-Governmental Organizations, Co-operatives and Non-formal groups of young people;
9. To promote a major participatory role for the youth in the protection and preservation of nature, including natural resources, to channelize their abundant energies in community service so as to improve the environment and foster a scientific, inquisitive reasoning and rational attitude.

The youth empowerment can be achieved by making them employable by providing training in technical field or assistance in obtaining occupation in which they are already qualified. It also includes skill enhancement and non-technical training like tailoring, handicraft, etc. Based on objectives of National Youth Policy we have come up with the following youth development plan and we believe that it will be helpful in overall development of youth in the study area.



**Figure 5.1
Youth Development**

5.5.3 Youth Development:

1. Schemes

The following schemes and programmes were implemented by the Ministry during the 10th Plan.

1. Nehru Yuva Kendra Sangathan (NYKS)
2. National Service Scheme (NSS)
3. Rashtriya Sadbhavana Yojan

NYKS and NSS are the flagship programmes of the Ministry, encompassing a major part of its activities in institutional, functional and financial terms, and along with the next three schemes, and the RGNIYD, constitute the core of the youth network under it. Under the next four schemes listed above, financial assistance is provided to NGOs and other organizations and institutions, for activities related to vocational training, development of adolescents,

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national integration and adventure. The scheme of Youth Hostels is the only infrastructure scheme of the Ministry, aimed at promoting youth travel and hostelling. Under the scheme of Scouting and Guiding, grant-in-aid is provided to Bharat Scouts and Guides for conducting training camps and holding of jamborees etc. throughout the country.

5.5.4 Nehru Yuva Kendra Sangathan (NYKS):

The Nehru Yuva Kendra Sangathan (NYKS) is an autonomous body under the administrative control of the Ministry of Youth Affairs and Sports. It is the largest youth based organization in the country, having under its fold more than 8 million rural youth, through a network of about 2.50 lakh village based youth Clubs, Sports Clubs/Mahila Mandals. The administration and management of the NYKS vests with a Board of Governors under the Chairpersonship of the Union Minister for Youth Affairs and Sports. The Director General, who is appointed by the Government of India, is the Chief Executive Officer of the Sangathan with headquarters in New Delhi. The organizational network of NYKS includes 18 Zonal Offices, 47 Regional Offices and 500 District Level Offices, which are called Nehru Yuva Kendras. (NYKs).

Objective:

Is to bring about social transformation in the rural areas by promoting and developing among the youth awareness and commitment to the concepts and values of unity amidst diversity, national integration, discipline, self-help, community service, secularism, democracy, a scientific temper, preserving our cultural heritage, promoting functional literacy, and providing avenues to the youth to strive towards excellence in all spheres of activity.

Programmes taken under NYKs:

- Youth Club Development,
- Training for Self-Employment / Vocational Training,
- Awareness Generation,
- Cultural Programmes,
- Work Camps,
- Seminars & Workshops,
- National Integration,

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- Celebration of National &
- International Days/Weeks,
- Sports Promotion and Adventure Promotion,
- District Youth Conventions, etc.

5.5.5 National Service Scheme (NSS):

The National Service Scheme (NSS) was launched in 1969 as a Centrally Sponsored Scheme, and is one of the most successful schemes of the Ministry, aimed at personality and character development of the students in schools and colleges. The motto of the NSS “Not me but You” seeks to imbibe a spirit of volunteerism and community service in the young minds of students. More than 2.69 crore students have so far embraced these values through the NSS. The present strength of student volunteers under the NSS is 26.6 lakhs.

Organizational Structure:

The Scheme is implemented through the State Governments and the operations are at the College/University level. The basic unit of NSS consists of 50 or 100 volunteers and is headed by a Programme Officer at faculty/institution level. The volunteers of the unit work under the guidance of Programme Officers. At the University level, the Programme Officers of affiliated colleges of the concerned University work under the guidance of Programme Coordinators. At the State level, all the Universities in the State work under the guidance of a State Liaison Officer. The State Liaison Cell at the State headquarters is responsible for ensuring timely release of grants under its jurisdiction and timely submission of accounts thereof. The State level Liaison Cell is fully funded by the Central Government. The staff strength of the State Liaison Cell is dependent upon the number of volunteers allotted to the State. There are 15 NSS Regional Centres in the country.

Programmes:

Five focal points have been identified for NSS work

- National Integration and Social Harmony,
- Literacy,
- Gender Justice,
- Village Adoption and

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➤ Life Skills Education.

The NSS has two types of programmes,

A. Regular activities:

Under the “Regular Activities”, students are expected to work as volunteers for a continuous period of two years, rendering community service for a minimum of 120 hours per annum.

B. Special Camping programmes.

Under “Special Camping Programme” a camp of 10 days’ duration is conducted every year in adopted areas on a specific theme. The theme for the Special Camping Programme for the years 2006-2007 to 2008-2009 is “Healthy Youth for Healthy India”.

In addition to the regular and special programmes, NSS also conducts programmes in collaboration with other Ministries/Departments and Organizations in different areas such as Disaster Management, HIV/AIDS, etc.

5.5.6 Rashtriya Sadbhavana Yojana:

The Rashtriya Sadbhavana Yojna was launched during 2005 in lieu of the erstwhile National Re-construction Corps Scheme. The latter Scheme covered 120 districts and there was a provision for appointment of certain number of volunteers in each district on a monthly honorarium of Rs.1000/-. Apart from the limited coverage of the scheme, other issues had also been raised about the manner of appointment of the volunteers and their functions, etc. Under the new Scheme of the Rashriya Sadbhavana Yojana, the objective is to have one volunteer, under the title of Nehru Yuva Saathi (NYS), in each Block with the responsibility of mobilizing the Youth Clubs to participate in programmes for youth and communally development, and to help in the implementation of the various activities and programmes of the District Kendras.

5.5.7 Training

Vocational Training

It is one most important activities of the Youth Development. At present, the following trainings are being conducted by the Department.

Computer Training

The main objective of the training is to create computer awareness among the youth particularly to those youth belonging to rural and distant areas in the State.

Radio/T.V. Repairing Training

This training is conducted by the Department every year.

ITI courses

S. N.	Course Name	Duration	Qualification
1.	Plumber	1 year	5th Pass, 15 years & above
2.	Mechanic - Two wheeler	6 months	7th Pass, 15 years & above
3.	Lathe Operator	1 year	7th Pass, 15 years & above
4.	Fitters	1 year	7th Pass, 15 years & above
5.	Machinist	2-year	7th Pass, 15 years & above
6.	Fabricator	1 year	7th Pass, 15 years & above
7.	Electronic Mechanic / Mechanic TV, VCD	1 year	7th Pass, 15 years & above
8.	Domestic Wireman	1 year	7th Pass, 15 years & above
9.	Mech. 4-Wheeler / Automobile Mechanic	1 year	7th Pass, 15 years & above
10.	Air conditioning & Refrigeration Mechanic	1 year	7th Pass, 15 years & above
11.	Welder	1 Year	8th Pass with 2 Years apprenticeship including 1 year basic Training
12.	Diesel Mechanic	1 year	10th pass
13.	Cutting & Tailoring	1 year	10th pass
14.	Forger & Heat Treater (Blacksmith)	1 year	10th pass
15.	Plastic Processing Operator	2 year	10th pass
16.	Refrigerator & Air Condition Mechanic	2 year	10 th pass

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17.	Electrician	2 year	10 th pass
18.	Machinist (Grinder)	2 year	10 th pass
19.	Electronics Mechanic	2 year	10 th pass
20.	Motor-vehicle Mechanic	2 year	10 th pass
21.	Draughtsman Civil	2 year	10 th pass
22.	Fitter	2 year	10 th pass
23.	Turner	2 year	10 th pass
24.	Radio & T.V. Mechanism	2 year	10 th pass
25.	Fiber Reinforced Plastic Course	2 year	10 th pass
26.	Draughtsman Mechanical	2 year	10 th pass
27.	Draftsman Civil	2 Year	10th Pass.
28.	Wireman	2 Year	10th Pass with science with 3 Years apprenticeship including 1 year basic Training.
29.	Electrician	2 Year	10th Pass with science with 3 Years apprenticeship including 1 year basic Training.
30.	Stenography Hindi	1 Year	12th Pass.
31.	Stenography English	2 Year	12th Pass.

Non-Technical Courses

Eligibility: 10th pass (SSLC/ matriculation)

Training Duration: The duration of the trade/ course may vary from one year to three years, depending on the field chosen.

Non- Engineering Trades

- Baker and Confectioner
- Cabin/Room Attendant
- Cane Willow and Bamboo Work
- Catering & Hospitality Assistant

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- Computer Aided Embroidery & Needle Work
- Corporate House Keeping
- Craftsman Food Production (General)
- Craftsman Food Production (Vegetarian)
- Crèche Management (play school)
- Cutting & Sewing & Dress Making
- Dairying
- Data Entry Operator
- Digital Photographer
- Driver Cum Mechanic (Light Motor Vehicle)
- Embroidery and Needle Work
- Floriculture & Landscaping
- Health Sanitary Inspector
- Horticulture
- Hospital House Keeping
- Hospital Waste Management
- Institution House Keeping
- Insurance Agent
- Leather Goods Maker
- Library & Information Science
- Manufacture of Footwear
- Medical Transcription
- Old Age Care
- Plate Maker-cum-Imposer
- Steward (warden)
- Weaving of Silk and Woolen Fabrics

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5.6 Out of School Youth Development Scheme

Introduction

Out-of-school youth are broadly defined as youth aged 16 to 24 who are not in school and who are unemployed, underemployed, or lacking basic skills. While there is no single system that provides services to out-of-school youth, many systems can play a role in better addressing their needs, including the public education, workforce, human services etc.

Today, there are 81 million unemployed young people globally. Key reasons for global youth unemployment include lack of information about career options, lack of skills, and lack of connections to potential employers.

Kerala State AIDS Control Society has intervened among Out of School Youth with different programmes and activities across the state to promote Voluntary Blood Donation and HIV/AIDS Prevention. The programme allocation and implementation mainly through different Government Organisations and bodies on Youth Development like, Kerala State Youth Welfare Board (KSYWB), Nehru Yuva Kendra (NYK), State Recourse Centre (SRC) etc.

Aim:

The aim of skill development in the country is to support achieving rapid and inclusive growth through:

- Enhancing individuals' employability (wage/ self employment) and ability to adapt to changing technologies and labour market demands
- Improving productivity and living standards of the people
- Strengthening competitiveness of the country
- Attracting investment in skill development.

Objectives:

- Create opportunities for all to acquire skills throughout life and especially for youth, women and disadvantaged groups
- Promote commitment by all stakeholders to own skill development initiatives
- Develop a high-quality skilled workforce/ entrepreneur relevant to current and emerging employment market needs.

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- Enable the establishment of flexible delivery mechanisms that respond to the characteristics of a wide range of needs of stakeholders
- Enable effective coordination between different ministries, the centre and the states and public and private providers.

Scope:

- Institution-based skill development including ITIs/ITCs/Vocational schools/technical schools/ polytechnics/ professional colleges etc.
- Learning initiatives of sectoral skill development organised by different ministries/departments
- Formal and informal apprenticeships and other types of training enterprises
- Training for self-employment/entrepreneurial development
- Adult learning, retraining of retired or retiring employees and lifelong learning
- Non-formal training including training by civic society organisations
- E-learning, web-based learning and distance learning.

Activities can be taken:

- Provide **vocational training** to the youth so that they can function better as productive youths and also give new skills to rural youth for preventing migration to the cities
- **Promote self-entrepreneurship** amongst the youth by equipping them with the skills on management, designing and planning micro-enterprises in conformity with local skills
- Channelize **youth energies** for effective participation in national development
- The vocational training is provided in small duration trades such as Carpentry, Electrician, Plumber, Auto-technician, Painters, Packages, Multipurpose Technicians, Masons, Dairy Assistants, etc.

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Vocational Courses Covered in Different Areas Under

Apprentices Act 1961: -

- **Agriculture** : Poultry Production, Fisheries/Fish Processing, Dairying, Sericulture, Apiculture, Floriculture, Plant Protection, Agricultural Chemicals, Inland Fisheries, Plantation Crops and Management, Seed Production Technology, Swine Production, Vegetable Seed production, Medicinal and Aromatic Plant Industry, Sheep and Goat Husbandry, Repair and Maintenance of Power Driven Farm Machinery, Veterinary Pharmacist-cum-Artificial Insemination Assistant, Agro Based Food Industry (Animal based), Agro Based Food Industry (Crop based), Agro Based Food Industry (Feed based), Post Harvest Technology, Fish Seed Production, Fishing Technology, Horticulture, Soil Conservation, Crop Cultivation/ Production.
- **Business and Commerce:** Banking, Marketing and Salesmanship, Office Secretary-ship / Stenography, Co-operation, Export-Import Practices and Documentation, Insurance, Purchasing and Storekeeping, Taxation Practices/ Taxation laws/ Tax Assistant, Industrial Management, Receptionist, Basic Financial Services, Office Management, Tourism and Travel, Accountancy and Auditing.
- **Engineering and Technology:** Civil Construction/Maintenance, Mechanical Servicing, Audio Visual Technician, Maintenance and Repair of Electrical Domestic Appliances, Building and Road Construction, Building Maintenance, Ceramic Technology, Computer Technique, Rural Engineering Technology, Materials Management Technology, Rubber Technology, Structure and Fabrication Technology, Sugar Technology, Tanneries.
- **Health and Paramedical:** Medical Laboratory / Technology Assistant, Health Worker, Nursing, Health Sanitary Inspector, Hospital Documentation, Hospital Housekeeping, Ophthalmic Technology, X-ray Technician, Physiotherapy and Occupational Therapy, Multi-rehabilitation Worker, Bio Medical Equipment and Technician, Dental Hygienist, Dental Technician, Multi-Purpose Health Worker, Pharmacist, ECG and Audiometric Technician, Nutrition and Dietetics, Auxiliary Nurse and Mid Wives, Primary Health Worker.
- **Home Science:** Food Preservation, Child Care and Nutrition, Catering and Restaurant Management, Pre-school and Crèche Management, Textile Designing, Interior Design,

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Commercial Garment Designing and Making, Clothing for the Family, Health Care and Beauty Culture, Bleaching Dyeing and Fabric Painting, Knitting Technology, Institutional House Keeping.

- **Humanities Science and Education:** Library and Information Science, Instrumental Music (Percussion Tabla), Classical Dance (Kathak), Indian Music (Hindustani Vocal Music), Photography, Commercial Art, Physical Education, Bharat Natyam, Cotton Classifier.

Prime Minister's Rozgar Yojana provides wage employment and self-employment to educated unemployed youths aged between 18 and 35 years.

The **Bharatiya Yuva Shakti Trust (BYST)** aims to help unemployed or underemployed youths aged 18-35 years to set up or develop their own businesses.

The **Ministry of Agriculture's Krishi Vigyan Kendra's (KVK)** impart training to farmers, farm women, and rural youth in broad based agricultural production systems.

The key to achieving these goals is to make sure that both participants and employers become highly invested in the programs. Employers must see how their involvement can improve the productivity of their work force at the same or reduced costs. Youth participants must have confidence that working hard in the program and after the program can yield long-term success. Programs must have the potential to achieve genuine improvements in career outcomes to attract the high and sustained levels of youth participation and commitment required for success.

5.7 Development of Adolescents Schemes

Introduction

Adolescence, a vital stage of growth and development, marks the period of transition from childhood to adulthood. It is characterized by rapid physical, changes resulting in sexual, psychosocial and behavioral maturation. Adolescence is also the stage when young people extend their relationships beyond parents and family and are intensely influenced by their peers and the outside world in general. As adolescents mature cognitively, their mental process becomes more analytical. They are now capable of abstract thinking, better articulation and of developing an independent ideology. These are truly the years of creativity, idealism, buoyancy

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and a spirit of adventure. But these are also the years of experimentation and risk taking, of giving in to negative peer pressure, of taking uninformed decisions on crucial issues, especially relating to their bodies and their sexuality. How adolescents cope with these challenges is determined largely by their environment. Adolescence is thus a turning point in one's life, a period of increased potential but also one of greater vulnerability. Adolescents (10-19 years) in India comprise nearly 22 per cent of the total population of the country (225 million) and their numbers are steadily rising. Adolescents have often been viewed as a group of people with problems, disturbances and rebellion. However, the reality is somewhat different. Adolescents have high aspirations and are bundles of energy.

Following are some of the needs and concerns of adolescents:

- For developing an identity - many of them are not able to effectively explore their potential and establish a positive image. Girls are groomed for stereotyped gender roles.
- Inability to pursue education – many adolescents drop out of school because of poverty. There is inadequate opportunity to continue education and upgrade vocational skills.
- Lack of skills to face the challenges of life – The education system does not equip them with life skills to cope with difficulties.
- The young people in the Indian Society are being influenced to a large extent by a media-driven global youth culture and lifestyle fuelled by liberalization and a rapid growth and expansion of information and communication technologies.
- Managing emotions and coping with stress – sex hormones secreted during puberty lead to sexual and emotional changes reflecting feelings of anger, sadness, happiness, fear, shame, guilt, and love. Very often adolescents are unable to understand these changes and feel stressed.
- Redefining relationships with parents, peers and members of the opposite sex - adults do not understand the feelings of adolescents and have high expectations of them.
- Resisting peer group pressure – the influence of friends sometimes leads them to experiment with risky sexual behaviour resulting in lifelong consequences. The pressure to conform introduces many adolescents to drugs.

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- Girls are forced into early marriage having negative consequences in terms of their development and the discontinuation of education.
- Lack of information on sexual and reproductive health- This leads to unwanted / early pregnancy, STDs/RTIs/HIV. Adolescents want sexuality education but there is resistance from adults in the family and community.
- Limited access to reproductive health services especially for unmarried adolescents. Attitude of health service providers towards unmarried adolescents is not positive regarding contraceptives and services.
- Vulnerability to sexual exploitation and gender based violence – crimes are rarely registered and conviction rates are low. There are hardly any support services to deal with the mental trauma of victims of sexual violence. Counselling facilities barely exist.
- The young people in the Indian Society are being influenced to a large extent by a media-driven global youth culture and lifestyle fuelled by liberalization and a rapid growth and expansion of information and communication technologies.
- There is also an urgent need to strengthen power of volunteerism to engage young people in Community Development and Nation Building activities in order to balance career pursuits with community concerns.
- Similarly, an opportunity for creative use of free time by the young people is another challenging area. Young peoples’ need for leisure and recreation should be considered with priority by providing them with a range of constructive outlets both in urban and rural areas.

Policies relating to Adolescents:

- The major policies that directly or indirectly impact adolescents are: National Education Policy, 1986 as modified in 1992,
- National Policy for the Empowerment of Women (2001),
- National Nutrition Policy (1993),
- National Charter for Children (2003),
- National Health Policy (2002),
- National Population Policy (2000),

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- National AIDS Prevention and Control Policy (2000),
- National Policy on Child Labour (1987),
- National Policy for Persons with Disabilities (2006) and
- National Youth Policy (2003).

Government Programmes and Schemes for Adolescents:

Various stakeholders are working for and with adolescents to address their varied needs and concerns. These have been grouped in the following categories for purposes of this report.

- Education
- Personality Development, Life Skills and Empowerment
- Health and Nutrition
- Preparation for Work Participation

Some major Programmes/schemes of MHRD – Ministry of Human Resource Development for adolescent

Programme/ Scheme	Focus	Implementation Mechanism
1. Sarva Shiksha Abhiyan (SSA):	<ul style="list-style-type: none"> ➤ Enrolment, Retention and quality improvement for 6-14 age group ➤ Mainstreaming out-of school children 	<ul style="list-style-type: none"> ➤ Schools in partnership with Village Education Committees, PTAs ➤ Involvement of NGOs
2. Education Guarante Scheme and Alternative and Innovative Education (EGS & AIE)	<ul style="list-style-type: none"> ➤ Access to education for out-of-school children through strategies such as bridge course, residential camps, remedial coaching etc 	<ul style="list-style-type: none"> ➤ Village level learning centres supported by VECs, NGOs

3. National Programme for the Education of Girls at the Elementary Level (NPEGEL)	Reaching out to “hardest to reach” girls not in schools for upper primary level education ➤ Intense community Mobilization ➤ Gender sensitization measures	Cluster based Model schools in 3164 educationally backward blocks
4. Kasturba Gandhi Swatantra Vidyalaya (KGBV)	Education for girls belonging to SC, ST, Minorities through bridge courses at elementary level	Residential schools in 1500 blocks
5. Continuing Education Scheme	Learning opportunity for neo-literates & out of school adolescents ➤ Equivalency programmes, Vocational skills & Quality of life improvement	Continuing Education Centres in 316 districts at the village level
6. Jan Shikshan Sansthan	Vocational skills and Quality of life for disadvantaged neoliterates/ Semi literates, girls & women	172 JSS at the district Level
7. National Institute of Open Schooling & Indira Gandhi National Open University (NIO &	Access to education for school drop outs, disadvantaged adolescents through open learning system	Contact Programmes through Study Centres implemented through NGOS and accredited

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IGNOU)	<ul style="list-style-type: none"> ➤ Flexibility in choice of subjects, mode of delivery & examination system 	institutions Contact Programmes through Study Centers implemented through NGOS and accredited institutions
8. Adolescence Education programme	<p>Adolescent sexual & reproductive health through curricular and co-curricular strategies</p> <ul style="list-style-type: none"> ➤ Life skills approach 	Secondary & Higher Secondary Schools in partnership with NACO
9. Nehru Yuvak Kendra Sangathan (NYKS)	<p>Character building & empowerment of out-of-school adolescents and youth</p> <ul style="list-style-type: none"> ➤ Career guidance & Training ➤ Volunteerism for Nation building 	NYKS Volunteers in Youth Clubs and Teen Clubs (60 districts) at village level.
10. Scouting and Guiding	Promotion of balanced physical and mental development through camps, jamborees etc	Bharat Scouts & Guides in partnership with schools
11. Bharat Scouts & Guides in partnership with schools	Improving employability through:	Coaching cum Guidance Centers in the country

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	Information & coaching ➤ Confidence building ➤ Follow up with potential employers	
12. Craftsman Training Scheme	Vocational training ➤ Trade tests & award of certificates	ITIs and ITCs under the DGE&T ➤ Special training for women
13. Skill Development Initiative	Modular employable skills – training, testing, certification ➤ Public private partnership	Certification by professional bodies / industry association
14. Support to Training Scheme (STEP)	Upgrading skills of girls in traditional occupations ➤ Enhancing self-employment capability	NGOs
15. Vocational Education	Vocational Educational courses ➤ Collaboration with industries ➤ Rural Community workshop	Through National Institute of Open Schooling (NIOS)

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5.8 Women Empowerment Plan

Introduction

Women all over the world are challenged by a number of obstacles that restrict their ability to play significant roles in their communities and the broader society. For a long time they have lagged far behind men in key socio-economic indicators that place them at a huge disadvantage. Two thirds of the 774 million adult illiterates worldwide are women, the same proportion for the past 20 years and across most regions, according to the United Nations' World's Women 2010: Trends and Statistics

Women are less likely to have access to land, credit, decent jobs even though a growing body of research shows that the achievement of gender equality has enormous socio-economic ramifications. Occupational segregation and gender wage gaps continue to persist in all parts of the world. Research shows that empowering women fuels thriving economies, spurring productivity and growth.

Around the world, healthy, educated, employed and empowered women break poverty cycles - not only for themselves, but for their families, communities, and countries too.

The term empowerment covers a vast landscape of meanings, interpretations, definitions and disciplines ranging from psychology and philosophy to the highly commercialized self-help industry and motivational sciences. Sociological empowerment often addresses members of groups that social discrimination processes have excluded from decision-making processes through - for example - discrimination based on disability, race, ethnicity, religion, or gender. It also includes encouraging, and developing the skills for, self-sufficiency, with a focus on eliminating the future need for charity or welfare in the individuals of the group. This process can be difficult to start and to implement effectively.

Empowering women in developing countries is essential to reduce global poverty since women represent most of the world's poor population. Eliminating a significant part of a nation's work force on the sole basis of gender can have detrimental effects on the economy of that nation. In addition, female participation in counsels, groups, and businesses is seen to increase efficiency. If implemented on a global scale, the inclusion of women in the formal workforce can increase the economic output of a nation.

Many of the barriers to women's empowerment and equity lie ingrained in cultural norms. Many women feel these pressures, while others have become accustomed to being treated inferior to men. Even if men, legislators, NGOs, etc. are aware of the benefits women's empowerment and participation can have, many are scared of disrupting the status quo and continue to let societal norms get in the way of development.

Recent studies also show that women face more barriers in the workplace than do men. Gender-related barriers involve sexual harassment; unfair hiring practices, career progression, and unequal pay where women are paid less than men are for performing the same job. Such barriers make it difficult for women to advance in their workplace or receive fair compensation for the work they provide.

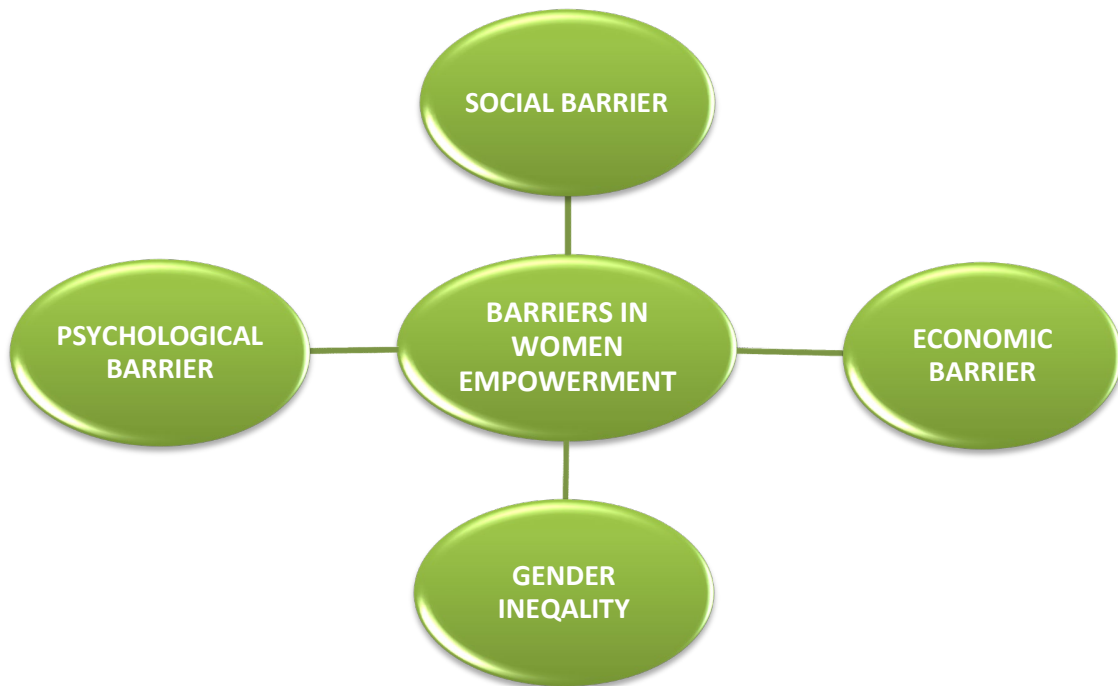


Figure 5.2
Cycle in Barriers in Women Empowerment

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SHGs (Self Help Groups) are a stepping stone in this process and we believe that SHG will play important role in women empowerment in the study area. Other effective schemes like Swawlamban, Swa-shakti, STEP, Swadhar, Integrated Child Development Services, Sarva Shikshan Abhiyan, Indira Gandhi Matritva Sahayog Yojana, Daughter against Dowry, etc. have been developed to face this obstacle.

Vision of the Women Empowerment Mission

Given the long term nature of issues which impact on women, overall aim of the mission would be to strengthen the processes that promote all round development of women by focusing on a coordinator approach for implementation of the schemes of participating Ministries/Departments and by creating an enabling environment conducive to social change. In such a contextual framework, the National Mission would endeavour to achieve empowerment of women by enabling them to create their own independent identity through economic empowerment, eradicating all forms of exploitation and discrimination, providing access to education, maternal and child health care to achieve their full potential and ensuring them rightful share in the allocation of resources and decision making, so that they can become equal partner in the family, in the society and in the process of nation building.

Functions of the Mission:

- Ensure economic empowerment of women
- Ensure that violence against women is eliminated progressively
- Ensure social empowerment of women with emphases on health and education
- Oversee gender mainstreaming of programmes, policies, institutional arrangement and process of participating Ministries, institutions and organizations
- Undertake awareness generation as well as advocacy activities to fuel the demand for benefit under various schemes and programmes and create, if required, structures at district, tehsil, and village level with the involvement of Panchayats for their fulfilment.

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5.8.1 Self Help Groups

Introduction

Empowerment has a wider connotation dealing with economic social and political aspects. In a country with a high rate of population below the poverty level, economic empowerment takes a top priority in any poverty upliftment programmes. The self help group scheme to help the rural women, for more than a decade, has played a major role in uplifting women throughout the nation. But a general idea about the nation on such schemes, gives a deceptive picture about development in different parts of the country.

Importance of SHGs in improving the standard of living of the rural poor and the confidence gained by these women to have a say in their family affairs. This ultimately, resulted in income generation and savings, which finally lead to upliftment of the poor. SHGs contribute towards a total clean drinking water and sanitation surge and also their role in community development. Women SHG have been involved in programmes like ‘Jalswarajya’ on rural drinking waters and Sant Gadge Baba Swachta Abhiyan and Nirmal Gram Puraskar on total sanitation. These cohesive groups have led them to collective actions leading to community development for e.g.: these groups have encouraged the local co-operatives in helping in the construction of latrines leading to sanitation surge.

Self-help groups (SHGs) play today a major role in poverty alleviation in rural India. A growing number of poor people (mostly women) in various parts of India are members of SHGs and actively engage in savings and credit (S/C), as well as in other activities (in come generation, natural resources management, literacy, child care and nutrition, etc.). The S/C focus in the SHG is the most prominent element and offers a chance to create some control over capital, albeit in very small amounts. The SHG system has proven to be very relevant and effective in offering women the possibility to break gradually away from exploitation and isolation.

Almost all major donor agencies support SHGs in India in one way or another and many success stories are available, describing how membership in a SHG changed the life of a particular individual or group for the better. Many NGOs in India are promoting the SHG mechanism and linking it to various other development interventions. Whereas there is ample evidence that the SHG approach is a very effective, efficient and relevant tool for organizing and

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empowering the poor, problems do arise with design, development and introduction of programmes to promote income generating activities (IGAs) that will generate sufficient, sustainable and regular income.

NABARD (1997) captures this by defining SHGs as "small, economically homogenous affinity groups of rural poor, voluntarily formed to save and mutually contribute to a common fund to be lent to its members as per the group members' decision".

In India, SHGs are formed for a variety of purposes and by a variety of people. Here SHGs formed by rural people (mostly women) with the objective of improving their livelihoods through collective savings and investments in income-generating activities.

The constitution of India has made ample provisions for securing gender equality and the development of weaker sections. The Directive Principles of state policy provides for the need for special efforts to develop women belonging to backward sections. But the goal of empowerment of women and gender equality cannot be achieved without enlisting community participation and without capacity-building measures. The women belonging to economically weaker sections of society need to be encouraged to undertake entrepreneurship and cooperative efforts towards achieving self-reliance. The govt. has emphasized the need for the formation of self-help groups of women for achieving socio-economic justice for women. The strategy of formation of self-help groups in fact has initiated a process of building self-confidence among women to transform their status in society besides achieving self-reliance. The experience shows that women participants of self-help groups are aware of their rights, their creativity, and potential growth. The community-based initiatives by women self-help groups especially towards supplementing their household income through gainful income generating programs have proved to be rewarding and successful experiments. But some drawbacks/problems faced by women self-help groups become impediments in achieving the desired rate of growth and development objectives. Such problems include lack of leadership, lack of skills in management and marketing of the products, lack of networking with stakeholders such as banks, potential buyers, govt. agencies, lack of proper financial support/incentives etc.

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Goals:

Self-help groups are started by non-profit organizations (NGOs) that generally have broad anti-poverty agendas. Self-help groups are seen as instruments for a variety of goals including empowering women, developing leadership abilities among poor people, increasing school enrolments, and improving nutrition and the use of birth control. Financial intermediation is generally seen more as an entry point to these other goals, rather than as a primary objective. This can hinder their development as sources of village capital, as well as their efforts to aggregate locally controlled pools of capital through federation, as was historically accomplished by credit unions.

Role of Proponent in Implementing the Activities through SHG:

The proponent should assist the villagers in the formation of a self-help group. Arrange training for them to enhance the skill to implement the activities they are intended to cover, accounting opening in the bank and getting microfinance from Bank or funding agencies like Khadi Gramdyog etc. Training to improve their skill in marketing their products and overall management from raw material purchase to sell out their products.

Khadi Gram Udyog organizes training for the enhancement of skills in Bachat Guts in villages.

The details have been furnished in **Table 5.2 and Table 5.3**.

**Table 5.2
Different Schemes Organized for Khadi Gramdyog**

Blow moulding	Pulses & cereals Processing Industry
Chalk crayons	Gur and Khandsari Industry
Corrugated Fibre board	Palmgur Industry
Detergent Powder	Fruit and vegetable Processing Industry
Elastic Tape	Village Oil Industry
Fruits Jams & jelly	Cottage Match Industry
Hollow Bricks	Plastic Industry
Laundry Soap	Medicinal Plants Industry
Leather Shopping Bag	Bee Keeping Industry
Noodles	Minor Forest Based Industry
Paper cups & Saucers	Handmade paper Industry
PVC conduit	Fibre Industry
Welding electrodes	Carpeting and Blacksmithy
Flour Mill	Cattle & Poultry Feed
Garlic Powder	Mustard Powder
Agro Seed Processing Plant	Wheat Milling
Rice Mill	Agarbathi Manufacturing
Leather Bags Making	Polythene Bags
Washing Soap and detergent	Wax Candles
Wire baskets Manufacturing	Wooden Switch Boards

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Papad Making	Pickle Making
Potato, Banana wafers	Tomato Products
Bamboo Products	Beedi Manufacturing
Gum Processing	Handmade paper
Honey Processing	Mat Weaving

**Table 5.3
Schemes on Special Demand for Khadi Gramudyog**

Cane & Bamboo	Agarbathi Manufacturing
Agricultural Waste Utilization I. Plant Growth Promoter II. Vermi Composting	Food Processing i. Biscuits ii. Papad Making iii. Pickles Making iv. Potato, Banana Wafers v. Tomato Products
Agro Processing i. Agro seed processing plant ii. Bleached & unbleached ginger iii. Cattle & Poultry Feed iv. Flour Mill Unit v. Garlic Powder vi. Mustard Oil vii. Mustard Powder viii. Spice Grinding ix. Turmeric Powder x. Rice Mill xi. Wheat Mill	Forest Based Units I. Bamboo Products II. Beedi Manufacturing III. Gum Processing IV. Handmade paper V. Honey Processing VI. Mat Weaving VII. Jams & Jelly's
Leather Bags Making	Polythene Bags
Washing Soap & Detergent	Wax Candles
Wire Baskets Manufacturing	Wooden Switch Boards
Handicraft	Tailoring

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5.8.2 Programmes for Women

A. Swayamsidha (Block Specific)

Similar to SHG with emphasis on converging services, developing access to microcredit, and promoting micro-enterprises.

Objectives:

1. Establishment of self-reliant women's Self Help Groups (SHGs);
2. Creation of confidence and awareness among members of SHGs regarding women's status, health, nutrition, education, sanitation and hygiene, legal rights, economic upliftment, and other social, economic, and political issues;
3. Strengthening and institutionalizing the savings habit among rural women and their control over economic resources;
4. Improving access of women to microcredit;
5. Involvement of women in local-level planning;

The most important component of the program is the formulation, implementation, and monitoring of block-specific composite projects for 4-5 years incorporating the following four elements:

- Group formation/mobilization activities;
- Community-oriented innovative interventions
- Other schemes of DWCD (Department of Women and Child Development), namely Swawlamban, STEP (Support to Training and Employment Programme for Women), AGP (Adolescent Girl Program), etc.

The composite project will be implemented by the Project Implementing Agency (PIA) which may be any appropriate government or non-government agency.

B. Swa-Shakti Project

Introduction

Swa-Shakti Project is a rural women development project jointly supported by the World Bank and the International Fund for Agricultural Development (IFAD). Swa-Shakti Project started on 16th October 1988 for a duration of five years with an outlay of Rs.186.21 crore. An additional

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amount of Rs.5 crore was provided under the project for setting up a revolving fund for giving interest-bearing loans to beneficiary groups, primarily during the formative stages.

The project aims at enhancing **women's access to resources** for a better quality of life through the use of drudgery (labor) and time reduction devices, health, literacy and imparting skills for confidence enhancement and increasing the women's control over income through involvement in skill development and income-generating activities.

Income Generation Activity/Micro-Enterprise Development

- With improved access to credit and skill up-gradation, a large number of women have already started microenterprises.
- started linking its members with good quality training providers like Krishi Vigyan Kendras, various research institutions of ICAR, agricultural universities and local consultants
- Around forty percent of SHG members are engaged in income-generating activities after group formation
- The average income of women engaged in income-generating activities has gone up from about Rs. 700 per month to about Rs. 1,200 per month. These women now contribute almost 8% of the household income
- 57 Business Counselling Centres have been set up to provide guidance to SHG members for taking up entrepreneurial activities and also to provide information on Govt. programs, bank procedures, awareness about health/ literacy, etc.

C. Support to Training and Employment Programme for Women (STEP)

Introduction

Support to Training and Employment Programme for Women (STEP) was launched as a Central Sector Scheme in 1986-87. The Scheme covers eight traditional sectors of employment i.e. Agriculture, Animal Husbandry, Dairy, Fisheries, Handloom, Handicrafts, Khadi and Village Industries, and Sericulture. It is implemented through Public Sector Organizations, State Corporations, DRDAs, Cooperatives, Federations, and registered Voluntary Organizations which have been in existence for a minimum period of three years.

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Its main focus is on providing training on skill upgradation, managerial, entrepreneurial and marketing skills. Support services like legal awareness, gender sensitization, nutrition, etc. are also part of the scheme. Under the scheme, 90 % of the project costs are borne by the Union Government with the balance of 10 % borne by the implementing agencies.

State Level Empowered Committees examine the proposals from States and forward them to the Union Government with their recommendations further scrutinize them by the technical department and then placed for the consideration of the Project Sanctioning Committee, headed by then-Secretary (WCD).

D. Swawlamban Scheme

NORAD/Women’s Economic Programme: launched in 1982-1983 with assistance from the Norwegian Agency for Development Cooperation (NORAD). The target groups under the scheme are the poor and needy women and women from weaker sections of the society, such as Scheduled Castes and Scheduled Tribes, etc.

- ❖ Financial assistance under the program is provided to Women’s Development Corporations (WDC), Public Sector Corporations, autonomous bodies, Trusts, and Registered Voluntary Organizations.
- ❖ Training includes computer programming, medical transcription, electronics, assembling, consumer electronics repair, radio & television repairs, garment making, handloom weaving, handicrafts, secretarial practice, community health work, embroidery, etc.
- ❖ Financial assistance is also provided to the grantee organizations for the hiring of training-cum production sheds, training cost, machinery & equipment, stipend to trainees, and remuneration for the trainers. The upper ceiling for assistance under this scheme is Rs.8000/- per beneficiary
- ❖ The NORAD assistance will not be available henceforth, since GOI has decided not to receive any aid from bilateral donors including Norway. The independent team from Norway has rated the program as the best practice for replication in developing countries.

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- ❖ State Level Empowered Committee has been set up (chaired by the Secretary in charge of Women and Child Development/Social Welfare in the State)- scrutinizes the project proposals (received from the NGOs/ Corporations/ Undertakings) and submits the same, along with its recommendations, to GOI for consideration. And then to the Project Sanctioning Committee (PSC) of the Department for approval.

E. Swadhar – A scheme for Women in Difficult Circumstances

Introduction

Swadhar is a scheme that is designed for women in difficult situations. Widows, destitute and deserted women, ex-prisoners, victims of sexual abuse and crimes, including those women trafficked and rescued from brothels migrant or refugee women mentally challenged women, women victims of terrorist violence women affected by natural calamity (flood, cyclone, earthquake), etc.

Causes of Such Circumstances

- Economic instability of family, therefore, support is not extended to such women
- Breakdown of the joint family system
- Social bias against the marginalized women as also the attitude and value attached to such women.
- Society itself drives such women out of the system to lead lives of sub-human existence. More often vulnerable women in distress end up as beggars or prostitutes for their own survival and at times for survival and maintenance of their dependent children. Very limited State intervention available through old age home, short-stay home, Nari Niketan, etc, cover only a fringe of the problems of such women. Therefore, a scheme known as ‘Swadhar’ has been designed with a more flexible and innovative approach to cater to the requirement of various types of women in distress in diverse situations under different conditions.

The Swadhar Scheme purports to address the specific vulnerability of each of group of women in difficult circumstances through a Home-based holistic and integrated approach.

Objective

The following shall be the objectives of the scheme:

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1. To provide primary need of shelter, food, clothing and care to the marginalized women/girls living in difficult circumstances who are without any social and economic support;
2. To provide emotional support and counseling to such women;
3. To rehabilitate them socially and economically through education, awareness, skill up gradation and personality development through behavioral training etc.
4. To arrange for specific clinical, legal and other support for women/girls in need of those intervention by linking and networking with other organizations in both Govt. & Non-Govt. sector on case to case basis;
5. To provide for help line or other facilities to such women in distress; an
6. To provide such other services as will be required for the support and rehabilitation to such women in distress

F. Target Group/Beneficiaries

The following shall be the target group beneficiaries of the scheme

- i. Widows deserted by their families and relatives and left uncared near religious places where they are victims of exploitation;
- ii. Women prisoners released from jail and without family support
- iii. Women survivors of natural disaster who have been rendered homeless and are without any social and economic support;
- iv. Trafficked women/girls rescued or runaway from brothels or other places or women/girl victims of sexual crimes who are disowned by family or who do not want to go back to respective family for various reasons;
- v. Women victims of terrorist/extremist violence who are without any family support and without any economic means for survival;
- vi. Mentally challenged women (except for the psychotic categories who require care in specialized environment in mental hospitals) who are without any support of family or relatives.
- vii. Women with HIV/AIDS deserted by their family or women who have lost their husband due to HIV/AIDS and are without social/economic support; or

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viii. similarly placed women in difficult circumstances.

G. Mahila Kisan Sasakthikaran Pariyojana

Empowerment of Women Farmers

National Commission on Farmers (NCF) - held several formal consultations across the country and also directly interacted with the farmers and other local stakeholders.

Reforms

Education Support Programme (ESP) in 2006 for school children from suicide-affected farmers

Problems of Women Farmers-

1. Women also lack ownership rights to the land on which they toil
2. women farmers are not recognized as farmers
3. Agriculture is practiced under unfavourable agro-ecological conditions with low levels of irrigation and modernization

MSSRFs (M. S. Swaminathan Research Foundation) Bio-Village Paradigm

1. Enhancing lives and livelihood of the communities through appropriate on-farm and off-farm interventions
2. Acknowledges grassroots women knowledge holders to take a key leadership role in rural areas
3. To occupy elected positions in the local bodies and have represented their community in several regional, national and international for a better quality of life.

The Mahila Kisan Sashaktikaran Pariyojana Programme

Launched in 2007 by MSSRF in Vidarbha region

- to bring about positive change in the lives of women farmers through mobilizing them into collectives
- helping generate an independent identity as farmers
- building their skills and capacities as farmers and in problem-solving more generally
- facilitating their increased involvement in decision-making in their families and facilitating the formation of community-based institutions which will emerge as a support and pressure group.

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1) Mobilization of Women into Groups

- Women are categorized on basis of ownership holding among MKSP member households according to farm size. small, marginal, large, semi medium farmers.
- Also provision for marginalized-(SC ST NT) single women, etc.
- accounting for about nearly half of the total members are marginal and small farmers
- socially marginalized sections in the group to more than one quarter.

2) Capacity building of women farmers' collective (giving independent identity)

Organizational management, sustainable agriculture practices and food and nutrition security

The strategy adopted for the capacity building includes

- a) Awareness creation through monthly meetings,
- b) Demonstrations and exposure visits;
- c) Skill training by sourcing into both in-house and external resource persons and
- d) Facilitation through helping effect linkages, providing access to technological and financial resources

Organizational management- These include training on recordkeeping, accounting, communication, mobilization and building linkages with local administration at all levels.

Sustainable agriculture-

1. Integrated Crop Management techniques
 - Integrated pest, disease and weed management;
 - Integrated plant nutrient systems
 - Integrated soil n water management system
2. Natural resource management in the women farmers field is done through soil and water conservation structures such as contour bunding
3. Soil health management is done through continuous monitoring of soil health using a soil health card.
4. Chemical or synthetic inputs are used at a bare minimum quantity depending upon the need.

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3) Food and nutrition security

- Awareness creation on issues relating to health and sanitation are also addressed with the members of the women collectives
- Locally suitable food crops, horticultural crops, and backyard kitchen gardens are promoted to increase household consumption of local food grains, vegetables, and fruits among the members
- health camps & various government schemes on food, nutrition and health
- ex. Training on insecticide resistance management

4) Extension and scaling up

1. Farmer to farmer extension- informal community - components share the knowledge gained through the capacity building exercises and practical experiences in field level implementation of technologies with other group members. of barefoot extension workers acting as catalysts of change and handhold other group members in the project area
2. Monthly meetings as learning forums- specific constraints faced in field level technology adoption and suggest ways of technology modification to suit local conditions

Uniqueness of the Initiative

1. Identity of women as farmers
 - never been recognized as farmers
 - neglect from the public extension system
 - MKSP is that it is the first women farmers organization which was started in the backdrop of the large number of farmers suicide happening across the country.
2. Difference over Self Help Groups (SHGs)
 - MKSP does not stress saving and credit like SHG; its focus is women empowerment through formation of women collectives and capacity building of these collectives to function as independent entities.

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- Women farmer groups provide a forum for women farmers for discussions of problems encountered in their farms and learn by sharing of experiences.
3. Empowerment through access to entitlements
 - Facilitation to access to entitlement using household entitlement card is a unique strategy adopted
 - For household entitlement card -information on eligibility criteria, documents required at the time of application, the department responsible for sanctioning the scheme, the contact person and address of the department etc are provided
 - access to the government schemes pertaining to agriculture, food and nutrition and health are taken up with women farmers using this entitlement card
 4. ICT for empowerment
 - entails the ability of the women farmers to take informed, scientific, and weather-based farm decisions
 - provided information on prices and cultivation practices through the ICT network
 - agro-advisories (5 free voice messages daily-provides day-to-day crop management advice)
 - green sim cards
 5. National recognition
 - farm women are enabled to play their rightful role in strengthening national food security and agrarian (agricultural economy) prosperity
 - national programme under the same title, viz , Mahila Kisan Sashaktikaran Pariyojana and special provision has been made in the union budget of 2010-11 for expanding this programme on a national scale

Results

1. Awareness and training on different sustainable agricultural practices, food and nutrition security issues and on organization management.
2. About 2200 ha. of land have been brought under one or the other sustainable agriculture practice for which the women farmers have received training

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3. Adoption of best practices in members field has created demonstration effects in MKSP villages resulting in demand by non-members for capacity building on these issues
4. So, while the programme directly covers only its members, the impact of the interventions under the programme extends to a larger section of the society resulting in a multiplier effect
5. The intangible and the more important results in terms of empowerment under MKSP, is the evolution of women farmers as better decision-makers, improvement in their self-confidence and development of a general sense of belonging among women farmers
6. position to take control of their lives and livelihoods

Prospects for Sustainability

Three-tier structure consisting of women farmer groups at the village level, cluster of 8-10 women farmers groups at the block level, and federation of all the women farmers groups at the district level

The federation of women farmers will be a registered body to take up services like credit and market linkages.

Collective marketing on behalf of its members. The members will benefit from the economies of scale those results from the bulk purchase and sale of inputs and produce.

Challenges

1. Lack of environment to allow women to be decision makers: male dominating society, - lack of ownership of resources in spite of gaining knowledge and skill gained through the capacity building exercises.
2. Trend of SHG mode of women empowerment: always been in the savings and credit (SHG) mode with focus on microfinance and linkage to institutional credit thus capacity building of women farmers in sustainable agricultural practices was major challenge.
3. Prevalence of conventional practices: Farmers in Wardha generally did not take up sustainable agricultural practices like contour bunds or apply bio-inputs in farming.

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Changing people’s mindset and mobilizing them to take up these practices was a challenging task. Ex. Scouting for pests in cotton fields.

Learning

1. Need for gender inclusiveness schemes to be developed also for men who are deprived of resources and technology. It will also influence space for greater participation of women in decision making related to agriculture and food and nutrition security at the household level
2. Resource support: Capacity building initiatives should be complemented with timely resource support (technical and financial) to ensure effective utilization of new learnings and adoption of new skills by women farmers.
3. Need for an enabling policy environment: A series of policy measures which will create an enabling environment for adoption of sustainable agricultural practices in the region is crucial for adoption and spread of these practices. The enabling environment would mean a credit system which caters to the need of farmers adopting sustainable agricultural practices, an effective public extension system to create awareness and facilitate the spread of sustainable agricultural practices, and incentives for producing biomass - such as subsidy for livestock rearing, subsidized supply of bio-inputs, etc.

Conclusion

Empowerment is a very broad term and individuals go through various stages of empowerment. MKSP - MSSRFs women farmers’ initiative in Vidarbha attempts at gradual empowerment of women farmers through multiple processes. The process of awareness creation, capacity building and facilitation ensures greater control over the decision-making process in the livelihood of women farmers and leads to transformative decisions based on sound science. The creation of a community-based organization will give women farmers greater visibility, recognition and support in the community and help them source resources (inputs, technology, and services like extension, credit and market and legal entitlements) more effectively. A community-based organization would also enable women to function effectively, both to develop themselves as farmers and thus provide for their households, and to develop agriculture in the region without encountering legal and social obstacles. MKSP

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serves as a platform for self-expression through sharing experiences and as a forum for peer learning. It also provides an opportunity for greater social participation and improves women farmers' self-confidence as is evident from the first-person accounts. The national programme which has been launched under the same name-MKSP perhaps marks the beginning of a new era where women farmers are identified as primary stakeholders in heralding a national agricultural revival.

Guidelines For Implementation of Adolescent Girls Scheme as A Component Under Centrally Sponsored ICDS (General) Scheme

Adolescence age: age group of 11-18 years

Introduction

- Intermediary between childhood and womanhood and it is the most eventful for mental, emotional and psychological well being
- For the first time in India, a special intervention was devised for adolescent girls using the ICDS infrastructure. ICDS with its opportunity for childhood development seeks to reduce both socio-economic and gender inequities. The
- **Adolescent Girls (AG) Scheme** under **ICDS** primarily aimed at breaking the inter-generational life-cycle of nutritional and gender disadvantage and providing a supportive environment for self-development

The objective of the Scheme is to increase self-confidence, boost moral and give dignity.

Present Intervention

1. Anganwadi Centres

- Adolescent girls who are unmarried and belong to families below the poverty line and school drop-outs are selected and attached to the local Anganwadi Centres for six-monthly stints of learning and training activities

2. Scheme- I (Girl to Girl Approach) and Scheme-II (Balika Mandal).

- Girl to Girl Approach:- age group of 11-15 years
 - Belonging to families below poverty line.
- Balika Mandal:- age group of 11-18 years

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- Any income levels of the family.
- every girl gets definite preference in the identification process
(Girls in the age group of 11-15 years or belonging to poor families)

Kishori Shakti Yojana – A new initiative

- Health, nutrition, education and social status of adolescent girls are at sub-optimal level.
- Access to vital health and nutrition information/ service is not up to the mark

Therefore, Programmes aimed at

- Improving the nutritional and health status of adolescent girls and
- Promoting self-development, awareness of health, hygiene, nutrition, family welfare and management,
- Promoting the decision making capabilities of women.
- Providing cover of ICDS to adolescent girls in all the ICDS Projects.

The programme is needed to following things:

- Extend the coverage of the Scheme with content enrichment,
- Strengthen the training component particularly in vocational aspects aimed at empowerment and enhanced self perception and
- Bring about convergence with other programmes of similar nature of education, rural development, employment and health sectors.

Objectives of Kishori Shakti Yojana

- i. To improve the nutritional and health status of girls in the age group of 11-18 years;
- ii. To provide the required literacy and numeracy skills through the non-formal stream of education, to stimulate a desire for more social exposure and knowledge and to help them improve their decision making capabilities;
- iii. To train and equip the adolescent girls to improve/ upgrade home-based and vocational skills;

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- iv. To promote awareness of health, hygiene, nutrition and family welfare, home management and child care, and to take all measure as to facilitate their marrying only after attaining the age of 18 years and if possible, even later;
- v. To gain a better understanding of their environment related social issues and the impact on their lives;

To encourage adolescent girls to initiate various activities to be productive and useful members of the society.

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5.9 Disabled-Person Development Schemes

Introduction

In the light of the Government's growing stress on helping disabled persons and in bringing the aids and appliances within their reach, it has been decided to continue the ADIP Scheme (Assistance to Disabled Persons) and modify it in such a way that it becomes more user-friendly and the needy are not deprived of aids / appliances, which are essential for their social, economic and vocational rehabilitation. If they can, thereby, become earning members they would be much closer to achieve economic self-dependence and also be able to live and pursue their activities dignity. The Department of Welfare of Disabled strives for the welfare of persons with disabilities and enables disabled persons to get the benefits of the different schemes in order to lead normal lives as far as possible. The disabled persons are categorized as here under:

- ◆ Orthopedically Handicapped
- ◆ Visually Impaired
- ◆ Hearing Impaired
- ◆ Mentally Retarded
- ◆ Multiple Handicapped
- ◆ Leprosy cured handicapped
- ◆ Mental Illness

A comprehensive Act called the persons with Disabilities (Equal Opportunities, Protection of Rights & Full Participation) Act - 1995 has come into force from 07-02-1996. The State Govt. has constituted the State Co-ordination Committee as per the Sec.13 of the Act. The State Government also appointed the Secretary Department of Women & Child Development as the Commissioner for persons with disabilities as per Sec.60 of the Act. The State Govt. has constituted the State Executive Committee as per the Sec. 19 of the Act.

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Types Of Aids / Appliances to be Provided

The following aids and appliances may be allowed for each type of disabled individual. However, any other item as notified from time to time by the Ministry of Social Justice and Empowerment (MSJE) for the purpose will also be allowed:

Locomotor Disabled

- I. All types of prosthetic and orthotic devices.
- II. Mobility aids like tricycles, wheelchairs, crutches walking sticks and walking frames / rotators. Motorized tricycles for persons with locomotors disability that are likely to cost more than Rs. 6,000/- may be procured and provided in exceptional cases subject to prior approval of Ministry of Social Justice and Empowerment on case to case basis. Extent of subsidy would however continue to be Rs. 6,000/-, for all other devices ceiling is Rs. 6,000/-.
- III. All types of surgical foot-wears and MCR chappals.
- IV. All types of devices for ADL (activity of daily living).

Visually Disabled

Learning equipments like arithmetic frames, abacus, geometry kits etc. Giant Braille dots system for slow-learning blind children. Dictaphone and other variable speed recording system.

- i. CD player /Tape recorder for blind student from X standard.
- ii. Science learning equipments like talking balances, talking thermometers, measuring equipments like tape measures, micrometers etc.
- iii. Braille writing equipments including Brailers, Braille shorthand machines, typewriters for blind students from X class. Talking calculators, Geography learning equipment like raised maps and globes.
- iv. Communication equipments for the deaf-blind. Braille attachments for telephone for deaf-blind persons.
- v. Low vision aids including hand-held stand, lighted and unlighted magnifiers, speech synthesizers or Braille attachments for computers.

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- vi. Special mobility aids for visually disabled people with muscular dystrophy or cerebral palsy like adapted walkers.
- vii. Soft-ware for visually handicapped persons using computers that are likely to cost more than Rs. 6,000/- may be procured and provided in exceptional cases subject to prior approval of Ministry of Social Justice and Empowerment on case to case basis. For all other devices ceiling is Rs. 6,000/-.

Hearing Disabled

- i. Various types of hearing aids
- ii. Educational kits like tape recorders / CD players etc.
- iii. Assistive and alarming devices including devices for hearing of telephone, TV, doorbell, time alarm etc.
- iv. Communication aids like portable speech synthesizer etc.

Mentally Disabled

- i) Any suitable device as advised by Rehabilitation Professional or treating physician.

Procedure For Receipt of Grant-In-Aid by an Implementing Agency

The organization will submit their application in the prescribed format to the Ministry of Social Justice and Empowerment through concerned State Government/UT Administration/National Institute/Regional Rehabilitation Training Centre/District Rehabilitation Centre/any other agency authorized by Ministry of Social Justice and Empowerment, every year. The application should be accompanied with following documents/information (duly attested):

- a) A copy of Registration Certificate u/s 51/52 of Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act (PWD Act), 1995
- b) A copy of Registration Certificate under Societies Registration Act, 1860 and their branches, if any, separately, or Charitable Trust Act
- c) A copy of Rules, Aims and Objectives of the Organization
- d) A copy of Certified Audited Accounts and Annual Report for the last year
- e) Names of the Members of Management Committee of the Organization

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- f) List of identified beneficiaries and types of aids/appliances required by the organization for supply/fitting to the identified beneficiaries
- g) Estimated expenditure for distribution/fitting of aids/appliances amongst the identified beneficiaries
- h) An Undertaking that the funds will not be utilized for any other purposes
- i) An Undertaking to maintain a separate account of the funds received from the Ministry under the scheme
- j) The Implementing Agencies already receiving grant-in-aid under the Scheme should also furnish the list of beneficiaries assisted from the grant-in-aid released to them in the previous year as per proforma in CD in Excel programme and summary of beneficiaries covered in hard copy. Utilization certificate may be given
- k) A calendar of activities for entire financial year including probable dates for holding camps etc. for distribution of aids/appliances and also maintains separate account for that
- l) An Undertaking that the organization will provide post-distribution care to the beneficiaries as well as aids/appliances, on demand
- m) Organization should be financially sound and viable and has requisite capability to mobilize the resources
- n) The organization shall have working rapport with the District Administration and shall have capacity to utilize the expertise available with District Administration for identification of aids/appliances
- o) The implementing agencies shall keep manuals / literature on main features, maintenance and upkeep of devices, one year free maintenance would be provided by them for assistive devices. 2% of the annual allocation will be earmarked for monitoring and evaluation of expenses
- p) The organization will provide reservation to SC/ST/OBC and disabled persons in accordance with instructions issued by GOI from time to time if it employs more than 20 persons on a regular basis.

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Facilities/ concessions are available for the disabled under the following Programmes:

1. Disability certificate and identity card
2. Education programmes for children with special needs
3. Children's Education Allowance and Scholarships
4. Assistance to disabled persons for purchase/fitting of aids and appliances (ADIP Scheme)
5. Preference in allotment of STD/PCO to handicapped persons
6. Custom concessions
7. Employment of the handicapped
8. National awards for people with
9. Incentives to private sector employers for providing employment to persons with disabilities
10. Reservation of jobs and other facilities disabled persons
11. Economic assistance
12. Grant-in-aid schemes of the Ministry of Social Justice & Empowerment
13. Other concession and schemes
14. Concessions for Blind
15. Concessions for Deaf
16. Concessions for Mentally Retarded (MR)
17. Concessions for Orthopedically Handicapped (OH)

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Specific Schemes for Maharashtra State Government		
S. N.	Particulars	Description
1.	Reservation In Govt Job:	3% reservation is available in Government job for physically handicapped persons in Grade 'C' and 'D' posts. The state government has decided that % vacancy of each for the Blind, the Deaf and for the Orthopedically Handicapped in Class III and Class IV services of Government and comparable posts in the Public Sector Undertakings and local bodies to be filled in by Directorate of Recruitment in any office should be reserved for being filled in by these persons.
	Age relaxation	The upper age limit is relaxed up to 45 years for handicapped persons for applying in Government jobs.
	In Educational institutions:	2% seats are reserved for handicapped for extension programme like short term courses in the following: a. Mental Retardation: Awareness Programme (Pertaining to all disabilities and rehabilitation) b. Learning disability: Technical Institutions 1% seat is reserved for handicapped for admission in educational institutes.
2.	Scholarship / Stipend	The State Government awards Rs. 30 p.m. as scholarship to those handicapped students from Class I to Class VIII whose family income is less than 4,800 p.m. A certificate of at least 40% disability is required to be eligible for the scholarship
3.	Maintenance Allowance (Through Institutions)	Disabled persons whose age is 55 years and above get maintenance allowance grant through NGOs at Rs. 125 p.m.
4.	Unemployment Allowance	Unemployed graduates are sent to work in Government Offices and given Rs. 100 for 15 days. They have to work for 4 hours per day.

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5.	Conveyance Allowance	Government employees get 5% of the basic or Rs. 100 p.m. maximum as conveyance allowance for attending office.
6.	Bus Concession	State Road Transport is giving 75% concession in bus fares to blind, deaf and Orthopedically Handicapped persons and 50% concession to their attendants
7.	Assistance for Self Employment	The maximum assistance admissible under this scheme shall be Rs. 500 per beneficiary. In exceptional types of trades such as armature, winding, book binding, sheet metal work etc. for which the material of equipment required is much expensive, the ceiling of financial assistance may be raised up to a maximum of 1000 per beneficiary. Financial assistance up to Rs. 1000 is given to the trained disabled person. Contact Officer - Director of Social Welfare, Maharashtra, Pune-1. A margin money scheme is implemented by State Government for starting self-employment by disabled persons. Project up to Rs. 25,000 are considered for financial assistance. Out of this 80% will be Bank Loan and 20% (Limited to Rs. 5,000) is the subsidy from the State Government.
8.	Awards/ Sports / Seminars Exemption in Road Tax/ Professional Tax	State Government gives awards to disabled for the excellent work done by them to those who fail to get National Awards by Central Government Physically handicapped persons are totally exempted from paying professional tax from 1987-88. Physically handicapped persons are also exempted from paying road tax.
9.	Assistance for purchase of Aids and Appliances	Handicapped persons whose income is up to Rs. 1500 p.m. are entitled to 100% grant on aids and appliances, for those whose income is between Rs. 1,501 to Rs. 2,000 are entitled 50% assistance. The maximum limit of assistance and

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		<p>appliances is Rs. 3,000. Handicapped persons are also eligible for Rs. 150 as conveyance allowance and Rs. 10 for lodging and boarding per day up to maximum of Rs. 100 for attending rehabilitation camps for aids and appliances.</p>
10.	Other Concessions / Facilities	<ul style="list-style-type: none"> • Relaxation in typing qualification: Relaxation in typing qualification for appointment to clerical post mandatory for MPSC. • Margin money: Margin money provided to the disabled up to the maximum cost of the project Rs. 25,000. Out of this, 80% is bank loan and 20% is subsidy being provided by the State Government i.e. Rs. 5,000. • Government Quarter: Disabled get preference in allotment of Government Quarter. • Extra timing in exam: Deaf, dumb, blind and physically handicapped students get extra 30 minutes time in the Secondary and Higher Secondary Examinations. The above categories students are provided a Writer if necessary at the time of examination whose arrangement is done by the board. • Merit award to disabled SSC and HSC students: Rs.100 is granted to meritorious handicapped students. 3 students covered every year. • 3 Residential Schools for the Orthopedically Handicapped are set up at Nagpur, Aurangabad and Miraj. • Blind students studying in colleges are given tape recorder and a set of 10 educational cassettes for their use.

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5.10 Health Schemes/Programmes

The details of important Centrally Sponsored Health Schemes/Programmes of Ministry of Health & Family Welfare presently in operation in the country are as follows:

1. National Rural Health Mission (NRHM) –

The National Rural Health Mission (NRHM) is a Centrally sponsored programme of this Ministry. The NRHM launched in April, 2005 (for seven years i.e. 2005 to March 2012) seeks to provide accessible, affordable and quality health care to the rural population, especially the vulnerable sections, with special focus on 18 states, including Jammu and Kashmir, Himachal Pradesh and North-Eastern states. The mission proposes to facilitate increased access and utilization of quality health services. This has been carried out by increasing the spending on health and improving the health care services at the community level. The mission undertakes several architectural corrections of the health system to enable and promote policies that strengthen public health management and service delivery within the country. It also envisages revitalizing the local health traditions and attempts to mainstream AYUSH into the public health system by effectively integrating health concerns through decentralized management at local levels. The mission also addresses issues on sanitation and hygiene nutrition, safe drinking water, gender, social concerns, and inter-state as well inter-district disparities in health care provision.

Objectives of NRHM - The main objectives of NRHM are as follows:

- Reduction in Child and maternal mortality
- Universal access to public services like food and nutrition, sanitation and hygiene and also access to public health care services with emphasis on services addressing women and children health and universal immunization.
- Prevention and control of communicable and non-communicable diseases, including locally endemic diseases.
- Access to integrated complete primary health care.
- Population stabilization, gender and demographic balance.
- Regenerate local health traditions & mainstream AYUSH.

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- Promotion of healthy life styles.

1. Revised National Tuberculosis Control Programme (RNTCP) –

The programme is being implemented in the entire country among the urban as well as rural areas to address the problem of Tuberculosis, based on WHO recommended strategy of Directly Observed Treatment Short Course Chemotherapy.

Under the programme, diagnosis and treatment facilities including anti TB drugs are provided free of cost to all TB patients. For quality diagnosis, designated microscopy centres have been established for every one lac population in the general areas and for every 50,000 population in the tribal, hilly and difficult areas. More than 13000 microscopy centers have been established in the country. Drugs are provided under direct observation and the patients are monitored so that they complete their treatment.

2. Janani Suraksha Yojana (JSY) –

Janani Suraksha Yojana (JSY) is a nationwide, centrally sponsored scheme being implemented with the objectives of reduction in infant and maternal mortality by improving coverage of institutional delivery among pregnant women. Under the scheme, cash assistance is provided to pregnant women for giving birth in a health facility.

3. Janani Shishu Suraksha Karyakaram (JSSK) –

Under National Rural Health Mission, the Government of India has launched Janani Shishu Suraksha Karyakaram (JSSK) on 1st June, 2011, which entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery including Caesarean section. The initiative stipulates free drugs, diagnostics, blood and diet, besides free transport from home to institution, between facilities in case of a referral and drop back home. Similar entitlements have been put up in place for all sick new borns accessing public health institutions for treatment till 30 days after birth.

In the current financial year i.e., 2011-12, based on the request received from the States, funds to the tune of Rs 1437 crores have been approved for the States to implement the scheme.

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4. Routine Immunization Programme and Pulse Polio Immunization Programme –

Routine Immunization Programme and Pulse Polio Immunization Programme are under operation in the country.

5. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) –

National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) is a new initiative in the 11th Five Year Plan. The NPCDCS aims at reducing the burden of Non-Communicable Diseases (NCDs) such as cancer, diabetes, cardiovascular diseases and stroke which are major factors reducing potentially productive years of human life, resulting in huge economic loss. The NPCDCS has been approved at a total outlay of Rs.1230.90 crore for the remaining period of the 11th Five Year Plan. This includes Rs.499.38 crore for DCS component of NPCDCS and Rs.731.52 core for Cancer Control Programme. The expenditure will be met on cost sharing basis with the participating States at ratio of 80:20. The programme has been initiated in 100 Districts of 21 States during 2010-11 & 2011-12. The objective of the programme include prevention and control of diabetes at various levels viz. Sub-centres, Community Health Centre (CHC), District Hospital etc. through screening of all persons above 30 years of age and all pregnant women for diabetes and hypertension, awareness generation on healthy life style and management of non-communicable diseases by strengthening / establishing Cardiac Care Units, Day-care cancer facilities at District Hospitals and specialised clinics (Non Communicable Diseases Clinic) at District Hospitals and Community Health Centres.

During 2010-11, a sum of Rs. 28.67 crore was released to 19 States for implementation of the programme in 27 Districts. During 2011-12, Rs.92.97 crore has been released to 20 States covering 91 Districts on signing of Memorandum of Understanding by the State Governments.

6. National Programme for Control of Blindness (NPCB) –

National Programme for Control of Blindness (NPCB) is one of the Centrally Sponsored Schemes in operation in the country for control of blindness.

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7. National Mental Health Programme (NMHP) –

Under National Mental Health Programme (NMHP), the objective is to provide treatment and care to the mentally ill patients in the country. Following provisions have been made under National Mental Health Programme:

- i. Strengthening of State run Mental Hospitals.
- ii. Upgradation of Psychiatric Wings of Govt. Medical Colleges/ General Hospitals
- iii. District Mental Health Programme.
- iv. Manpower Development Schemes

8. National Tobacco Control Programme (NTCP)-

The National Tobacco Control Programme (NTCP) has been launched in 42 Districts of 21 States in order to implement the various provisions made under Tobacco Control Act (COTPA), 2003 and to create awareness about the harmful effects of tobacco consumption. The programme broadly envisages-

- i. Public awareness/mass media campaigns for awareness building & for behavioural change.
- ii. Establishment of tobacco product testing laboratories, to build regulatory capacity, as required under COTPA, 2003.
- iii. Mainstream Research & Training – on alternate crops and livelihoods with other nodal Ministries.
- iv. Monitoring and Evaluation including surveillance e.g. Adult Tobacco Survey.
- v. Dedicated tobacco control cells for effective implementation and monitoring of Anti Tobacco Initiatives.
- vi. Training of health and social workers, NGOs, school teachers etc.
- vii. Setting up tobacco cessation centres.

9. National Vector Borne Disease Control Programme (NVBDCP) –

The National Vector Borne Disease Control Programme (NVBDCP) is an ongoing centrally sponsored scheme which is implemented in all the states/UTs for prevention and control of six vector borne diseases, namely Malaria, Dengue, Chikungunya, Japanese Encephalitis, Kala

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Azar and Lymphatic Filariasis. The Govt. of India provides technical support as well as cash and commodity assistance as per the approved pattern.

10. National Leprosy Eradication Programme (NLEP)

11. Capacity building for Trauma Care –

Under the Centrally sponsored Scheme-Assistance for capacity building for Trauma Care, funds have been released to 117 Government Hospitals situated along the Golden Quadrilateral, North-South and East-West Corridors of the national highways in 16 States, as per laid down norms of level of Trauma Centre, in phases, towards construction, equipments, manpower, communication and Legal Service, after signing of Memorandum of Understanding (MOU) with the respective state Governments.

12. Upgradation of facilities in the Department of Physical Medicine & Rehabilitation in Medical Colleges -

Under the Centrally Sponsored Scheme for “Upgradation of facilities in the Department of Physical Medicine & Rehabilitation in Medical Colleges”, funds have been released to 18 Medical Colleges under Central/State Governments after signing of Memorandum of Understanding (MOU) with the respective State Governments.

1. Reproductive and Child Health programme (RCH) –

Reproductive and Child Health programme is a comprehensive sector wide flagship programme, which is being implemented under Government of India’s (GoI) National Rural Health Mission (NRHM), to achieve the targets for reduction of maternal and infant mortality and total fertility rates.

2. National Programme for the Health Care of Elderly (NPHCE) –

The National Programme for the Health Care of Elderly (NPHCE) has been initiated in 100 identified districts of 21 States during the 11th Plan period (2010-12) in order to provide comprehensive health care facilities to the elderly people of the country. Eight selected Regional Medical Institutions (Regional Geriatric Institutions) in different regions of the country have also been identified.

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3. Strengthening and Upgradation of State Government medical colleges -

The Medical Education Division is implementing a Centrally Sponsored Scheme for strengthening and upgradation of State Government medical colleges by way of a one-time grant of Rs.1350 crores with funding pattern of 75% by Central Government and 25% by State Government for starting new Post Graduate disciplines and increasing PG seats. So far, the Central Government has released first instalments of Rs. 501.00 crores to the 72 medical colleges during the financial year 2009-10, 2010-11 & 2011-12.

4. National AIDS Control Programme –

Department of AIDS Control is implementing National AIDS Control Programme-IV as a 100% centrally sponsored scheme/programme is implemented in all States/UTs.

5. Centrally Sponsored Scheme for Development of AYUSH (Indian Systems of Medicine Ayurved Yoga Unani Sidhha Homeopathy Naturopathy)

Hospitals and Dispensaries - A Centrally sponsored Scheme for Development of AYUSH Hospitals and Dispensaries is under implementation. The Department of AYUSH is providing funds to all States/UTs Government under the following components:

1. Establishment of OPD at PHC's
2. Establishment of IPD at CHC's
3. Establishment of AYUSH wings at DH's
4. Upgradation of AYUSH Hospital and Dispensaries
5. Establishment of PMU
6. Essential drugs to AYUSH Hospital & Dispensaries

These programmes are constantly monitored and assessed through multiple monitoring mechanisms including analysis of structured monthly, quarterly and annual reports, officials' visits by concerned programme Divisions, periodical review meetings/Joint Monitoring Missions, External Surveys, Health Management Information System (HMIS), Performance Audit by CAG, Mid-Term Appraisal by Planning Commission etc. The progress and efficiency of the schemes are reviewed with the States in various national review meetings and forums like Dissemination workshop, internal review meetings at the State/District level. Some programmes are also reviewed by other mechanism such as Expert

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Group, External Agencies, funding agencies and technical partners, independent Impact Assessment studies.

5.11 National Scheme of Welfare of Fishermen

The Centrally Sponsored National Scheme of Welfare of Fishermen was introduced to offer financial assistance for fishermen. The funds offered under the scheme can be built for constructing homes, community halls for both recreation and work purposes, installation of tube-wells, and drinking wells. The current plan outlay, which is in its 10th term, has a budget of Rs.120 crore.

Scope

The Centrally Sponsored Scheme seeks to assist fishermen from all over India to implement:

- Development of self-sustainable fishermen villages
- Accidental insurance for all active fishermen
- Saving-cum-relief resources in case of work-related accidents

Group Accident Insurance

Under this component of the Centrally Sponsored National Scheme of Welfare of Fishermen, all fishermen who are registered with the State or UT government will receive Rs.50,000 worth of insurance on death or permanent disability. An additional Rs.25,000 is also allocated in case of partial disability.

The insurance cover lasts 12 months and is controlled by FISHCOPFED for all participating States and UTs. The annual premium that needs to be paid is a maximum of Rs.15 per head, which is a subsidised amount by the grants-in-aid from the Centre and the State Government. In Union Territories, the entire amount is borne by the Central Government.

The premium that is borne by FISHCOPFED is transferred directly to farmers' insurance policies instead of being routed via the States of Union Territories. To keep the insurance plan active, farmers need to pay their share of the premium (maximum of Rs.15 per head/term) before the due dates.

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Savings cum Relief Scheme

This component of the Centrally Sponsored National Scheme of Welfare of Fishermen offers saving and relief benefits to fishermen. Under this component of the scheme:

- Rs.75 per month is to be collected from marine fishermen for 8 months to a year
- A total of Rs.600 needs to be collected with a matching amount of Rs.600 being offered by the State and Central Government on a 50-50 share basis.
- If a fisherman defaults payment, any paid amount will be refunded along with accrued interest at the end of the 4th instalment's due date.
- If a fisherman defaults all payments, the scheme may be waived entirely.
- Provisions are available for "lean months" which vary from coastal area to coastal area.

The lean months are decided by the FISHCOPFED.

Eligibility Terms for Marine Fishermen

The scheme covers all marine fishermen eligible for Centrally Sponsored Schemes who operate under States, Union Territories, and FISHCOPFED. Fishermen under FISHCOPFED are eligible for the insurance component only. Fishermen officially licensed by their respective States or Union Territories are eligible for funds for building homes, community halls, utilities, and insurance.

To be eligible for the scheme, an individual has to be:

- Engaged in full-time fishing in the sea
- Be a member of a Cooperative Society/Welfare Society/Federation
- Lives below poverty line (BPL)

Eligibility Terms for Inland Fishermen

For inland fishermen, the eligibility terms are different from full-time marine fishermen living in coastal areas. Fishermen officially licensed by their respective States or Union Territories are eligible for funds for building homes, community halls, utilities, and insurance. To be eligible for the scheme, a fisherman needs to:

- Be below 60 years of age
- Be from below poverty line (BPL)
- Engaged in full-time activities within the inlands

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Fishermen families or fishermen who are regularly employed or indulge in other income-generating activities will not be eligible for the scheme.

How to Apply

To apply for the scheme, potential beneficiaries need to apply to the nearest FISHCOPFED office. The contribution is collected by the President or Secretary of the Associations and forwarded to nationalized bank accounts held by the Director of Fisheries.

Once the funds are submitted to the Director of Fisheries, the State and Central Governments match the contributions of the fishermen as part of their premiums. Upon maturity of the schemes, the full investment is returned, along with any interest accrued.

Documents required when applying at FISHCOPFED include:

- Aadhaar Card
- Voter ID Card
- Income Certificate
- Registration as a fisherman under the State or Central Government

District Level Schemes

Training of Fisher Youths

A) Inland: -Short-term Training of advanced technology in freshwater Fish farming is imparted to Fisher youth.

- Place of training - Government fish seed centers
- Duration of training - One month.
- No. of Training Terms - 2(IMC Breeding season)/(Cyprinus Breeding season).
- Capacity - 20 Trainee/Term.
- After successful completion of Training, the certificate is awarded.

More Training of Fisher Youths

Establishment Of Fish Seed Centers

The department has established Forty-two fish seed production centres out of which 28 centres are facilitated with Chinese Circular Hatcheries, to make available Indian Major Carp and Common Carp quality fish seed to piscicultures of the state.

Fish seed is made available at reasonable rates from these centres.

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More Establishment of Fish Seed centres

Fish Farming in Impounded Waters

Fishing rights of newly constructed irrigation tanks and reservoirs are handover to the Department of Fisheries by Irrigation Department for the development of pisciculture. Such virgin tanks are stocked by the government for first five years as per the directives of the government. The revised departmental stocking policy is determined by Government Resolution No. Matsui -2410/527/Pra.Kra.104/10/ADF-13, dated 18.09.2010 under this scheme as below:

More Fish Farming in Impounded Waters

Concession In Electricity Bill for Ice Factories and Cold Storages of Fisheries Co-Operatives

It is imperative to preserve fish in ice or in cold- storage as it is highly perishable food commodity. The ice factories & cold storages are managed by fisheries co-operative societies. Day by day it is becoming a costly affair to manage the ice factories & cold storages. Hence concession is accorded to Fisheries Co-operative Societies at the rate of 40 paise per unit. The reimbursement according to use of electricity is paid directly to MSEB on behalf of Fisheries Co-operative Societies by State Government.

Providing Infrastructure Facilities On Fish Landing Centers - Crash Program

Under this scheme / program following infrastructural facilities/ works up to the estimated cost of Rs. 5.00 lakhs are provided at fish landing centers. These construction works are being carried out by Harbour Division.

More Providing Infrastructure Facilities On Fish Landing Centers - Crash Program

Development Of Fisheries Co-Operatives Societies

To uplift the socio-economic conditions and strengthen the Fisheries Co-operative Societies assistance is provided to the Fisheries Co-operatives.

- Managerial subsidy of Rs.5000/- is awarded to groups sponsored Primary Fisheries Co-operative society in descending order for five years.
- Managerial subsidy of Rs.1800/- is awarded to Primary Fisheries Co-operative society which are not groups sponsored descending order for five years.

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- Managerial subsidy of Rs.2000/- is awarded to Primary Fisheries Co-operative society descending order for five years.
- Managerial subsidy of Rs.12500/- is awarded to District & Regional Fisheries Federation descending order for five years.
- Fisheries co-operative societies are awarded Managerial Share Capital amounting Rs.10,000/- or limited to 3 times of concerned societies share capital.

Assistance On Purchase of Fishery Requisites

A) Assistance For Purchase Of Twine And Nets:-

Assistance in the form of subsidy is provided to fishermen members through concerned fisheries co-operative society on the purchase of fishing nets and twine at concessional rates.

More Assistance On Purchase Of Fishery Requisites

Reimbursement Of VAT On HSD

Value Added Tax (VAT) on Diesel oil for mechanized fishing boats is being reimbursed from April 2005 (In the Mumbai area 35 % and out of the Mumbai area 31 %).

The ceiling limit is as follows: -

More Reimbursement of VAT On HSD

Assistance For Installation of OBM & IBM - CSS

The fishermen are economically vulnerable to traditional fish fishermen, and the purpose of this scheme is to provide fishing facility to 5 fertile depths in the community, time for fishing and more time for fishing, and bringing the caught fish to the coast quickly and increase their income.

The Government has brought this scheme for traditional fishermen, with the aim of making fisheries and fisheries and their fisheries cooperative societies in the Gulf, by making an external engine on small noses, making the fish economically viable.

Establishment Of Fish Farmers Development Agency - CSS

Fish Farmers Development Agencies have been established to increase freshwater fish/prawn production by adopting modern techniques of intensive fish/prawn culture, in

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selected ponds & tanks, by imparting training to selected fish farmers and financial assistance is also made available to selected fish farmers.

Fish farmers Development Agencies also co-ordinate production and sale of fish.

Schemes implemented by Fish Farmers Development Agencies.

More Establishment of Fish Farmers Development Agency - CSS

Establishment Of Brackish Water Fish Farmers Development Agency - CSS

With the aim of coordinating the fish production and fisheries sector by developing the area under the submersible water, under the water of the submersible under the intensive culture of fisheries, by training the fishermen and increasing fish production and providing fish farming and fish farming in the form of fishery development system for every marine district has been established. That's it.

The program for the Bhujal area is being implemented through the fishing system provided by the Marine Development Agency.

The District Collector and the member secretary of the respective districts will be the Assistant Commissioner of Fisheries.

Schemes implemented through Fisheries Development Mechanism.

Matter	Rate	Magnitude	Limit	Feedback
Construction of ponds (barking)	60,000 / -	Hector	2	-
	75,000 / -	Hector	5	Scheduled Castes and Scheduled Tribe
Renewal of the tank	15,000 / -	Hector	5	-
	18,000 / -	Hector	5	Scheduled Castes and Scheduled Tribe

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Fishermen Development Rebate On HSD Oil - CSS

Concession @ Rs. 1.50 / liter is provided to Fishermen on Diesel oil used for fishing boats.

Admissible diesel limit for fishing boats.

Limitation of use of diesel for fishing boats are as follows :-

More Fishermen Development Rebate on HSD Oil - CSS

Mechanisation & Improvement of Fishing Crafts - N.C.D.C.

Fisheries are a fictitious thing and they should go to the fastest market without spoiling it, financial assistance for the fisheries cooperative societies to get a fair price.

Fisheries Co-operative financing for purchase of trucks for fishery / ice transport, diesel transportation

Preservation, Transportation and Marketing - N.C.D.C.

Finance	Truck / Diesel Tanker	Icecream / Cold Storage
State Government - Special Releasing Part Capital	10%	10%
NCL-Loans	50%	55%
Part Capital	15%	5%
Special Released Part Capital	-	20%
organization's investment	10%	10%

Criteria -

- The institution should not be ballads.
- Recovery of fisheries cooperative organization should be 75%.
- Annual turnover of fishery cooperative organization should be over 10 lakhs.
- The institution should have its own or long lease premises for the construction of an ice house / a jute.
- There should be basic amenities like water, water and roads for the construction of ice factory / jute building.

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National Scheme on Welfare of Fishermen

Fishermen who are in the marine and inland sector are entitled for the benefits under the scheme. Land for the development of these resources will be provided by the respective Union Territories (UTs) and States.

However, when it comes to allotment of the houses to the beneficiaries, the States must follow the below-mentioned conditions:

- The State Government must determine that the beneficiaries are active fishermen.
 - Fishermen without land and who are below poverty should be given preference.
 - Under the scheme, allotment of houses can be given to fishermen who own land or kutchra.
- Subject to the type of amenity that is being provided, the State and Central Government share the cost of providing these amenities. However, 75% of the cost of amenities will be paid by the Central Government in case of North-Eastern states. The Government of India will make the entire contribution in case of Union Territories.

Eligibility Criteria

Under the National Scheme of Welfare of Fisherman, the eligibility criteria for the fishermen are mentioned below:

- Individuals who are into full-time fishing.
- Individuals who are members of the Cooperative Society/Federation/Welfare Society.
- Individuals who are below the age of 60 years old.
- Individuals who live below the poverty line.

In case a member of the fishermen family has regular employment, or he/she receives a regular income, the family would not be considered as a beneficiary.

Different types of amenities that are provided

Given below are the different types of amenities that are provided and the contribution that is made by the government:

- **Common Facility:** Under the scheme, a community hall can be constructed if necessary for fishermen villages that consist of at least 75 houses. The total size of the hall should not exceed 200 sq. metres and the total cost should not exceed Rs.2 lakh. The community hall will come with two toilets (one for ladies and one for gents) and a tubewell as well. The

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community hall can be used as a mending shed and a drying yard in order to make proper utilisation of it. The States and Union Territories must ensure that the community hall is utilised well. In order to make it a common workplace for all fishermen, the community hall can be a workplace with a roof and pillars instead of walls.

- **Drinking Water:** Under this scheme, every 20 houses will be provided with a tubewell. In case a village consists of more than 10 houses but less than 20 houses, one tubewell is provided. The maximum cost should not exceed Rs.40,000 for the construction of the tubewell. However, in the case of North-Eastern States, the cost for installation should not exceed Rs.45,000. The State Government should provide reasonable justification for the increase in cost. Depending on the requirement of water, the number of tubewells that needs to be installed will be decided. An alternate source for providing water can be given to villages where it would not be practical to build tubewalls. The State Government provides the entire contribution in case supply of drinking water is more than the construction of a tubewell.
- **Housing:** In order to be eligible for housing under the scheme, the village must consist of a minimum of 10 houses. However, the number of houses that can be constructed in the village depends on the number of fishermen that are eligible under the scheme, and there is no upper limit. However, the State must ensure that houses are allotted equally among all eligible fishermen. The base area must be within 35 sq. metres and the cost of construction of the house should not exceed Rs.75,000. However, depending on the resources that are available, the State Government can plan the construction accordingly so that more houses can be constructed.

Training and Extension

Under the National Scheme of Welfare of Fisherman, Training and Extension is a component that can be executed. The State and Central Governments will contribute towards the expenditure of the component on a 50:50 basis. The contribution will be on a 75:25 basis in case of North-Eastern states. The entire cost will be contributed by the Central Government in case of Union Territories.

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Saving-cum-Relief

The implementation of this component will be equal among both inland and marine sector fishermen. Saving is requested from fishermen for 9 months, while relief is provided to them via a fishing ban for 3 months. The contribution that is made by fishermen is Rs.900 for 9 months. The State and Central Government each contribute Rs.900 over 9 months as well. Therefore, the entire contribution of Rs.2,700 is given to the fishermen during the 3-month fishing ban. Rs.900 is paid to the fishermen per month during this period. The Central Government will make the entire contribution in the case of Union Territories, while the contribution is made on a 75:25 basis in the case of North-Eastern States (the Central Government's contribution is Rs.1,350 and the North-Eastern State's contribution is Rs.450). Interest will be generated on the contribution that is being made by the fishermen and it will be given in the last month.

The beneficiary's contribution will be collected by the President or the Secretary of the Association and will be given to the State or Union Territory who in turn deposit the contribution at a Nationalised Bank. The contribution will be deposited in the name of the State or Union Territories' Director of Fisheries.

In case the beneficiary defaults on any payments, the contribution by the government will be for the months that the beneficiary makes the contribution. The total contribution will then be paid back equally in 3 months. The interest that has been generated will be paid in the last month.

However, in case the default has been only for one month and twice during the entire fishing season, the amount will be waived if the beneficiary pays the default fee. The default fee would be equal to the interest that would have been generated if the beneficiary had made the payments on time.

Depending on the weather, the lean months would vary every year. Therefore, the Director of Fisheries can decide the lean months based on climate changes and other logical reasons.

Insurance and aid for fishermen

- **Group Accident Insurance for Active Fishermen:** Fishermen who are registered with State and Union Territory and State Governments will be provided insurance for Rs.2 lakh and Rs.1 lakh

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against death or permanent total disability and partial permanent disability, respectively. Rs.10,000 will also be provided for hospital expenses in case of an accident as well. The duration of the insurance policy would be for 12 months and the National Federation of Fishermen’s Cooperatives Ltd. (FISHCOPFED) will take out the policy for all States and Union Territories that are participating. The maximum annual premium must be below Rs.65 per person and is contributed on a 50:50 basis by the Central and State Governments, respectively. In the case of the Union Territories, the entire contribution is made by the Central Government, while for North-Eastern States the contribution is made on a 75:25 basis between the Central and North-Eastern State Governments.

In case of the States or Union Territories who have subscribed for this component, the Central Government’s contribution will be directly given to FISHCOPFED and not to the State or Union Territory Governments. However, the State Government’s contribution must be given to FISHCOPFED much before the renewal date. Depending on the annual premium, the Central Government’s share would be either based on the actual premium of the policy or the annual premium if the policy had been taken under FISHCOPFED, whichever is lesser.

Both marine and inland sector fishermen are covered under the scheme, and the fishermen do not have to make any contributions towards this component. The scheme would be operated through an insurance company and will be executed by FISHCOPFED. However, in order to make sure service is provided adequately and depending on the requirements, the Ministry may take the help of one or more different agencies.

- **Grants-in-aid provided to FISHCOPFED:** FISHCOPFED is a National Level Federation that is mainly concerned with providing fishermen welfare activities by giving training and insurance. Due to the importance of FISHCOPFED, there is a need to strengthen the organization. Therefore, Rs.50 lakh per year will be provided as a grant-in-aid to FISHCOPFED. There will also be encouragement given to FISHCOPFED to conduct training programs to improve the skills of traditional fishermen by making use of the funds available or by using funds that are available from other schemes that are currently active.

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The assistance that has been granted for various components under the Training and Extension program

Component	Assistance Granted
Human Resources Development	For a training period of a maximum of 15 days, Rs.125 is provided as a stipend per day (maximum of Rs.1,875 for 15 days). Rs.500 is also provided to every participant as bus or train travel charges. Rs.1,000 is also provided for every guest lecture for their professional services. However, there can be a maximum of two lectures per day. Rs.1,000 is also provided to per resource person for travel expenditure.
Publication of handbooks	Authors will be provided Rs.15,000 for every handbook. The Rs.15,000 will also include an Rs.5,000 expenditure towards transparencies, illustrations, typing, stationaries, etc. In order to print about 500 copies of the handbook, Rs.50,000 will be provided to the Organization, Union Territory, or State Government.
Publication of training manuals	In order to prepare the manual, Rs.5,000 will be paid to the expert. Rs.20,000 will also be provided to the Organization, State Government, or Union Territory to print about 500 manuals.
Fisheries Division activities at the Headquarters	In order to strengthen the extension and training skills of personnel at the Department of Animal Husbandry, Dairying & Fisheries Headquarters, overhead expenditure will be provided. Seminars, symposia, international conferences, etc. must also be organised using these funds.

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Establishment of Fish Farmers’ Training and Awareness Centres	The training and awareness centres were merged with a view of infrastructure and common facilities. This merger cost Rs.30 lakh and helped in the establishment of the Farmers’ Training and Awareness Centre. Rs.60 lakh is provided as financial assistance to every state for the establishment of a maximum of two Farmers’ Training and Awareness Centres. The State and Union Territories would contribute to the land and operational costs.
Seminars/workshops/symposia workshop	In order to organise National level workshops and seminars, a lump sum amount of a maximum of Rs.1 lakh is provided for the publication of these proceedings. After checking with the Integrated Finance, the Division determines the meeting expenditure of the miscellaneous items. The State and Union Territories contribute a maximum amount of Rs.50,000 for organising these workshops and seminars.

CHAPTER 6

REHABILITATION AND RESETTLEMENT ACTION PLAN

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6.0 Project Background

India has an approximately 5,423 km long peninsular coastline and is located close to major shipping routes linking East Asia, Europe and the Middle East. India therefore has the potential to significantly grow its maritime trade with other countries and as its economy grows, necessity of developing ports for international trade will also grow. The Government of India initiated the ambitious development of Vadhvan Port as a major port of India and would serve the hinterland of Maharashtra, North Karnataka, Telangana, Gujarat and secondary hinterland of NCR, Punjab, Rajasthan and Uttar Pradesh in addition to JNPA.

Setting of Port Location: The proposed port at Vadhvan (Lat 19°55.8'N Long 72°39.6'E) is located along the west coast of India in the state of Maharashtra, which is about 190 km north of JN Port. The natural water depth available at proposed Vadhvan port is more than any competing Indian port and more or equal than competing international ports. Vadhvan port will enhance India's ability to handle containerized cargo while establishing a strong supply chain network in Maharashtra. As there is a need to provide a logistic support for the new Port and Rail and Road are most essential Part of the evacuation programme of the Port.

External Rail Connectivity: The nearest railway stations to Vadhvan port along western dedicated freight corridor (WDFC) will be the proposed New Palghar crossing station of WDFC which runs parallel to Mumbai – Delhi western railway line. Connectivity from Vadhvan in port rail yard to WDFC at proposed New Palghar station Dedicated Freight Corridors (DFC) in India are being developed specifically to fulfil the requirements of this type of transportation needs.

External Road Connectivity: Vadhvan Port will connect to to NH-08 and Mumbai-Vadodara expressway. For ease of study and design, the road alignment has been split into Three sections as under:

- i. From Varor (Vadhvan port) to Western Railway line - Ch. 0.00 to 12.00 km
- ii. From Western Railway line to Surya River - Ch. 12.00 to 21.00 km
- iii. From Surya River to NH-08 junction - Ch. 21.00 to 34.00 km.

The Proposed Rail and Road alignment passes through various villages of Dahanu and Palghar taluka of Palghar District. The Land required for the Road and Rail is follows;

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6.1 Purpose and Objective

Approximately 287.63 hectares of private land, 140.60 Hectare of Adivasi land area spread across 21 villages of Dahanu and Palghar Taluka of Palghar District of Maharashtra State. over a total length of ~33 km is required for the project. The land is required for construction of road and rail and maintenance, parking space, etc. 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 majority will 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, if any
- 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

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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.

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**Table 6.1
Land Acquisition Details**

Sr. No.	Taluka	Village	Total Land Acquisition (in Ha.)			Private Land			Adivashi Land			Govt Land			Forest Land		
			For Road (in Ha.)	For Rail (in Ha.)	Total (in Ha.)	For Road (in Ha.)	For Rail (in Ha.)	Total (in Ha.)	For Road (in Ha.)	For Rail (in Ha.)	Total (in Ha.)	For Road (in Ha.)	For Rail (in Ha.)	Total (in Ha.)	For Road (in Ha.)	For Rail (in Ha.)	Total (in Ha.)
1	Dahanu	Varor	18.22	8.48	26.70	18.12	7.68	25.81	0.00	0.00	0.00	0.00	0.74	0.74	0.09	0.06	0.15
2	Dahanu	Chinchani	9.60	5.35	14.94	9.58	5.35	14.93	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00
3	Dahanu	Tanashi	28.92	14.03	42.95	28.72	13.21	41.92	0.00	0.75	0.75	0.20	0.07	0.27	0.00	0.00	0.00
4	Dahanu	Bavade	43.93	21.38	65.31	39.72	20.38	60.10	0.48	0.00	0.48	3.74	1.00	4.73	0.00	0.00	0.00
5	Dahanu	Vangaon	8.64	4.72	13.36	8.17	4.52	12.69	0.00	0.00	0.00	0.47	0.20	0.67	0.00	0.00	0.00
6	Dahanu	Kolavali	23.50	9.94	33.43	14.93	5.70	20.63	0.00	0.00	0.00	8.56	4.24	12.80	0.01	0.00	0.01
7	Palghar	Newale	26.66	22.87	49.53	25.64	22.38	48.02	0.00	0.24	0.24	1.02	0.26	1.28	0.00	0.00	0.00
8	Palghar	Hanuman Nagar	11.47	1.07	12.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	11.47	1.02	11.47
9	Palghar	Shigaon	24.85	6.38	31.23	10.06	0.47	10.54	14.79	5.90	20.69	0.00	0.00	0.00	0.00	0.00	0.00
10	Palghar	Khutad	0.00	10.21	10.21	0.00	1.22	1.22	0.00	4.63	4.63	0.00	0.00	0.00	0.00	4.36	4.36
11	Palghar	RaniShigaon	0.00	15.43	15.43	0.00	5.18	5.18	0.00	7.30	7.30	0.00	0.00	0.00	0.00	2.95	2.95
12	Palghar	Boisar	0.00	9.97	9.97	0.00	9.00	9.00	0.00	0.98	0.98	0.00	0.00	0.00	0.00	0.00	0.00
13	Palghar	Sumadi	19.27	0.00	19.27	1.38	0.00	1.38	10.74	0.00	10.74	0.00	0.00	0.00	7.15	0.00	7.15
14	Palghar	Gargaon	20.58	0.00	20.58	5.51	0.00	5.51	13.08	0.00	13.08	1.60	0.00	1.60	0.39	0.00	0.39
15	Palghar	Ravate	10.63	0.00	10.63	0.22	0.00	0.22	5.76	0.00	5.76	0.35	0.00	0.35	4.30	0.00	4.30
16	Palghar	Chichare	29.63	0.00	29.63	1.57	0.00	1.57	0.42	0.00	0.42	0.00	0.00	0.00	27.64	0.00	27.64
17	Palghar	Akoli	8.13	0.00	8.13	2.25	0.00	2.25	4.33	0.00	4.33	0.00	0.00	0.00	1.54	0.00	1.54
18	Palghar	Akhegavaon	19.56	0.00	19.56	0.53	0.00	0.53	14.47	0.00	14.47	0.14	0.00	0.14	4.43	0.00	4.43
19	Palghar	Nanivali	41.50	0.00	41.50	20.40	0.00	20.40	20.55	0.00	20.55	0.55	0.00	0.55	0.00	0.00	0.00
20	Palghar	Ambhedhe	13.73	0.00	13.73	0.54	0.00	0.54	8.18	0.00	8.18	0.39	0.00	0.39	4.62	0.00	4.62
21	Palghar	Dhamatane	22.82	0.00	22.82	0.00	0.00	0.00	16.93	0.00	16.93	0.57	0.00	0.57	5.31	0.00	5.31
22	Palghar	Kolhan	16.21	0.00	16.21	0.00	0.00	0.00	2.26	0.00	2.26	0.22	0.00	0.22	13.73	0.00	13.73
23	Palghar	Ghol	10.81	0.00	10.81	2.57	0.00	2.57	0.43	0.00	0.43	2.88	0.00	2.88	4.92	0.00	4.92
24	Palghar	Tawa	26.46	0.00	26.46	2.62	0.00	2.62	8.37	0.00	8.37	2.74	0.00	2.74	12.72	0.00	12.72
25	Total		435.11	129.83	564.94	192.55	95.08	287.63	120.80	19.81	140.60	23.45	6.55	30.01	98.32	8.38	105.68

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6.1.1 Resettlement Policy and Land Acquisition Framework

The guidelines are prepared for addressing the issues limited to this project for resettlement and rehabilitation of the PAPs. This policy has been developed based on the National Highways Act 1956 and The Right to Fair Compensation and Transparency in LA RR Act, 2013.

6.1.2 R&R Benefits for Project Affected Families

The resettlement and rehabilitation (R&R) benefits shall be extended to all the Project Affected Families (PAF) whether belonging to below poverty line (BPL) or non-BPL. The details are provided in the entitlement matrix. For tribal the following provisions will be adhered. Each Project Affected Family of ST category shall be given preference in allotment of land.

Tribal PAFs will be re-settled close to their natural habitat in a compact block so that they can retain their ethnic/linguistic and cultural identity

The Tribal Land Alienated in violation of the laws and regulations in force on the subject would be treated as null and void and the R&R benefits would be available only to the original tribal landowner.

6.2 Principles and Policies Adopted for the Project

The core involuntary resettlement principles for this project are:

- a) Land acquisition, and other involuntary resettlement impacts will be avoided or minimized exploring all viable alternative sub-project designs;
- b) Where unavoidable, time-bound resettlement plan (RP) will be prepared and PAPs will be assisted in improving or at least regaining their pre- project standard of living;
- c) Consultation with PAPs on compensation, disclosure of resettlement information to PAPs, and participation of in planning and implementing sub- projects will be ensured;
- d) Vulnerable groups will be provided special assistance (v) payment of compensation to PAPs for acquired assets at replacement rates;
- e) Payment of compensation and resettlement assistance prior to the construction contractor taking physical acquisition of the land and prior to the commencement of any construction activities;
- f) Provision of income restoration and rehabilitation; and

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g) Establishment of appropriate grievance redress mechanisms.

6.3 Entitlement Matrix

The broad entitlement matrix comprising the R & R compensation and assistance is presented below. The titleholder PAPs will receive compensation for land and assets, as decided by the competent authority. The titleholders are entitled to receive compensation for land/assets at replacement cost, R & R assistance and allowances for fees or other charges. They should be given advance notice to harvest non-perennial crops, or compensation for lost standing crops. They will have the right to salvage material from existing structures.

The LARR-2013, represents a significant milestone in the development of a systematic approach to address resettlement issues in India and closes significantly the gap between Indian national policies and operational policy of the World Bank/ADB. The National Highways Act, 1956 gives directives for the acquisition of land in the public interest and provides benefits only to titleholders.

Based on these, the following core involuntary re-settlement principles are applicable:

- Avoid or minimize land acquisition and involuntary resettlement impacts by exploring all viable alternative designs;
- Where displacement is unavoidable, 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 affected persons in improving their former living standards and income earning capacity with additional assistance to vulnerable groups;
- Ensure wide range of meaningful consultations with stakeholders including likely PAPs on compensation, disclosure of resettlement information, participation of PAPs in planning and implementation of the resettlement program in order to suitably accommodate their inputs and make rehabilitation and resettlement plan more participatory and broader based;
- Facilitate harmonious relationship between the Executing Authority and PAPs through mutual co-operation and interaction;
- Ensure payment of compensation and resettlement assistance prior to taking over the possession of land and commencement of any construction activities;

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- Provision of rehabilitation assistance for loss of livelihood/income;
- Establishment of institutional arrangements such as grievance redress mechanism, NGO.
- Eligibility of different categories of PAFs will be as per the Entitlement Matrix shown in the below **Table 6.2**.

Table 6.2
Eligibility For Compensation or/and Assistance

S. N.	Eligibility
1	The unit of entitlement will be the family.
2	Titleholder PAFs will be eligible for compensation as well as assistance.
3	In case a PAF could not be enumerated during census, but has reliable evidenceto prove his/her presence before the cut-off date in the affected zone shall be included in the list of PAPs after proper verification by the grievance redress committee.
4	PAFs from vulnerable group will be entitled for additional assistance as specified inthe Entitlement Matrix.
5	PAFs belonging to BPL category will be identified at the time of disbursal ofCompensation. They will get benefits as detailed in Entitlement Matrix.
6	PAFs will be entitled to take away or salvage the dismantled materials free of costwithout delaying the project activities.
7	If a notice for eviction has been served on a person/family before the cut-off dateand the case is pending in a court of law, then the eligibility of PAP will be considered in accordance with the legal status determined by the court and the PAP will be eligible for compensation/assistance in accordance with the RAP provisions.

6.4 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 VPPL for road and rail connectivity. 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 road & rail

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alignment of 120-160 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 to be 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:

1. The Right to Fair Compensation and Transparency in Land Acquisition & Rehabilitation and Resettlement Act 2013,
2. The Gazette of India, Extraordinary, S.O 425(E), Ministry of Rural Development Notification Dated: 9th February 2016
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
4. The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra
5. Panchayats (Extension to Scheduled Area) Act, 1996;
6. Census of India, 2011 (Primary Census Abstract and Village amenities directory).

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6.4.1 Land Acquisition Plan

Land acquisition plan has been prepared by VPPL based on the approved alignment. Revenue maps of all villages and urban areas falling in the Vadhvan Port Project alignment were collected and digitized. The final alignment was then transferred on revenue maps of villages. 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.

6.4.2 Need for Identification of Structures and Other Assets Affected

Structures and other properties likely to be affected within the Right of Way have been identified and noted based on physical survey. 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. However, the details about the dimension of structures, present use, construction materials used, etc. have to be assessed. Simultaneously, names of owners, possessors of structures, etc. associated with the likely affected structures and properties are required to be noted once the perception of people is diverted to the project benefits.

The land acquisition proposal is to be finalized on the basis for conducting a census and socio-economic survey. Surveyors who conduct the survey shall be provided a list of land owners of Gata/ Survey No. of the village for conducting the survey. Census survey to be conducted with owners and others (encroacher, squatter, tenant) who are available during the survey. Efforts shall be made by revisiting the villages to conduct a survey with as many affected persons as possible. The survey will 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

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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.

The socio-economic survey questionnaire to be 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.

6.4.3 Land Acquisition Process

The detailed land acquisition procedure to be followed for the projects in Maharashtra in general and for VPPL in particular is provided in the following section

In 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: 12th 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 as it widely accepted and followed in DFCC, NHRDCL, MUTP-III and Samrudhi Mahamarg etc.

6.4.4 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.

The Vadhvan Port 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, if any. The implementation of the project will result in loss of land, dismantling of structures sometimes leading to displacement, loss of livelihood, loss of

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community resources, etc. which are falling within the Right of Way of Road and Rail connectivity (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.

6.4.5 Scope of Land Acquisition

Majority of the project alignment traverses through greenfield area and as such major impacts are on fertile agricultural land. Land required for the project includes construction of road and rail will be at an elevation to avoid crisscrossing of local traffic and intrusion of animals on road. Private land required for the project will be acquired primarily through consent award and government land will be transferred through inter-governmental process.

6.5 Legal and Policy Framework

A Legal and Policy Framework (LPF) has been prepared by VPPL Project proponent i.e JNPA. 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.

6.5.1 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).

- i. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR, 2013).
- ii. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Acts, 2006;
- iii. The Scheduled Castes and The Scheduled Tribes (Prevention of Atrocities) Act, 1989;
- iv. 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

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- v. 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
- vi. The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra
- vii. The Gazette of India, Extraordinary, S.O 425(E), Ministry of Rural Development Notification dated 9th February 2016;
- viii. The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996;
- ix. The Gazette Notification (RNI No. MAHENG/2009/35528), Govt. of Maharashtra on PESA e exemption of linear projects;
- x. Right to Information Act, 2005
- xi. 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:

6.5.1.1 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

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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:

- i. to minimize displacement and to promote, as far as possible, non-displacing or least displacing alternatives;
- ii. to ensure adequate rehabilitation package and expeditious implementation of the rehabilitation process with the active participation of the affected families;
- iii. 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;
- iv. to provide a better standard of living, making concerted efforts for providing sustainable income to the affected families;
- v. to integrate rehabilitation concerns into the development planning and implementation process; and
- vi. 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 a mandatory requirement for Land Acquisition Process. In Maharashtra, since land Acquisition is being done through direct negotiation, SIA is not required.

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- (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

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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 in **Table 6.3**.

Table 6.3
Main Schedules and Sections of RFCTLARR 2013

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.

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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;

- a) 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.
- b) 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.
- c) However, provisions under section 10 (dealing with food security) are exempted in case of projects that are linear in nature including railways.
- d) 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

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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.

- e) Land acquired under this act shall vest in the name of acquiring agency.
- f) The time required for land acquisition including SIA report is a minimum of two (2) years.
- g) Compensation and rehabilitation and resettlement assistance as per Schedule I & II of RFCTLARR Act, 2013.

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

[Relevant provision to be included in consultation with State Govt].

6.5.1.3 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 Govt Decision (Shasan Nirnay)

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 principal 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

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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:
 - Distt. Collector - President
 - Engineer from JNPA/VPPL - Member
 - Engineer PWD/ NHAI - Member
 - Distt. Govt. Pleader - Member
 - Asstt. Director of Town Planning - Member
 - Competent Authority of acquiring body - Member
 - 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.

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- i. Paying complete compensation as calculated vide (C) above at one time.
- ii. while purchasing land/ taking over land 50% amount will be paid at the first stage out of whole compensation.
- iii. Remaining balance 50% amount will be paid as annuity.

6.5.1.4 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

The Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt. 12th 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) 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.

6.5.1.5 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

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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

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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, VPPL may request the State Government to notify the Port project at Dahanu as “vital Government project” for land alienation in Schedule Areas in the State of Maharashtra.

6.5.1.6 The Gazette of India, Extraordinary, S.O 425(E), Ministry of Rural Development Notification dated 9th 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).

6.5.1.7 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 PESA1996 are:

- i. 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
- ii. Gram Sabha shall be responsible for approval of plans, programs, and projects for social and economic development
- iii. Gram Sabha shall be responsible for the identification or selection of persons as beneficiaries under the development programs

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- iv. Consultation with Panchayat prior to land acquisition and Rehabilitation & Resettlement activities in the scheduled areas
- v. Endows ownership of minor forest produces (MFPs) to Panchayats
- vi. 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).

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). All villages in Dahanu & Palghar tehsil in Maharashtra are affected due to road and rail construction for the Port project. Thus, the PESA Act shall be applicable for these villages, however the Maharashtra government has exempted PESA from linear projects.

6.5.1.8 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:

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“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. projects⁵ (MA-HSR project declared as vital government project as per the notification dated 18th 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.

6.5.1.9 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

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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:

- a) 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;
 - b) User rights- Refers to minor forest produce (also including ownership), to grazing areas, ponds for fishing, to pastoralist routes, etc.
 - c) 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;
 - d) Forest management rights- Refers to protect forests and wildlife;
 - e) Rights to indigenous knowledge- Refers to biodiversity and community right to intellectual property and traditional knowledge related to biodiversity and cultural diversity; and
 - f) 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.
- 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.

6.5.1.10 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

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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.

6.5.1.11 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.

- a) Only citizens can apply for information
- b) All public authorities are answerable under the Act
- c) Nature of the information must be relevant to the administration of the State
- d) Applicant need not provide reasons
- e) The information must be disseminated within 30 days
- f) Reasons for rejection of an application to be provided
- g) First Appellate Authority and the Second Appellate Authority
- h) The limitation to file and dispose of the appeals
- i) Information is one which is already recorded in official records and published

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j) Information requested should not relate to any exempted matter under the Act.

6.5.1.12 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 in

Table 6.4.

Table 6.4

Types of Activities as per Scheduled VII – Companies Act

S. N.	Categories	List of activities
1	Category i	<ul style="list-style-type: none"> • Eradication of extreme hunger and poverty • Supplementing government schemes like- mid-day meal by corporate through additional nutrition. • 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 • Providing medical aid • Making safe drinking water available.
2	Category ii	<ul style="list-style-type: none"> • Promoting education of masses • Special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled.

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		<ul style="list-style-type: none"> • Livelihood enhancement projects
3	Category iii	<ul style="list-style-type: none"> • Promoting gender equality Women Empowerment • Setting up homes and hostels for women and orphans • Setting up old age homes, day care centers and such other facilities for senior citizens Measures for reducing inequalities faced by socially and economically backward groups
4	Category iv	<ul style="list-style-type: none"> • Environmental Sustainability Ecological balance 5Protection of flora and fauna • Animal welfare, agroforestry, and conservation of natural resources • 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 • Water Sprinklers for agricultural purpose
5	Category v	<ul style="list-style-type: none"> • Protection of natural heritage, art, and culture • Restoration of buildings and sites of historical importance and works of art Setting up public libraries • Promotion and development of traditional arts and handicrafts
6	Category vi	<ul style="list-style-type: none"> • Measures for the benefit of Armed-forces veterans War Widows • And their dependents
7	Category vii	<ul style="list-style-type: none"> • Training to promoteRural sports • Nationally recognized sports Paralympic sports • Olympic sports
8	Category viii	<ul style="list-style-type: none"> • Contribution to Prime Minister's Relief Fund and Other Such State and Central Funds • 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

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		classes, minorities, and women.
9	Category ix	<ul style="list-style-type: none"> • Contributions or funds provided to technology incubators located within academic institutions, which are approved by Central Government
10	Category x	<ul style="list-style-type: none"> • Rural Development projects: Rural Electrification Enhancing rural connectivity Installation of solar lights • Infrastructure development
11	Category xi	<ul style="list-style-type: none"> • Slum Area Development • Housing for Economically Weaker Sections

6.5.1.13 Applicable Safeguard Policies VPPL Project

Safeguard policies applicable for the Vadhvan Port Project Limited are briefly discussed below in **Table 6.5**.

Table 6.5
Applicable Safeguard Policies of the VPPL Project

S. N.	Acts, Notifications, and policies	Relevance to this project	Applicability
1	The RFCTLARR Act, 2013	<p>The provisions of this Act relating to land acquisition, compensation, rehabilitation, and resettlement.</p> <p>The Act lays down procedures for land acquisition and providing resettlement & rehabilitation assistance.</p>	Applicable
2	Govt. Decision No. SANKIRNA-03/2015/Para. Kra.34/A-2 dt 12 May 2015, Revenue & Forest Department, Govt. of	This government decision recommends acquiring private land for various projects through negotiation by direct purchase method.	Applicable

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	Maharashtra – Reg. Acquisition of Private Land for Irrigation and other Projects by negotiation through direct purchase method		
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	As per this government decision, for deciding compensation, 25% should be added on the calculated compensation as per the RFCTLAAR act	Applicable
4	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 i) If the land is acquired in respect of the implementation of vital government project; and ii) The amount of compensation to be paid for such purchase is to be arrived at in a fair and transparent manner.	Applicable but exempted for linear acquisition

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		Notification from the government of Maharashtra on 18 th May 2017/18 declares the project as a vital project and exempts it from PESA	
5	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

6.6 Resettlement and Rehabilitation Framework

6.6.1 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 will be as per the provisions of the RFCTTLARR Act, 2013 and subsequent amendment thereafter
- ❖ 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,

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- ❖ 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.

6.7 Eligibility Policy, Resettlement & Rehabilitation Framework

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

- ❖ a family whose land or other immovable property has been acquired;
- ❖ 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;

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- ❖ 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;
- ❖ 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;
- ❖ 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;
- ❖ 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 laborer:

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:

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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;⁶

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;

Landless:

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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

Land owner: Includes any person

- ❖ whose name is recorded as the owner of the land or building or part thereof, in the records of the authority concerned; or
- ❖ 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
- ❖ who is entitled to be granted Patta rights on the land under any law of the State including assigned lands; or
- ❖ 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;

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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 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):

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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

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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.

6.7 Eligibility and Guidelines for Compensation and R&R Assistance

Eligibility for compensation, resettlement and rehabilitation assistance and is presented below in **Table 6.6**.

Table 6.6

Eligibility & Guidelines for Compensation and R&R Assistance

S. N.	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

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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.
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.

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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 District Horticulture Department – for Fruit bearing trees and plants District Forest Department - for Timber trees 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.

6.8 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 Maharashtra is presented in **Table 6.7**.

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**Table 6.7
Entitlement Matrix Maharashtra**

S. N. (1)	Type of Loss (2)	Eligible Category (3)	Entitlement (Compensation & R&R Assistance) (4)	Remarks (5)
1	Loss of Land [agricultural as well as non-agricultural (homestead/commercial or otherwise)]	Title Holder – TH	<p>The land will be acquired on payment of compensation as per RFCTLARR Act, 2013 (hereinafter referred as Act no 30 of 2013). 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 whichever is higher.</p> <p>Plus 100% Solatium and 12% interest from the date of notification (Namuna 1 publication for various tehsil)</p> <p>Multiplication Factor as per the Act (1 in urban, 1.5 in areas under regional/development areas and 2 in rural areas).</p> <p>b) R&R cost/ assistance shall be as per Second Schedule of the RFCTLARR Act, 2013. (Minimum lump sum Rs 5,00,000)</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>The R&R amount/ assistance shall be payable according to the Second Schedule of the Act No. 30 of 2013.</p>

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			<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 JNPA 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.</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: JNPA 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>	<p>The additional one-time R&R assistance for partially acquired land plot shall be without solatium, multiplication factor and interest @12%. The ownership of the balance area of the partially acquired land plot</p>
			<p>Land Area Acquired</p>	<p>Additional R&R assistance</p>
			<p>Up to 50%</p>	<p>Nil</p>

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S. N.	Type of Loss	Eligible Category	Entitlement (Compensation & R&R Assistance)	Remarks				
			<table border="1"> <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> </table>	50% -75%	15% of Compensation amount for balance land area	More than 75%	25% of Compensation amount for balance land area	shall continue to remain with the land owner.
50% -75%	15% of Compensation amount for balance land area							
More than 75%	25% of Compensation amount for balance land area							
		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.					
			<p>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.</p> <p>Sample calculation as under</p> <p>Total value of rural land as per market/Jantri/ Consented amount as per clause 1(a) above say Rs100,000</p> <p>Multiplier factor -2 for rural say Rs 2,00,000</p> <p>Solatium 100% of (ii) Rs 2,00,000</p> <p>Total Compensation (ii) +(iii) = Rs 4,00,000</p> <p>Additional incentive for agreeing to consent – 25% of (iv) = Rs 1,00,000</p> <p>Gross Amount including incentive for consent –Rs 5,00,000/</p>	This assistance shall be applicable for acquisition of private land through consent.				
			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).					

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2	Families primarily dependent on acquired land (Agricultural)	Affected family	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 JNPA 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. 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. <u>Sample calculation as under</u>	Valuation of structure by approved Valuer based on applicable

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S. N.	Type of Loss	Eligible Category	Entitlement (Compensation & R&R Assistance)	Remarks
			<p><u>Valuation of the structure Say Rs 100,000</u> <u>Solatum @100% of (i) Say Rs 1,00,000</u> <u>Total Compensation for Structure (i) +(ii) = Rs 2,00,000</u></p>	Schedule of Rates (SoR)/ Plinth area, without depreciation.
			<p>a) Full compensation of structure payable in case of partial impact making unimpaired use of structure difficult. Or 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 JNPA 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>b) R&R cost/assistance shall be as per Second Schedule of the RFCTLARR Act, 2013. Sample calculation as under <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 R&R amount/ assistance shall be payable according to the Second Schedule of the Act No. 30 of 2013.
			<p>As an alternative to 3.1(a) and 3.1 (b), the following may be opted: 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.</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. ⁸

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			d) The stamp duty and other fees payable for registration of the land or house purchased by the Titleholder shall be borne by JNPA 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.
			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. Balance 20% will be paid after providing encumbrance free land.
			Compensation for the structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under Valuation of the structure Say Rs 70,000 Solatium @100% of (i) Say Rs 70,000	Valuation of the structure shall be based on applicable

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3.2	Loss of Residential Structure	Encroachers, Squatters	Total Compensation for Structure (i) + (ii) = Rs 140,000	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.	Up to 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., Rs43,200)	
			k) One-time Resettlement allowance of Rs 50,000/	
			As an alternative to 3.2(a), the following may be opted: 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. Balance 20% will be paid after providing encumbrance free land.			

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4.1	Loss of Commercial/Industrial Structure	Titleholder	Compensation for structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under Valuation of the structure Say Rs 100,000 Solatium @100% of (i) Say Rs 1,00,000 Total Compensation for Structure (i) + (ii) = Rs 2,00,000	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. Or	

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S. N.	Type of Loss	Eligible Category	Entitlement (Compensation & R&R Assistance)	Remarks
			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 JNPA 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. <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>	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 JNPA 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.	
			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.

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				Balance 20% will be paid after providing encumbrance free land.
4.2	Loss of Commercial Structure	Affected family (Non-titleholder – Encroachers, Squatters)	Compensation for structure as per section 29 of Act 30 of 2013 with 100% Solatium. Sample calculation as under Valuation of the structure Say Rs 1,00,000 iii) Solatium @100% of (i) Say Rs 100,000 Total Compensation for Structure (i) + (ii) = Rs 2,00,000	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	Advance payment of 80% of the total compensation shall be paid

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S. N.	Type of Loss	Eligible Category	Entitlement (Compensation & R&R Assistance)	Remarks
			g) One-time resettlement allowance of Rs. 50,000	on/before serving the advance notice. Balance 20% will be paid after providing encumbrance free land.
5.1	Loss of residential structures	Tenants	Residential: One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of the family, building material, belongings, cattle, etc. Rental allowance of 4000/- per month in a rural area and 5000/- per month in urban areas for six (6) months. Two months' advance notice to vacate structure.	
5.2	Loss of commercial structures	Tenants	Commercial: One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of commercial and other items kept in the structure. One-time financial assistance amount of Rs. 25,000/- for loss of trade/self- employment. 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. Two months' advance notice to vacate structures.	
5.3	Loss of other structures	Tenants	Others: One-time financial assistance of Rs. 50,000/- as transportation cost for shifting of items kept in the structure affected. 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.	

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			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	<p>Compensation for trees affected as per section 29 of Act 30 of 2013. Or JNPA 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>Sample calculation as under Valuation of the tree Say Rs 1000 Solatum @100% of (i) Say Rs 1000 Total Compensation for tree (i) + (ii) = Rs 2000 In case affected families take the tree, then compensation = Rs 500</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. Standing crops – by Agriculture Department. Fruit bearing trees, plants, etc. by Horticulture Department.</p>

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S. N.	Type of Loss	Eligible Category	Entitlement (Compensation & R&R Assistance)	Remarks
			d) Three (3) months' advance notice to affected persons to harvest fruits, standing crops etc.	
8	Cattle shed/ Petty shops	Titleholder, 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>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>	<p>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.</p> <p>Entitled parties receiving assistance under the 'petty shop' category shall not be entitled to payment of lump sum amount</p>

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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 JNPA.	
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 JNPA.	

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Note 1: Determination of Compensation of Land

❖ 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:

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 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

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 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 1, 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 1 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 1 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.

The market value calculated as per (I) 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

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Government. Where the market value as per (1) or (2) above cannot be determined for the reason that- 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 the registered sale deeds or agreements to sell as mentioned in the clause. (a) of sub-section for similar land are not available for the immediately preceding three years; or 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 (1) irrespective of similar types of land situated in the immediate adjoining areas:

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.

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

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

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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.

6.9 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

6.10 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. However, the actual number of structures that would be impacted will be verified only before finalization of compensation package. It will be decided if relocation required as per the public demand.

6.11 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.

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- ❖ 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.
- ❖ Details of IRP activities to be implemented in three levels are presented in **Table 6.8**.

Table 6.8

Detail of IRP Matrix- Port Project

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

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Individual disclosure	Individual disclosure will involve engagement with individual PAPs so that the livelihood interventions address the specific needs of each household.
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6.12 Income and Livelihood Restoration Measures (ILRP)

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

6.13 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 Vadhvan greenfield port project. The PAPs will be well supported by JNPA 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 in

Table 6.9.

Table 6.9

Short Term ILRP Provisions-Port Project

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. Rs 5000/- per month in rural areas Rs 7000/- per month in urban areas

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Wage Earner 10	Subsistence allowance	Rs. 3600/month * 1 Year = Rs. 43,200
Affect families non-title holders (Loss of cattle shed / petty shop11)	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/-

6.14 Long-term Income and Livelihood Restoration Plan

Long-Term JNPA 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.

6.14.1 Skill Mapping & Training

One of the aspects for long-term ILRP income restoration activities involve 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 study area, which will be further finalized during the implementation stage and details are presented in **Table 6.10**.

Table 6.10

Key Training Programme Identified for the Project

District	Training Programs Identified	Rational for Training Selection
Study area	Agarbatti manufacturing Warli painting Masonry training Catering Button manufacturing Motor driving	In Palghar, the training identified included agarbatti manufacturing, Warli painting Masonry training and catering training have been identified as other training areas.

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	Catering Vocational training Computer operation Typing (Local Language and English) Sanitary pad manufacturing Plumbing Masonry training	
Fishermen Training		The training and schemes are covered under the Fishermen compensation policy for the VPPL

The equipment and machinery for imparting the training and setting up small units will be facilitated by JNPA. 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 JNPA. 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.

6.14.2 Role of Non-Government Organizations

Details of role and responsibilities of NGO in study are presented in **Table 6.11**.

Table 6.11

Role and Responsibilities of NGO

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

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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 JNPA 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 JNPA. 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.

JNPA 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

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- ❖ 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, JNPA representative will do the needful assessment based on the qualification and training programme suggested.

6.14.3 Development of Employment Opportunities and Livelihood Support

JNPA will facilitate the development of employment opportunities for PAPs. PAPs can form a cooperative or a group and approach JNPA 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.
- ❖ JNPA 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)

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For availing benefits of setting up an employment unit, PAPs can form a cooperative and approach JNPA for the establishment of various income generation unit. JNPA 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.

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.

6.15 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.

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BudgJNPA 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. JNPA will give priority to PAPs as a beneficiary under CSR, further industry linkage will also be established for end placement of beneficiary.

6.16 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 6.12**.

Table 6.12
Budget for Livelihood Enhancement Training and Capacity Building

S. N.	District Name	No. of PAH	Budget for Training/PAH (in Rs.)	Total (in Rs. Cr.)
1	Port area – Dahanu Tehsil			
2	Railway alignment - Dahanu & Palghar Tehsil			
3	Road alignment - Dahanu & Palghar Tehsil			
	Total			

6.17 Land Acquisition and Resettlement Costs and Fund Allocation

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

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Resettlement Act, 2013. The prevailing Jantri rate of land has been collected for all Project affected villages for study area from revenue department along with the 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 6.13**.

Table 6.13
Land Acquisition, Rehabilitation and Resettlement Act, 2013

	For Road (in Cr.)	For Rail (in Cr.)	Total (in Cr.)
Private and Adhivashi Land Cost -	75.44	34.05	109.49
कलम 26 प्रमाणे पोट कलम (2) अन्वये बाजार मुल्य व त्याचे कलम 26(1) प्रमाणे लावलेल्या किंमतीला गावांचे फॅक्टरद्वारे गुणले जाईल. महाराष्ट्र शासन अधिसूचना दि. 26/05/2015 प्रमाणे प्रस्तुत गावांचा गुणांक घटक 2.00 आहे.	150.87	68.11	218.98
कलम 26 व 27 प्रमाणे आदीवासी भुधारक व नविन अविभाज्य शर्त व भोगवटा वर्ग. 2, कु. का.32 ग चे जमीनीची नजराना व अनर्जीत रक्कम बाजार मुल्याचे 50% ऐवजी 10% रक्कम आकारणी करणेचे शासनाचे 15/06/2010 चे आदेशा प्रमाणे या प्रकरणी 10% (अंदाजे) रक्कम अनर्जीत म्हणून गृहीत धरली आहे व बिगर आदीवासी संदर्भात 50% अनर्जीत रक्कम शासन जमा करणेची आहे.	15.09	6.81	21.90
वरील नजराना/अनर्जीत रक्कम वरील मोबदला मधून कमी केली.	135.78	61.30	197.08
भूसंपादन अधिनियम 2013 चे कलम 27 प्रमाणे संपादीत जमीनीवरील झाड/झाडोरा बांधकाम/विहीरी/बोअरवेल यांचे मुल्यावान हे जोडावे. (संयुक्त मोजणी अती संपादीत जमीनीत अंतर्गत असणारे) (सध्या- निरंक)	-	-	-
कलम 28 प्रमाणे एकूण एकंदर रक्कम मोबदला	135.78	61.30	197.08
भूसंपादन अधिनियम 2013 चे कलम 28,29,30 प्रमाणे मुल्यांकन दिलासा रक्कम - अंतिम निवाडयात एकूण देय नुकसान भरपाई रक्कमेमध्ये रकमेच्या स: विभाजन (solitium) 100% रक्कम देण्याची तरतुद करणेत आली आहे.	271.57	122.59	394.16
12% अतिरिक्त वाढ कलम 30 प्रमाणे महाराष्ट्र शासनाचे महसूल व वन विभाग कडील परिपत्रक क्र. संकिर्ण/ 03/2016/ स.क्र. 270/ अ.2 दि. 28/10/2016 अन्वये वरील रक्कमेवर 12% अतिरिक्त वाढ देण्याची तरतुद केली आहे.	32.59	14.71	47.30
एकूण एकंदर देय रक्कम	304.15	137.30	441.46
यामध्ये वरील प्रमाणे सरकार जमा करणेची अनर्जीत व नजराना रक्कम जोडावी	15.09	6.81	21.90
जमीनी बाबत अंतिम निवाडयात जमीनीची नुकसान भरपाई देय राहिल.	319.24	144.11	463.35

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आस्थापना खर्च व सोयी सुविधासाठी तरतुद भूसंपादन अधिकारी या भूसंपादनाचे कामा करीता 3% आस्थापना खर्च व 3% महाराष्ट्र शासनाचे महसूल व वन विभागाकडील अधिसूचना क्र. LAQ/12/2013/CR-190/A2 दि. 19/03/2014 नुसार आकारणी करेल ती रक्कम खालील प्रमाणे 3% आस्थापना खर्च 13.31 3% खर्च सोयी सुविधा 13.31	9.58	4.32	13.90
वरील प्रमाणे येणारी रक्कम एकूण रक्कमेत जोडावी.	338.40	152.76	491.16
Govt. Land (शासकिय जमीन)	5.96	1.68	7.64
Forest Land (वन जमीन)	15.52	0.91	16.42
Land from MMB (Reclamation)			292.30
Grand Total	359.87	155.34	807.52

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**Table 6.14
Taluka 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 structuree including 100% Solatium (INR crores)	* R&R assistance (INR crores)	** Inc entive for consent- 25 % (INR crores)	Compensation for tress and crops @ 2.5% of landcost (INR crores)	Balance land and other misc.cost @ 10% of landcost (INR crores)	Total (INR crores)
Maharashtra								
Thane								
Total private land								
Grand Total Maharashtra								
Administrative cost @ 10% of Total Cost								
Interest @ 12% of Total Cost								
R&R site development budget (Details provided in Chapter 6)								
Livelihood development & IRP budget (Details provided in chapter 7)								
Total including administrative cost and Interest								

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6.18 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 Maharashtra. 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 local valuers. The compensation amount of structure will be calculated without depreciation.

6.19 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.

6.20 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.

6.20.1 Within Vadhvan Port Project Ltd (VPPL)

VPPL, a Joint Venture of Government of India and Government of Maharashtra is responsible for planning and execution including social, environmental aspects of Vadhvan Port Rail project. Implementation of RAP requires institutional arrangements at VPPL's Office at

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Mumbai. 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.

6.20.2 Project Implementation Unit (Resettlement and Rehabilitation)

At the Headquarter Level

At Head Office, Managing Director, JNPA 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 (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 JNPA related to resettlement and rehabilitation. JNPA 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.

The responsibilities of this unit broadly include the following:

- ❖ Responsible for all land acquisition activities and facilitate necessary help needed at the site,

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- ❖ 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.

At the Field Level

- ❖ Site offices of JNPA 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). The project including RAP will be implemented by the CPM Offices located at Mumbai, and site
- ❖ CPMs at Mumbai 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 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

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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,

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- ❖ Decide on the requirement of developing relocation site, if required any.

6.20.2.1 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 JNPA 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,

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- ❖ 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.

JNPA 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.

- District Collector will be involved in assigning, coordinating & monitoring all the Land Acquisition, Compensation Disbursement, and GRC related activities at the district level.
- Land Acquisition officer (LAO) will be directly responsible for the following activities.
- Coordinating and monitoring of field activities including demarcation of affected land, JMS, and other verification work
- Publication of related Gazette notifications
- Approval of JMS report
- Determination of Land value and calculation of compensation including R&R Assistance
- Receiving and resolving the Grievance of PAP's
- Demand and receipt of compensation funds from JNPA
- Disbursement of compensation to PAP's
- Monitoring and coordinating of R&R work

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- Handing over the encumbrance free land to JNPA
- 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

6.21 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.

6.21.1 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 – Site Level Committee

Grievance Redressal Committee (GRC) will be constituted by VPPL at the Site 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 Sr Official of VPPL 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

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- 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:

- a. 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,
- b. Inform PAPs through RAP consultant GRC's decision to PAPs and project authority for compliance.
- c. PAPs are being informed during each consultation (individual, group and public) about GRC, the institutional arrangement for grievance redressal of PAPs.
- d. 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 VPPL.
- e. 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 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

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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 Corporate Office Grievance Redress Committee will hear and redress the grievances of PAPs, if not resolved at the district level.

6.22 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.

6.23 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 JNPA 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 6.15**.

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Table 6.15

Monitoring for RAP and Resettlement Activity Implementation

S. N.	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.)				

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S. N.	Indicators	Scope	Status	Achievement (in %)	Remarks
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.)				
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.)				

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S. N.	Indicators	Scope	Status	Achievement (in %)	Remarks
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.)				

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S. N.	Indicators	Scope	Status	Achievement (in %)	Remarks
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 7th 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.

6.24 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, JNPA before the start of the RAP implementation. The objectives of external

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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.

- ❖ 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 JNPA 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, JNPA 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

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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 JNPA
- ❖ 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 6.16** 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.

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Table 6.16
Impact Evaluation Indicator

S.N.	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			

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6.25 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 7th 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

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.

6.26 RAP Implementation Schedule

6.26.1 JNPA 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. JNPA 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

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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 require 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

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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.

6.26.2 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.

6.26.3 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,

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- ❖ 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.

CHAPTER 7

FISHERY COMMUNITY DEVELOPMENT AND ACTION PLAN

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7.0 Introduction

The proposed Port in the offshore of Dahanu coast at Vadhvan is likely to impact the fisheries and livelihood of fisher-folks to some extent. Although most of the impacts are expected to be during the construction period, some impacts are identified to be more of permanent nature and hence a policy has been drawn as per the largely accepted compensation policies for major projects in the region of Mumbai i.e., JNPA, MMRDA, MTHL etc. Indian Council of Agricultural Research-Central Marine Fisheries Research Institute (ICAR-CMFRI) is a nodal agency identified by the Government of Maharashtra and Maharashtra Maritime Board to study the impact of any developmental activities in the coastal and marine areas of the state or related to marine fisheries. JNPA approached ICAR-CMFRI for assessing the possible impacts of the proposed Vadhvan Port on the coastal fisheries in general and identify breeding grounds, endemic fishes as a part of the Environmental Impact Assessment (EIA) report. The task is also to identify the entire fisherman who might be impacted due to the proposed project and to offer a fair compensation to the affected fisher-folks. It has been acknowledged that no such policy exists in the Indian context and therefore compensation offered by National Green Tribunal in the 27th February 2015 order (application no. 19/2013, before the Western Zone Bench of National Green Tribunal), has been used as a base.

The Fisher-folks Compensation Policy (FCP) for MTHL project is considered as most successful policy which is a result of numerous discussions with the Fishing Community, Fisheries Scientists and other stakeholders including the concerned Government Departments. A Fisher-folks Compensation Committee (FCC) was set up by the MMRDA with Additional Metropolitan Commissioner as the Chairman, and members from Fishing Community, Department of Fisheries, Revenue, MMRDA, Police, Fisheries Scientist and MMRDA as its members.

In line with above the JNPA and VPPL who are implementing the project would also follow the same principle to arrive at a compensation for an action plan will be prepared. The JNPA/VPPL will prepare a Fisher-folks Compensation Policy (FCP) for VPPL project in consultation with all stake holders and fishermen community. and a Fisher-folks Compensation Committee (FCC) will be set up by JNPA/VPPL with Dy Chairman, JNPA as the Chairman, and members from Fishing Community, Department of Fisheries, Revenue, MMB, Police, Fisheries Scientist and JNPA/ VPPL officers as its members. The Committee conduct will meetings for formulating

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the policy. In addition, a Stakeholder’s meeting will also be conducted by the Dept. of Fisheries and site visits with PAP’s.

7.1 Participation Process

A Stakeholder Engagement Plan is proposed to be developed by CFFRI which includes a full identification and mapping of stakeholders, prioritization, and the design of communication. The plan clearly conveys expectations, responsibilities and the commitment to engagement.

Early stakeholder engagement significantly helps to understand stakeholder expectations and to channel them to feasible, sustainable projects. This substantially reduces conflicts in the short and medium-terms and lowers project implementation costs. It is a key to understanding project dynamics and sources of leverage.

Proceedings of all meetings and workshops need to be held with project stakeholders and recorded using audio, video and photographs.

7.2 A Legitimate Process

Potentially impacted stakeholders are being carefully consulted during the preparation of the Plan. Representatives of potentially impacted fisher-folks, mussel harvesters’ associations, and others are participating in the compensation program selection, providing legitimacy to the process and its results.

Compensation is being closely supervised by VPPL & MMB. Since compensation will be participatory, the institutions that supervise or observe the Project will be able to validate the transparency and the results of the resulting programs.

7.3 Magnitude of Displacement (Economic) which can Impact the Coastal Community

1. Loss of common area.
2. Loss of fishing area.
3. Loss of historical fishing ground for the gillnetters, dol nets, hand pickers and other inshore fishing activities.
4. Loss and displacement of fishing structures, fishing stakes (‘sus’) and nets from the port area, navigational channel, berthing areas permanently.
5. May affect fish abundance and productivity of the area.
6. Loss of income and livelihood.
7. With the decreased fishing areas, there will be chances of increasing conflicts over fishing space.

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8. Loss of fishing time and increased operating cost (fuel) to reach fishing grounds and return.

9. Additional income opportunity to coastal community

Fishing is a seasonal activity. Most fisher-folks fish during winter and beginning of summer, but there are some of them who also fish in the rest of the seasons, including rainy season.

Though, for many fisher-folks, fishing is the primary source of livelihood, some fisher families are not solely dependent on fishing activities and may have some other sources of income.

7.4 Fishing Villages around the Proposed Fishing Area

The proposed Vadhvan Port is planned almost at the northern side of coastal Maharashtra very near to the Dahanu creek, Palghar. Fishing and allied works are the major livelihood activities for the majority of the population in the selected 16 fishing villages within 10 km radius of the proposed Vadhvan port area. The fisher population, in general, and the fishing crafts and gears in particular, operating from villages near to the proposed site are likely to be affected by the port construction and activities. As per the guidelines of environmental impact studies, an area of 10 km radius and the villages falling in this area from the boundaries of the proposed port area have been identified. As explained earlier, a few villages beyond the radius of 10 km are also included in the survey as the fishing boats from these villages utilizing the landing, operating facilities in the identified coastal villages within 10 km range.

The boundaries of the proposed port were collected from JNPA as 19°55'59.85"N 72°39'42.36"E (Fig.2). Based on this location, ICAR-CMFRI identified 16 villages, which come under 10 km radius from the proposed Vadhvan Port location as the possibly affected villages. The proposed port and the port facilities will be in the reclaimed area on the offshore zone near Vadhvan village taking advantage of the large tranquil location and the port will need a minimum land acquisition. The list of coastal villages identified by ICAR-CMFRI which are likely to be impacted by the development of the port development are given in below. The villages within the port limit can be considered as the most affected villages due their proximity (Tadiyale, Gunguwada, Dhakti Dahanu, Vadhvan and Varor). Name of Villages Falling in 10 km Radius having Fishing Activities is given in below **Table 7.1**.

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Table 7.1

Name of Villages Falling in 10 km Radius having Fishing Activities

S. N.	Name of the Village
1	Ghivali
2	Kambode
3	Tarapur
4	Chinchani
5	Tadiyale
6	Varor
7	Dhakti-Dahanu
8	Dahanu
9	Gungwada
10	Matgaon
11	Asangaona
12	Agara
13	Narpada
14	Dandepada
15	Dhumket
16	Abram

- a. Narpad, Agar & Asangaon are not exactly coming under 10 km radius of the project area, but the majority of fishers from these village are members in Dahanu Fishermen Co-operative Society and they operate boats from Dahanu landing center, conduct fishing in the near-shore waters. Therefore, CMFRI has included these fishing villages for the study.
- b. Dandepada and a part of Chinchani revenue village is a hamlet in Govt. documents, but it is a separate fishing village as per Marine Fisheries Census 2010.

It is seen from the table that out of 5,333 fisher households, 91.2% are pucca houses while 470 households (8.8%) are kutcha houses. Of the total, 3,582 (67.2%) fisher households are above the poverty line (APL) and 1,751 households (32.8%) are below the poverty line (BPL). Most of the fisher population seems to be congregated in Dhakti-Dahanu village (21.0%) followed by Dahanu (9.3%), Chinchani (8.7%), Ghivali (8.7%), Gungwada (8.6%),

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Dhumket (7.5%). The remaining 7,525 fisher population (36.2%) resides in the remaining 10 villages. The Port Limits and activities Proposed in the Port Operation in the offshore area are given in below **Table 7.2**.

Table 7.2

Port Limits and Activities Proposed in the Port Operation in the Offshore Area

CRZ Classification	Area in Acres	Development Area of Vadhvan Port (acre)	Proposed Activity of VPPL
CRZ 1A	98.30	0.00	No development proposed.
CRZ 1A	126.50	0.00	No development proposed.
CRZ 1B	553.60	124.27	Reclamation area nearshore including Admin building.
CRZ III (NDZ)	36.30	17.05	Road Area - Covers the area between the entry and exit gate.
CRZ III		17.45	Exit gate area.
CRZ IV A	41,106.00	3,388.78	Offshore reclamation area.
		426.25	Nearshore reclamation area including RORO storage, liquid tank farms, fertiliser storage.
		316.46	Breakwater area.
		25.70	Road Approach trestle (piled structure).
		12.85	Rail Approach Trestle (piled structure).
		28.00	Approach trestle (piled structure) to Liquid jetties and breakwater head.
		1.49	Liquid jetties (piled structure) - LPG, Liquid bulk - Chemicals, Edible oil.
		3,004.14	Navigational area - Approach channel and manoeuvring area.
		1,246.37	Sheltered Area - Water area within the port.
Total	41,920.70	8,608.79	

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7.5 The Impact Study carried out by CMFRI and the following Impacts are Predicted

1. Loss of fish and productivity of the area due to increased turbidity during the construction and operational phase of the proposed port. Increased rate of turbidity (TSS) affects the light penetration which impacts the primary productivity, water quality, disturbance to marine life affecting total biological productivity causing fishery decline, which will in turn lead to fishing location changes and affecting income per trip. However, the nearshore waters are highly turbid due to sandy bottoms and strong tide and coastal currents.
2. In the operational phase the deterioration of water quality in and around port facility is expected, which in turn increases the stress on marine organisms, people. Additionally, it will also affect the quality of open-air fish drying.
3. Reduced fishing area, crowding and conflicts -may lead to increased pressure in the available fishing locations and sectoral conflicts due to crowding effect increase the competition for fishing space in the other nearshore waters.
4. There is a visible loss of fishable areas, which will be further enhanced if any restriction on activities is further related to development/security. Larger development plans and security concerns can further create access restriction.
5. Destruction of the rocky bottom and sedimentation/siltation and reclamation will affect the bottom set gillnet fishery targeting lobsters.
6. Any possible change in currents due to the construction of large breakwater will affect the fixed fishing gear operators beyond the port limit. If any such concerns are raised, they may be compensated adequately.
7. Reduced fishing time -With the increased vessel traffic in the nearshore waters fishing time will be reduced highly and higher chances of operation disruption causing increased risk to fishers.
8. Another impact includes, increase in traffic, affecting fisher accidents, high waves which necessitates exclusion zones. The vessels operate in the region are smaller, which makes it difficult to observe, besides, these vessels don't have AIS or VMS systems.
9. The impact on the resources may also impact the value chain, from harvest to endpoint consumer. It will affect the income to fish drying units, women vendors.

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10. The long breakwater in the north side between the coastal Increase in operational cost and loss in total fishing time due to the blockade created by break wall, they have to travel additional distance during construction and the post-construction phase. As mentioned, fishing is the primary source of livelihood and will be affected. 11.2 km-long breakwater, whose tail would rest near the shore, while the head would be in the sea at a depth of 18 meters, which will increase the navigation route fishers of immediate south of the port
11. Decrease in fisheries participations- Due to expected new opportunities, moving out from sector is expected and also due to income change, till finding advantages of situations
12. During the construction phase, a lot of equipment, construction material, etc. transportation between the site is expected through sea and land, these changes and or pollution, which may create behavioural and health issues in the coastal community.

7.5.1 CMFRI has Recommended that the following Aspects need to be Studied

1. Identify the fishers, and coastal community who will be affected and provide compensation to minimize the economic impact/livelihood impact.
2. All the direct impacts, livelihood impacts to be adequately compensated and mitigated to maximum.
3. Compensation to those, whose fishing structures has to be removed and displaced.
4. There is no adequate medical facility in the proposed port area. To address the possible behavioural change and health issues created among the coastal community during the construction and operational phase of port, there is an urgent need to create adequate medical facility in the region.
5. With the adequate qualifications/skills specified, coastal community may be given preferential consideration for employment in the port jobs.
6. Any loss to the fixed assets in the lands of the coastal community to be compensated.
7. Interconnectivity between the coastal villages should not be restricted due to the port construction.
8. Mandatory navigational aid in the port premises and channels or any restricted areas. Timely communication to stakeholders on all important matters needing attention.

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9. Many of the villages doesn't have proper landing centres and are mostly beach based. Adequate arrangement has to be made to land the fish (facilities like jetty or harbour). Proper access to this landing area and fishing area from the jetty or operational base should be ensured. Adequate depth should be provided to the boats for the navigation if in case there are siltation chances, navigation issues during the construction or post-construction phase.
10. There are legal and institutional constraints in assessing damage to Dol fishery. The fixed structures (sus) in the sea are not exclusively included in fisheries legislation. Only fishing boats are registered. There is no information on the fishing structures in the sea with any agencies. The Government of Maharashtra or its bodies may come up with policies such as, mandatory registration of fishing structures in the sea and any eligibility assessment should be based on that registered with the government agency. The sus locations if in case shared by fishers should be verified by sea surveys.
11. Support in fishing vessels to equip all with have transponders/ AIS or VMS systems to identify this by other vessels in the ocean and reduce chances of accidents.
12. Installation of the artificial reef: Based on the availability suitable types of artificial reefs can be deployed to increase productivity and support lobster fisheries.
13. Provision on value addition and branding of seafood products: better income for fishers comes from better value for their harvest. Marketing and storage facilities appear to be major limitations in the region. Adequate Infrastructure should be developed for better marketing, improved income, and fresh fish for all.
14. Compensation or loans to likely affected fishermen (boat owners, crew, subsistence and marginal fishers) and persons involved in other fishery-related allied activities in the project area to continue their avocation of fishing.
15. Capital expenditure for switching to alternative livelihoods options like cage culture, crab fattening, pond culture and shrimp farming.
16. Skill development or (Capacity building) of the marginal fishermen has to be taken care by shifting them to other than fishing activity.
17. Ice factory and cold storage facility at multiple locations should also be considered.
18. Support in improved navigation aid and up-gradation of fishing vessels.

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19. Seawater quality in the port area/ port limit should be strictly maintained and monitored so that it should not cause adverse impacts on fishing and the environment.
20. Continuous fisheries monitoring programs on the effectiveness of the mitigation measures or additional impacts if any during the construction and operation of the project. Pollution is a major threat in these coastal regions, reducing marine pollution in coastal waters, seawater quality in the nearshore waters should be monitored regularly and pollution should not cause adverse impacts on fishing and the environment.
21. Transformation of the coastal areas will have an impact, how and what extent, and what magnitude cannot be predictable at the current state of extreme events and climate change. However, a recommendation for regular monitoring program during the construction phase and audit after post construction phase to verify the status of the predictions about fisheries impact study and to detected and unpredicted/unforeseen impacts. Evaluate the effectiveness of mitigation plans implemented by JNPA (navigation, fishing restriction, operation issues, etc.) during post construction phase.
22. A social impact study must be conducted if the port is to establish the actual impact if any shift in the fishing area/impact on fishing-based livelihoods.
23. Better income for fishers comes from better value for their harvest. Marketing and storage facilities appear to be major issues in the region. Adequate Infrastructure should be developed for better marketing, improved income, and fresh fish for all.
24. Proper access to the landing area and fishing area from the jetty. Adequate depth should be provided to the boats for the navigation if in case there are siltation chances, navigation issues during the construction or post-construction phase.

7.6 Objectives

Objectives of the Fisher-folks Compensation Plan are as follows:

1. To minimize the economic displacement caused by VPPL restrictions on access to coastal and marine resources.

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2. To improve or at least to restore the livelihoods and standards of living of all persons experiencing economic displacement as a result of the construction or operation of proposed VPPL facilities.
3. To ensure that compensation activities are implemented with appropriate disclosure of information, consultation and the informed participation of those affected.
4. Brief description of the project:
 - i. The proposed project is of high strategic and economic values for overall development of logistic sector for EXIM cargo.
 - ii. The proposed Port will also be the most dependable Port for all future EXIM trade. The Vadhvan Port will be most modern smart technology Port.
 - iii. Committed to preserve, protect and promote the environment in and around Vadhvan port while implementing as well as operating the project. All environment laws, rules and regulations will be be fully regulated with oversight from pollution control board.
 - iv. Port will have a dedicated road and rail service so as not to interfere with the local traffic, thereby avoiding any clutter within the local transportation.
 - v. The Port will abide by the directions as per Environmental Clearance Notification of 2006 for EIA clearance and 2011 for CRZ clearance.
 - vi. Will live up to the expectation of people concerning the environment and take all precautionary and mitigative measures as per the sustainable development ordinance envisaged under the Environmental Law and contribute to the economic benefit for the state of Maharashtra.
5. Union Cabinet in its meeting held on 5th Feb. 2020 granted in principle approval for setting up of proposed Port at Vadhvan in Dahanu, Maharashtra State with an estimated cost of Rs.65,544.54 crores including IDC, GST etc. An investment of Rs.16,140 crores will be implemented by the SPV in constructing basic infrastructure like breakwaters, rail line/yard and road connectivity, power and water line, internal roads and common amenities. At present JNPA and Maharashtra Maritime Board, Govt of Maharashtra are development partners for the prospective port with a equity share of 74% and 26% resp. Project sponsor is being executed by the Govt of India and selected JNPA as implementing Agency.

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The possible impacts of the project are envisaged to be of six basic types and coded from **C1 to C6. They are as follows:**

C1: Loss of fishing and livelihood due to removal of fishing stakes ('sus') and nets in the Proper Port area in break water and lee word side of break water where all port activities are envisaged. This is the permanent impact.

C2: Permanent decrease of revenue due to decline in fish catches and changed seawater currents. This permanent loss is considered for only sus/dol Nets that are dependent on current up to 500 mts from the location of break water and Port operation. The basis for this calculation is based on the CWPRS study that shows overall insignificant impact on tidal strength in the area but some reduction of current strength would be observed at the location of reclamation and Port area within break water. The effect is in an area of ~8000 acres. This is a fair limit of compensation covering all the affected fisher-folks with Nets depending on currents.

C3: Loss due to restricted movement of subsistence level fisher-folks for hand picking of fishery organisms near to the shore area where it is proposed. This has been considered as the permanent impact.

C4: Loss of fishing time and increased operating cost (fuel) to reach fishing grounds from their hamlets during construction phase. This impact, though temporary, has been considered as candidate for permanent impact as the compensation will be difficult to quantify on daily basis. The impact was considered for Commercial and Artisanal fisher folks only. The Commercial trawlers, though have high maintenance, they do not travel daily for fishing. Even the Artisanal fisher- folks do not travel for more than 15 days in a month. Based on activities and construction schedule and alignment, it was observed that the Dahanu Creek side boats are more affected during the construction phase. Considering that the construction activities in the Sea section will be impacting for about 5 years, a comparable package need to be offered.

C5: Loss of fish due to increased turbidity during construction phase. This is a temporary impact. This category will also be considered for only those fisher folks affected by increased turbidity due to VPPL construction activity beyond the 250 m limit of Port Operation area. Fisher folks already covered under other compensation categories excepting C4 and C6 will not be covered under this category.

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C6: Damage of fishing boats and nets due to movements of barges, vessels, machinery materials and men along the ROW, jetties, casting yards and labour sites during construction phase. This will be incidental and compensation will be offered only against an incident.

7.7 Action Plan preparation and Approval Process

This Fisher-folks Compensation Management Plan shall be prepared in conjunction with the following other project social and environmental documents:

- Stakeholder Engagement Plan
- Community Affairs Management Plan
- Project Grievance Procedure
- Environmental & Social Impacts Assessment.

7.8 Avoidance and Minimization of Impacts

The CMFRI has submitted the Impact assessment report. The fishery in the area is supported by a variety of fin-fishes and shellfishes. During June 2017 to May 2018, a good diversity of fishes (126 species) including 86 species of teleost, 4 shark, 20 crustaceans and 13 molluscs were observed in the fish landings. Most of the fish species collected during June and July were juveniles, smaller than the size at maturity. However, in different months, maturity, size and catch composition of fishes differed in different fishing gears. The area under study cannot be conclusively suggested as a breeding ground. No endemic or protected fishes were recorded in the proposed port area or in the fishery. Fishing and its post-harvesting such as the sun-drying of Bombil is a family affair and most of the fisher families depend on fisheries for livelihood. Analysis of fishery data (2013 to 2018) collected from the Department of Fisheries, Government of Maharashtra showed that mechanized sector was the major contributor to the fishery with diverse groups of commercially important fishes landed by mechanized gillnetters and dol netters. Fishery analysis shows that dol nets were the major gear contributing more than 80 percent fishery followed by gillnets <15 percent. The estimated catch of fishery resources showed variations across the years and landings of most of the fish resources have declined significantly in recent years. Over the years the catch has decreased by >70 percent from 2013-14 to 2018-19. Common and commercially important fish varieties caught were Bombay duck, nonpenaeid prawns, catfishes,

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anchovies, pomfrets, seerfish, lobsters, etc. The ESIA describes the physical, biological and social baseline, and predicts potential impacts on environmental, social or cultural resources. It includes a framework management plan, which makes various commitments, and outlines measures to minimize and mitigate the direct and indirect impacts of the project vis – a –vis compensation. It also outlines measures for monitoring predicted impacts and if further mitigation is required.

7.9 Summary of the Construction and Operation Activities

7.9.1 Summary of Activities

Anticipated environmental impacts associated with the proposed port project have been identified and listed below:

- 1) Port construction and intertidal area reclamation
- 2) Impact of dredging and disposal
- 3) Environmental impact of breakwater system
- 4) Impact of shipping operations on marine environment
- 5) Air pollution from port operations
- 6) Noise and light pollution
- 7) Impact of cargo handling
- 8) Hazardous materials and oil
- 9) Ship and boat generated wastes
- 10) Introduction of non-native species into marine environment
- 11) Oil spill

The following activities are anticipated during the construction phase of the Project:

- i. Transportation and Mobilization, including all the activities related to the transportation of equipment, machinery, supplies and personnel to and from Dahanu Creek/ Landing Point proposed at Dahanu Point during the entire construction phase. Transportation will be conducted by land and sea.
- ii. Site Preparation including all the activities related to earthwork (cut and fill) on the non-marine portion of the site required for the construction of the process areas, storage and support building areas.

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- iii. Construction of Infrastructure and Utilities including the construction of internal access roadways, installation of the temporary construction camp, administrative areas, firewater system, the effluent treatment system and other services.
- iv. Construction of Process and Storage Areas including the construction of metal-framed structures, erection of piles, casting area, the assembly of mechanical components and the construction of all mechanical and electrical components of all the processes, storage and loading units.
- v. The marine area construction including temporary jetty, bored piles, bridge assembly etc.

During the operations phase, the activities include movement of vessels, ships, tugs and cargo handling machinery, dredging equipment's etc. for operations and maintenance activities of Port.

7.9.2 Impacts on Land

The most significant impacts on land during the construction of the VPPLL is related to the alteration of the landforms from activities related to site preparation during the construction of the land-based infrastructures such as storage yards, fabrication yards, internal accesses roadways, temporary lay down areas etc. However, considering that most of the landward area on both sides is a sufficiently built area, the overall impact is less significant.

7.9.3 Impacts on Water Regime

During the construction phase, water will be used for dust control, soil compacting and concrete mix. Water required for these activities will be obtained mainly from the water suppliers from Dahanu Area and water supplied by MJP. Other construction activities, such as construction of the Jetty, Bored Piles may have impacts on seawater at different magnitudes. However, these impacts can be avoided, minimized, or mitigated according to the ESIA and associated environmental and social management plans. A comprehensive marine monitoring program has also been proposed to verify predictions made in the EIA.

7.10 Fishing Economy in the Vicinity of the Project Area

7.10.1 Introduction

There are three broad types of fisher-folks in this area.

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- (a) Commercial: They reside in the villages but do not fish in the creek area. They have large trawlers for fishing in the deep sea.
- (b) Artisanal Fisher-folks: These are traditional fisher-folks fishing in the area for generations. They have kind of net like dol, gill or drift net that is used for fishing during particular seasons. Artisanal fishing in this area provides an important source of household income to households in the area. However, these fisher-folks families usually supplement their income from the catch, by employing some family members in Petrochemical companies; commerce industries, carpentry and masonry work especially during the non-fishing months. Most of their catch is sold in the local markets. A small portion of the catch is kept in the cold storage to ensure freshness and to obtain a higher price later.
- (c) Subsistence Fisher-folks: These are daily fish catchers who catch the fish generally by hand picking. Large number of women is also involved in subsistence fishing. This group is highly unorganized and hence qualifies for maximum care and special attention during the compensation distribution.

7.10.2 Fishing Areas

Most of the fisher population seems to be congregated in Dhakti-Dahanu village (21.0%) followed by Dahanu (9.3%), Chinchani (8.7%), Ghivali (8.7%), Gungwada (8.6%), Dhumket (7.5%). The remaining 7,525 fisher population (36.2%) resides in the remaining 10 villages. The fishers who spend at least 90% of the fishing time (excluding closed season) in a year for the source of income in were considered as “Full-time fishers” whereas fishers those who spend less than 90% of the fishing time in a calendar year were considered as “Part-time fishers”. The study by CMFRI revealed that 3,537 (17%) of the total fisher population is involved in actual fishing activities. Among them 1,734 fishers (49.0%) are engaged full time and the remaining 1,803 fishers (51.0%) have part-time involvement in fishery related activities. A total of 7,580 fishers are engaged in fishing associated activities viz. marketing of fish, making/repairing of nets, curing / processing, peeling/cutting, labourer and other activities such as the collection of bivalves, seaweeds, collection of ornamental fishes, etc.

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7.10.3 Requirement of Basic Study for Fishing Survey

The general objective of the study is to obtain a comprehensive socio-economic baseline study that can be used to refine mitigation measures (if necessary), to form the basis of the Fisher-folks Compensation Plan (FCP), and also to form the basis of a social monitoring program for the Project. The specific objectives are as follows:

- Enhance the social baseline study presented in the CMFRI to address recommendations received from stakeholders.
- Confirm the potential for social impacts on fisher-folks arising from the construction of the Port.
- Identify the socio-economic indicators that are of relevance to fisher-folks in the Project's area of influence e.g., fishing traditions, methods and locations, and catch-effort data etc.
- Establish a plan to define how to identify genuinely affected fisher-folks and identify the procedures to be followed during negotiations on compensation.
- Propose a coordination and negotiation strategy that aligns Project timetables with stakeholder expectations.

The study is participatory in nature and will establish solid grounds for compensating the fisher-folks and monitoring their livelihoods. The geographical extent of the survey in Vadhvan Region have to be identified as possible impacted villages and shall be considered for detailed study to be conducted with the help of Fisheries Department.

7.10.4 General Considerations

(a) Social baseline study will be based on the following:

- Review of existing information and interpretation of data that was previously gathered in the field.
- Applying statistical methods involving a census-type survey of fisher-folks in the direct influence area.
- Applying qualitative methods that gauge perceptions about the Project, complementing data from the surveys.
- Identifying gaps in the socio-economic, public opinion and intercultural relations data set.

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- Enrolling stakeholders in discussion. Several outputs will be confirmed during a reconnaissance field survey.
- (b) The study to be conducted with the help of activities such as:
- Interviews with Community Relations representatives.
 - Literature reviews
 - Reconnaissance of the study area
 - Design of methods
 - Field test of methods
 - Adjustment of the design
 - Field work planning
 - Selection and training of personnel used during fieldwork
 - Data collection, processing and coding
 - Confirmation of impacts
 - Preparation of an outline for the Compensation Plan and Negotiation Strategy
- (c) Participatory Research The research is participatory in nature and involves a sample of stakeholders under study to help ensure information can be validated.

The base line study will determine whether social organizations are stakeholders or social actors. Such a distinction will lend a clear understanding during negotiations between the VPPL and the fisher-folks.

The qualitative study will examine fisher-folk’s perceptions and public opinion in the area near the Project.

7.10.5 Quantitative Methods

The purpose of the surveys is to collect quantitative data about the key socio- economic conditions of the fisher-folks who have the potential to be directly impacted by the Project. A structured questionnaire shall be circulated containing simple questions that are especially sensitive to the economy, culture and psychology of the people from the coast area.

7.10.6 Validation of Information

Specialists in technology and marine resources and experts on local fishing practices will participate in the study to validate the results obtained from the field interviews and surveys. A validation will be performed with the fisher-folks themselves focusing on those

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who frequently fish in this area. This will be further validated through the Dept. of Fisheries.

7.11 Compensation Framework

7.11.1 Compensation Dialogue and Agreement

Compensation is one of the most sensitive social issues of the Project as it relates directly and contractually with the population of the area of direct influence, and most specifically with those stakeholders that may be impacted by the construction and operation phases of the Project.

7.11.2 Compensation Plan Objectives

(a) General Objective:

Provide compensation to fisher-folks who will be impacted by the proposed Port.

(b) Specific Objectives:

- i. To identify a comprehensive list of Project affected Fisher-folks and extent of impacts.
- ii. Maintain a relationship of mutual trust and communication with the fisher-folks in the area of influence.
- iii. Generate a positive perception about the Project among NGOs, opinion makers, government agencies, the press, local federations and confederations, local leaders, and the general public.

7.11.3 Fisher-folks Compensation Committee

A Fisher-folks Compensation Committee (FCC) shall be as under as shown in below **Table 7.3.**

Table 7.3
Fisher-folks Compensation Committee

S. N.	Designation of the Committee Member	Status in the Proposed Committee
1	Dy Chairman, JNPA	Chairman
2	Commissioner, Fisheries (Marine)	Member
3	Chief Executive Officer, Maharashtra Maritime Board	Member
4	Collector, Palghar District	Member
5	Collector, Thane District	Member

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S. N.	Designation of the Committee Member	Status in the Proposed Committee
6	Dy. Commissioner of Police, Palghar area	Member
7	Dy. Commissioner of Police, Navi Mumbai Shivaji Nagar area	Member
8	Representative of Fisher-folks Societies from Fishing villages falling in the influence area of VPPL	Invitee
9	Engineer – in – Chief / Chief Engineer, JNPA/VPPL	Member Secretary

Scope of the Committee:

The scope of the Committee shall be as under:

1. To monitor and take necessary actions for the implementation of the FCP.
2. To monitor the base line and periodic surveys conducted.
3. To approve the Fisher-folks Compensation plan and recommend to MMRDA for disbursement.
4. To monitor the post implementation evaluation.

Implementation of Compensation Process

JNPA to appoint a nodal agency to carry out baseline survey of the affected fisher-folks and detailed list along with category/nature of loss (permanent or temporary), which will be sent to fisheries department for validation. This Compensation Plan will include details of the beneficiaries such as Name, Amount of compensation, bank details, etc. Fisheries Department shall validate the same and forward to FCC for approval. FCC shall take the decision on compensation payable and forward recommendations to JNPA/VPPL for further necessary action. On receipts on comments from FCC, MMRDA shall release the compensation amounts in the names of the beneficiaries through the office of the respective Collector for distribution. Respective Collector office shall make the disbursement to affected fisher-folks and forward the report to Fisheries Department and VPPL for record. Appropriate record of disbursement shall be maintained by the respective office of the Collector.

Broad time line of process is given in the below **Table 7.4.** [To be decided after EC Clearance]

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Table 7.4
Time line of Process

S. N.	Activity	Action by	Date	Remarks
1	Approval of Fisher-folks Compensation Policy	FCC		
2	Approval by JNPA/VPPL	JNPA		
3	Detailed list of PAP and Compensation Plan	JNPA		
4	Validation of Compensation Plan	FisheriesDept		
5	Approval of CompensationPlan	FCC		
6	Approval by MMRDA	JNPA		

7.12 Implementation Schedule

The census, augmented baseline survey and collection of livelihood data are currently being finalized. At this point, it will be possible to review and validate the outcomes with the fisher-folks and discuss compensation amount.

The compensation matrix is given below:

7.13 Salient features of MTHL Compensation Matrix

The amount of compensation is based on the NGT order no. 19/2013 dated 27 February 2015. The NGT has considered period of 3 years to switch over to some other vocation to establish livelihood. The impact on fisher-folks due to construction of MTHL also considered similarly.

The VPPL can also adopt the compensation package on similar terms as the compensation base used by NGT has been applied being most recent and most relevant for many projects in Bombay region.

The compensation matrix for various compensation codes shall be as given below in **Table 7.5**.

Table 7.5
Compensation Matrix

Comp. Code	Type of loss	Nature of Loss	Explanations for loss	Compensation
C1	Perma nent	Loss of fishing and livelihood due to removal of fishing stakes ('sus') and nets in the ROW	<p>The fisher-folks practicing 'dol' net fishing have permanent fixtures of stakes ('sus') in the creek that are in vicinity of MTHL piers (ROW) which will have to be displaced permanently from their traditionally owned places. The stakes can neither be re-fixed at the same place or relocated elsewhere as the fishing area is already overcrowded.</p> <p>[VPPL Comments: In Port project there will permanent shifting or losing of dol net site falling with in Port area with break water area]</p>	<p>Onetime payment of Rs. 5,84,000/- per</p> <p>*Unit as per the survey conducted under Clause nos.2.3 to 2.7</p>
C2	Perma nent	Permanent loss of revenue due to decline in fishcatches	<p>The dol-net is a passive fishing gear which filters seawater against the ebbing tidal currents and retains fish. The nets are able to operate efficiently at certain current velocities and operate only during spring tides (<i>Udhan</i>) for about 18-20 days in a month but not during neap tides (<i>Bhang</i>). The construction of piers of MTHL would impede the currents and slow them</p>	<p>50% of the amount provided per Unit in Code C1</p>

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Comp. Code	Type of loss	Nature of Loss	Explanations for loss	Compensation
		and changed seawater currents.	<p>down in some places (10% reduction in the shadow region of piers</p> <p>Owing to reduced velocity of the current, efficiency of <i>dol</i>-nets would be weakened resulting in reduction of number of days of fishing and reduction in the quantum of fish caught leading to permanent loss of Revenue.</p>	
C3	Permanent	Loss due to restricted movement of subsistence level fisher-folks for hand picking of fishery organisms	<p>The subsistence level fisher-folks (mostly women) in inshore or inter-tidal zones hand pick crabs, oysters, bivalves and fish without using boats. Owing to construction of 'land-ward' part of the MTHL, casting yards and labour camp and access roads for transport of materials, equipment, machinery and men would prevent such fisher-folks from having an access to their rightful fishing grounds and thereby depriving them of their livelihood significantly. Similarly, those using 'barrier' nets ('<i>vana</i>') in such intertidal mudflats will be losing their fishing area for erecting the nets in future.</p>	Onetime payment of 50% amount provided in Code C1

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Comp. Code	Type of loss	Nature of Loss	Explanations for loss	Compensation
		Loss of fishing time and	The fisher-folks living near the landing part of MTHL would have to travel a long distance and	The compensations shall be based on average travel time as
C4	Temporary	increased operating cost(fuel)to reach fishing grounds from their hamlets due toMTHL during construction phase.	detour to reach their regular fishing grounds as well as marketing at wharfs in Mumbai (New ferry wharf and Sassoon docks).	compared to the period before construction and as determined during construction survey at Rs. 500// per hr. for Artisanal and Rs. 1000/- per hr. for commercial.
C5	Temporary	Loss of fish due to increased turbidity during construction phase	During construction of MTHL drilling and piling works and constant movement of barges carrying heavy machinery and materials would cause disturbances to the sea bottom and thereby increase the turbidity of the ambient water. Most fish species are sensitive to turbidity (suspended solids TSS) due to the fact that they cause irritation to their gills and respiratory system. If the TSS levels in the water are continuously high, it may result in many fish species permanently migrating to clearer waters. This	Equal to the loss of average catch as compared to the period before construction and as determined in during construction survey.

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Comp. Code	Type of loss	Nature of Loss	Explanations for loss	Compensation
			would in turn mean reduction in fish availability to fisher-folks in the affected area during construction phase.	
		Damage of fishing boats and nets due to movements of barges, vessels, machinery materials and men along the ROW, jetties, casting yards and labour sites during construction phase.	The gill netter boats have fishing areas close to the MTHL use drift gill nets which are set during high tide at night and allowed to drift along the surface seawater currents for 6-8 hours for catching pelagic fishes. These nets may get damaged due to movements of barges and vessels.	The actual cost of damages to Boats, Gear, etc. and for the loss of time as evaluated by the Evaluation Committee with the Office of the Commissioner of Fisheries/MMB
C6	Incidental			

One Unit is considered for the single or collective families per single Dol Net.

The Compensation shall be availed on following conditions:

1. The Commercial and artisanal Boats need to be Licensed and Registered.
2. For Subsistence fisher-folks documents like proof of residence/identification proof/membership of registered Fisher-folks Society is mandatory.
3. For entitlement of loss of productivity in Code no C3 & C4 will be counter checked by monitoring studies to ensure that the loss has been only due to construction activity of the Bridge.

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4. No minors shall be considered as Fisher Folks.
5. Families/Units covered under any one category shall not be covered for compensation under any other category.

The category wise distribution of compensation is given in the below **Table 7.6**.

Table 7.6
Category wise Distribution of Compensation

S. N.	Compensation Code	No. of Instalments/year	Year wise disbursement in %				
			Y1	Y2	Y3	Y4	Y5
1	C1	1	60%	20%	20%	Nil	Nil
2	C2	1	60%	20%	20%	Nil	Nil
3	C3	1	60%	20%	20%	Nil	Nil
4	C4	At the end of every Qtr (4)	Depending on the actual loss				
5	C5	At the end of every Qtr (4)	On account of Construction phase and identified impacts				
6	C6	On account of the incidence	Within 3 months of the occurrence of the incidence				

7.14 Grievances and Dispute Resolution

The Grievance Procedure is in place to address any concerns of the PAP. The primary objective is to ensure that the Project Authority responds to any complaints made against the Project, and addresses grievances related to eligibility and entitlement for compensation in a timely manner to avoid or minimize any potential for conflict or judicial processes.

7.15 Specific Objectives Include

- i. Establish a mechanism for responding to complaints in an understanding, transparent and culturally-suitable way.
- ii. Develop an easy-access, no-cost and efficient complaint procedure for the local population involved and/or impacted by the Project.
- iii. Implement effective dialogue and open lines of communication with the public.
- iv. Help to prevent unrealistic expectations and/or negative perceptions from the local population towards the Project.

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- v. Establish a system of investigation, response and quick complaint resolution.
- vi. Reduce gradually the number of local populations' grievances regarding the Project.
- vii. Improve the Project social performance through the analysis of complaints.

7.16 Grievance Redressal Committee

The Grievance Redressal Committee (GRC) shall be as given in **Table 7.7** to address the grievances related to eligibility and entitlement of fisher-folks affected by the project:

Table 7.7
Grievance Redressal Committee (GRC)

S. N.	Designation of Committee Member	Status in the Committee
I	Chief Engineer/ Social Welfare Cell, VPPL	Chairman
II	Assistant Commissioner, Fisheries (Marine) Mumbai Suburb	Member
III	Assistant Commissioner, Fisheries (Marine) Thane and Palghar District	Member
III	Dy. Collector, Palghar District	Member
IV	Dy. Collector, Thane District	Member
V	Dy Manager Engineer, JNPA/ VPPL	Member Secretary

The role of Grievance Redressal Committee shall be as follows:

- The GRC will consider the written grievances only.
- The GRC shall conduct hearing, scrutinize the documents submitted and issue written orders of decision based on the Fisher-folks Compensation Policy.
- The decision of GRC shall be final and binding on all, PIA shall take action accordingly
- The grievances of individual fisher-folks only shall be considered by GRC.
- The grievances beyond entitlement and eligibility shall be recommended to FCC.

7.17 Monitoring and Evaluation

The purpose of resettlement monitoring will be to verify that:

- Actions and commitments described in the FCP are fully implemented on schedule.
- Fisher-folks receive their full compensation entitlements within agreed timeframes.
- FCP actions and compensation measures are effective at restoring or improving the affected fisher-folk's living standards and income levels.

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- If necessary, changes in FCP procedures are made to improve delivery of entitlements to project affected fisher-folks.
- Complaints and grievances lodged by project affected fisher-folks PAP are followed up and that where necessary, appropriate corrective actions are implemented

7.18 FCP Monitoring Framework

Monitoring shall be done at two levels during construction of the project:

- Monitoring by the FCC shall be done on Monthly/Quarterly basis
- A Completion Audit by the independent consultants shall be done after completion of the construction phase:

A key objective of the audit is that compensation project and mitigation measures should lead to sustainable restoration of the project affected fisher-folks.

7.19 Improving Fishing Facility and Value Additions to Fish Catch

Fishing is the major livelihood activity in the identified and nearest coastal villages and most of the fishers are marginal. The total fishermen population residing in the identified fishing villages is around 20,809 in 5333 households. The infrastructure facilities in fisheries are found to be limited and insufficient. Ice factory/cold storage facility is found operational only in Dahanu which needs up-gradation in capacity so that it can provide more support to the fishers of other villages around. Coastal roads in these villages are in bad shape without regular public transport systems and connectivity may be improved. The port may bring improved opportunities like better connectivity and improved networks to the coastal area which may increase the faster distribution of fish and fishery products to destinations, increasing the quality and price and increased income to the coastal community.

Many of the villages doesn't have proper landing centers and are mostly beach based. Adequate arrangement has to be made to land the fish (facilities like jetty or harbor). Proper access to this landing area and fishing area from the jetty or operational base should be ensured. Adequate depth should be provided to the boats for the navigation if in case there are siltation chances, navigation issues during the construction or post-construction phase.

In order to address the infrastructure issues for fishing and landing of fish catch, JNPA/VPPL has proposed several improvement schemes for supporting fishermen community as follows;

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1. Fishing vessels to equip all with have transponders/ AIS or VMS systems to identify this by other vessels in the ocean and reduce chances of accidents.
2. Installation of the artificial reef: Based on the availability suitable types of artificial reefs can be deployed to increase productivity and support lobster fisheries.
3. Provision on value addition and branding of seafood products: better income for fishers comes from better value for their harvest. Marketing and storage facilities appear to be major limitations in the region.
4. Adequate Infrastructure should be developed for better marketing, improved income, and fresh fish for all.
5. Compensation or loans to likely affected fishermen (boat owners, crew, subsistence and marginal fishers) and persons involved in other fishery-related allied activities in the project area to continue their avocation of fishing.
6. Capital expenditure for switching to alternative livelihoods options like cage culture, crab fattening, pond culture and shrimp farming.
7. Skill development or Capacity building of the marginal fishermen has to be taken care by shifting them to other than fishing activity.
8. Ice factory and cold storage facility at multiple locations should also be considered.

7.20 Way Forward

As brought above there are no such policy exists in the Indian context to compensate livelihood for the fishermen community for loosing revenue earning streams and therefore compensation offered by National Green Tribunal in the 27 February 2015 order (application no. 19/2013, before the Western Zone Bench of National Green Tribunal), can be used as a base. The VPPL is a national importance project and there is likely impact on the fishing activities as brought above as such the VPPL has prepared a action plan for preparation of “Fisher-folks Compensation Policy” (FCP) to address the issues all the stakeholders in the marine side of the project construction and operation of Port. There most successful policies and in the Mumbai region as such policy frame work can be adopted after thorough examination. Therefore, JNPA/VPPL has appointed a committee to take forward the policy frame work in consultation Fishing Community. The

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committee will be consisting of members from Fishing Community, Department of Fisheries, Revenue, MMRDA, Police, Fisheries Scientist and VPPL as its members.

Annexure I

***Settlement wise Demographic Data as Per
2011 Census in 10 Km***

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

State	District	Subdistt	Town/ Village	Ward	EB	Level	Name	TRU	No_HH	TOT_P	TOT_M	TOT_F	P_06	M_06	F_06	P_SC	M_SC
0-3 KM RADIUS																	
Dahanu Tehsil																	
27	517	04158	551715	0000	000000	VILLAGE	Tadiyale	Rural	230	1062	547	515	99	52	47	15	5
27	517	04158	551723	0000	000000	VILLAGE	Varor	Rural	678	2810	1392	1418	247	136	111	204	99
27	517	04158	551722	0000	000000	VILLAGE	Vandhavan	Rural	296	1278	639	639	114	59	55	0	0
27	517	04158	551718	0000	000000	VILLAGE	Gungavada	Rural	303	1328	662	666	110	61	49	0	0
27	517	04158	551717	0000	000000	VILLAGE	Pokharan	Rural	165	622	305	317	21	12	9	66	34
27	517	04158	551719	0000	000000	VILLAGE	Bade Pokharan	Rural	378	1686	839	847	204	107	97	0	0
27	517	04158	551721	0000	000000	VILLAGE	Ambistewadi	Rural	248	1310	633	677	130	59	71	0	0
Total									2298	10096	5017	5079	925	486	439	285	138
Percentage											49.69	50.31	9.16	4.81	4.35	2.82	1.37
3-7 KM RADIUS																	
Dahanu Tehsil																	
27	517	04158	551728	0000	000000	VILLAGE	Tanashi	Rural	255	1053	522	531	105	57	48	0	0
27	517	04158	551724	0000	000000	VILLAGE	Vasgaon	Rural	437	2115	1056	1059	222	114	108	0	0
27	517	04158	551720	0000	000000	VILLAGE	Chandigaon	Rural	302	1293	612	681	123	63	60	49	23
27	517	04158	551714	0000	000000	VILLAGE	Dhakti Dahanu	Rural	1079	4903	2419	2484	465	247	218	26	14
27	517	04158	551716	0000	000000	VILLAGE	Dhumket	Rural	427	2097	1009	1088	201	97	104	0	0
27	517	04158	551725	0000	000000	VILLAGE	Motgaon	Rural	265	1199	591	608	114	51	63	0	0
27	517	04158	551726	0000	000000	VILLAGE	Vadade	Rural	103	458	209	249	44	18	26	0	0
27	517	04158	551727	0000	000000	VILLAGE	Osarwadi	Rural	267	1112	547	565	132	65	67	0	0
27	517	04158	551729	0000	000000	VILLAGE	Dedale	Rural	278	1109	524	585	124	60	64	3	2
27	517	04158	551730	0000	000000	VILLAGE	Bavade	Rural	363	1523	745	778	195	100	95	129	59
27	517	04158	802782	0000	000000	TOWN	Dahanu (M CI)	Urban	11397	50287	25790	24497	5242	2691	2551	2471	1245
27	517	04158	551750	0000	000000	TOWN	Chinchani (CT)	Urban	3129	13646	6793	6853	1133	561	572	117	56
Total									18302	80795	40817	39978	8100	4124	3976	2795	1399
Percentage											50.52	49.48	10.03	5.10	4.92	3.46	1.73

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

State	District	Subdistt	Town/ Village	Ward	EB	Level	Name	TRU	No_HH	TOT_P	TOT_M	TOT_F	P_06	M_06	F_06	P_SC	M_SC
7-10 KM RADIUS																	
Dahanu Tehsil																	
27	517	04158	551589	0000	000000	VILLAGE	Narpad	Rural	695	2759	1337	1422	250	120	130	453	220
27	517	04158	551590	0000	000000	VILLAGE	Thakurwadi	Rural	203	935	464	471	78	37	41	12	6
27	517	04158	551599	0000	000000	VILLAGE	Lashkari	Rural	211	967	473	494	137	70	67	0	0
27	517	04158	551600	0000	000000	VILLAGE	Kankradi	Rural	369	1769	883	886	236	114	122	74	39
27	517	04158	551601	0000	000000	VILLAGE	Raipada	Rural	422	1964	982	982	225	117	108	4	2
27	517	04158	551610	0000	000000	VILLAGE	Saravali	Rural	1171	5402	2726	2676	642	319	323	143	78
27	517	04158	551611	0000	000000	VILLAGE	Sawata	Rural	348	1594	791	803	183	95	88	1	0
27	517	04158	551614	0000	000000	VILLAGE	Motapada	Rural	250	1149	572	577	157	94	63	0	0
27	517	04158	551615	0000	000000	VILLAGE	Pale	Rural	523	2569	1240	1329	351	163	188	0	0
27	517	04158	551731	0000	000000	VILLAGE	Asangaon Bk.	Rural	373	1666	819	847	210	108	102	3	2
27	517	04158	551732	0000	000000	VILLAGE	Asangaon	Rural	321	1333	649	684	128	69	59	0	0
27	517	04158	551733	0000	000000	VILLAGE	Kapshi	Rural	324	1439	710	729	211	109	102	187	92
27	517	04158	551739	0000	000000	VILLAGE	Vangaon	Rural	1645	7649	3950	3699	909	463	446	231	131
27	517	04158	551740	0000	000000	VILLAGE	Kolavali	Rural	486	2048	1012	1036	226	116	110	105	53
Palghar Tehsil																	
27	517	04163	552183	0000	000000	VILLAGE	Ghivali	Rural	539	2396	1195	1201	222	107	115	65	34
27	517	04163	552184	0000	000000	VILLAGE	Sawarai	Rural	91	359	174	185	14	5	9	0	0
27	517	04163	552185	0000	000000	VILLAGE	Kambode	Rural	193	878	461	417	65	39	26	0	0
27	517	04163	552186	0000	000000	VILLAGE	Kudan	Rural	582	2334	1218	1116	194	109	85	54	30
27	517	04163	552187	0000	000000	VILLAGE	Dahisar T. Tarapur	Rural	514	2020	1024	996	218	109	109	214	113
27	517	04163	552192	0000	000000	VILLAGE	Navi Delwadi	Rural	269	987	478	509	104	50	54	39	20
27	517	04163	552395	0000	000000	TOWN	Tarapur (CT)	Urban	1558	6962	3462	3500	652	333	319	644	315
Total									11087	49179	24620	24559	5412	2746	2666	2229	1135
Percentage											50.06	49.94	11.00	5.58	5.42	4.53	2.31
Grand Total (0-10 KM RADIUS)									31687	140070	70454	69616	14437	7356	7081	5309	2672
Percentage											50.30	49.70	10.31	5.25	5.06	3.79	1.91

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	F_SC	P_ST	M_ST	F_ST	P_LIT	M_LIT	F_LIT	P_ILL	M_ILL	F_ILL	TOT_WO RK_P	TOT_WO RK_M	TOT_WOR K_F	MAINWO RK_P	MAINWO RK_M	MAINWO RK_F
0-3 KM RADIUS																	
Dahanu Tehsil																	
Tadiyale	Rural	10	35	15	20	829	452	377	233	95	138	400	329	71	361	312	49
Varor	Rural	105	506	251	255	2246	1166	1080	564	226	338	1099	804	295	962	722	240
Vandhavan	Rural	0	56	29	27	1066	556	510	212	83	129	688	420	268	626	382	244
Gungavada	Rural	0	36	19	17	1126	573	553	202	89	113	468	380	88	464	379	85
Pokharan	Rural	32	28	13	15	535	267	268	87	38	49	291	179	112	211	141	70
Bade Pokharan	Rural	0	46	22	24	1254	683	571	432	156	276	664	495	169	643	488	155
Ambistewadi	Rural	0	5	3	2	1018	537	481	292	96	196	731	417	314	649	353	296
Total		147	712	352	360	8074	4234	3840	2022	783	1239	4341	3024	1317	3916	2777	1139
Percentage		1.46	7.05	3.49	3.57	79.97	41.94	38.03	20.03	7.76	12.27	43.00	29.95	13.04	38.79	27.51	11.28
3-7 KM RADIUS																	
Dahanu Tehsil																	
Tanashi	Rural	0	369	184	185	804	420	384	249	102	147	497	331	166	359	249	110
Vasgaon	Rural	0	33	16	17	1540	844	696	575	212	363	1100	665	435	1042	646	396
Chandigaon	Rural	26	9	7	2	889	474	415	404	138	266	447	318	129	270	217	53
Dhakti Dahanu	Rural	12	283	138	145	3783	1966	1817	1120	453	667	1729	1360	369	1387	1209	178
Dhumket	Rural	0	50	26	24	1315	750	565	782	259	523	841	451	390	518	266	252
Motgaon	Rural	0	11	5	6	778	456	322	421	135	286	638	359	279	259	162	97
Vadade	Rural	0	419	191	228	296	155	141	162	54	108	258	132	126	142	74	68
Osarwadi	Rural	0	391	187	204	696	387	309	416	160	256	545	368	177	395	284	111
Dedale	Rural	1	799	380	419	782	405	377	327	119	208	526	312	214	497	301	196
Bavade	Rural	70	1018	491	527	1003	528	475	520	217	303	748	443	305	533	324	209
Dahanu (M CI)	Urban	1226	9323	4553	4770	38137	20782	17355	12150	5008	7142	19901	14456	5445	17921	13205	4716
Chinchani (CT)	Urban	61	2820	1359	1461	11166	5801	5365	2480	992	1488	5604	4010	1594	4661	3500	1161
Total		1396	15525	7537	7988	61189	32968	28221	19606	7849	11757	32834	23205	9629	27984	20437	7547
Percentage		1.73	19.22	9.33	9.89	75.73	40.80	34.93	24.27	9.71	14.55	40.64	28.72	11.92	34.64	25.29	9.34

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	F_SC	P_ST	M_ST	F_ST	P_LIT	M_LIT	F_LIT	P_ILL	M_ILL	F_ILL	TOT_WOR K_P	TOT_WOR K_M	TOT_WOR K_F	MAINWOR K_P	MAINWOR K_M	MAINWOR K_F
7-10 KM RADIUS																	
Dahanu Tehsil																	
Narpad	Rural	233	789	369	420	2050	1064	986	709	273	436	1202	763	439	893	599	294
Thakurwadi	Rural	6	243	130	113	733	380	353	202	84	118	316	254	62	309	250	59
Lashkari	Rural	0	863	423	440	461	255	206	506	218	288	553	290	263	538	288	250
Kankradi	Rural	35	1145	561	584	962	552	410	807	331	476	815	510	305	693	442	251
Raipada	Rural	2	625	311	314	1356	719	637	608	263	345	763	513	250	701	479	222
Saravali	Rural	65	1975	954	1021	3272	1894	1378	2130	832	1298	2228	1519	709	2079	1452	627
Sawata	Rural	1	846	415	431	822	490	332	772	301	471	704	406	298	626	357	269
Motapada	Rural	0	666	324	342	529	321	208	620	251	369	496	302	194	480	296	184
Pale	Rural	0	959	465	494	1305	778	527	1264	462	802	1028	666	362	868	612	256
Asangaon Bk.	Rural	1	503	253	250	1155	636	519	511	183	328	794	454	340	652	405	247
Asangaon	Rural	0	26	14	12	1011	544	467	322	105	217	642	379	263	422	301	121
Kapshi	Rural	95	1037	510	527	868	500	368	571	210	361	630	356	274	384	231	153
Vangaon	Rural	100	2629	1317	1312	5554	3083	2471	2095	867	1228	3048	2198	850	2757	2014	743
Kolavali	Rural	52	637	306	331	1547	821	726	501	191	310	961	664	297	942	653	289
Palghar Tehsil																	
Ghivali	Rural	31	157	85	72	1987	1040	947	409	155	254	894	694	200	712	593	119
Sawarai	Rural	0	0	0	0	328	167	161	31	7	24	124	102	22	67	57	10
Kambode	Rural	0	99	56	43	731	400	331	147	61	86	362	268	94	317	248	69
Kudan	Rural	24	214	111	103	2007	1049	958	327	169	158	1039	729	310	768	538	230
Dahisar T. Tarapur	Rural	101	704	344	360	1497	818	679	523	206	317	894	621	273	744	597	147
Navi Delwadi	Rural	19	37	23	14	782	398	384	205	80	125	367	267	100	305	235	70
Tarapur (CT)	Urban	329	809	414	395	5747	2953	2794	1215	509	706	2673	1952	721	2191	1672	519
Total		1094	14963	7385	7578	34704	18862	15842	14475	5758	8717	20533	13907	6626	17448	12319	5129
Percentage		2.22	30.43	15.02	15.41	70.57	38.35	32.21	29.43	11.71	17.73	41.75	28.28	13.47	35.48	25.05	10.43
Grand Total (0-10 KM RADIUS)		2637	31200	15274	15926	103967	56064	47903	36103	14390	21713	57708	40136	17572	49348	35533	13815
Percentage		1.88	22.27	10.90	11.37	74.23	40.03	34.20	25.77	10.27	15.50	41.20	28.65	12.55	35.23	25.37	9.86

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MAIN_CL_P	MAIN_CL_M	MAIN_CL_F	MAIN_AL_P	MAIN_AL_M	MAIN_AL_F	MAIN_HH_P	MAIN_H_H_M	MAIN_HH_F	MAIN_OT_P	MAIN_O_T_M	MAIN_OT_F	MARGWO_RK_P	MARGWO_RK_M	MARGWO_RK_F	MARG_CL_P
0-3 KM RADIUS																	
Dahanu Tehsil																	
Tadiyale	Rural	36	33	3	5	2	3	50	37	13	270	240	30	39	17	22	10
Varor	Rural	64	49	15	242	129	113	153	127	26	503	417	86	137	82	55	20
Vandhavan	Rural	210	190	20	69	41	28	33	32	1	314	119	195	62	38	24	46
Gungavada	Rural	47	33	14	32	20	12	127	121	6	258	205	53	4	1	3	0
Pokharan	Rural	122	91	31	18	10	8	2	1	1	69	39	30	80	38	42	54
Bade Pokharan	Rural	114	101	13	216	112	104	131	127	4	182	148	34	21	7	14	5
Ambistewadi	Rural	205	186	19	23	13	10	45	39	6	376	115	261	82	64	18	68
Total		798	683	115	605	327	278	541	484	57	1972	1283	689	425	247	178	203
Percentage		7.90	6.77	1.14	5.99	3.24	2.75	5.36	4.79	0.56	19.53	12.71	6.82	4.21	2.45	1.76	2.01
3-7 KM RADIUS																	
Dahanu Tehsil																	
Tanashi	Rural	64	56	8	185	107	78	2	2	0	108	84	24	138	82	56	36
Vasgaon	Rural	582	412	170	363	157	206	43	43	0	54	34	20	58	19	39	14
Chandigaon	Rural	53	46	7	105	93	12	19	16	3	93	62	31	177	101	76	26
Dhakti Dahanu	Rural	57	43	14	21	15	6	60	60	0	1249	1091	158	342	151	191	28
Dhumket	Rural	40	24	16	29	12	17	26	23	3	423	207	216	323	185	138	61
Motgaon	Rural	32	19	13	114	51	63	66	61	5	47	31	16	379	197	182	145
Vadade	Rural	6	5	1	107	42	65	8	8	0	21	19	2	116	58	58	22
Osarwadi	Rural	51	46	5	127	75	52	120	118	2	97	45	52	150	84	66	132
Dedale	Rural	30	25	5	266	134	132	15	14	1	186	128	58	29	11	18	1
Bavade	Rural	76	72	4	333	162	171	0	0	0	124	90	34	215	119	96	45
Dahanu (M Cl)	Urban	239	192	47	584	384	200	1102	717	385	15996	11912	4084	1980	1251	729	65
Chinchani (CT)	Urban	187	177	10	682	382	300	740	624	116	3052	2317	735	943	510	433	24
Total		1417	1117	300	2916	1614	1302	2201	1686	515	21450	16020	5430	4850	2768	2082	599
Percentage		1.75	1.38	0.37	3.61	2.00	1.61	2.72	2.09	0.64	26.55	19.83	6.72	6.00	3.43	2.58	0.74

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MAIN_CL_P	MAIN_CL_M	MAIN_CL_F	MAIN_AL_P	MAIN_AL_M	MAIN_AL_F	MAIN_HH_P	MAIN_HH_M	MAIN_HH_F	MAIN_OT_P	MAIN_OT_M	MAIN_OT_F	MARGWO_RK_P	MARGWO_RK_M	MARGWO_RK_F	MARG_CL_P
7-10 KM RADIUS																	
Dahanu Tehsil																	
Narpad	Rural	75	58	17	23	8	15	102	32	70	693	501	192	309	164	145	10
Thakurwadi	Rural	80	71	9	88	62	26	12	6	6	129	111	18	7	4	3	2
Lashkari	Rural	12	6	6	181	94	87	10	6	4	335	182	153	15	2	13	1
Kankradi	Rural	49	40	9	81	52	29	14	6	8	549	344	205	122	68	54	3
Raipada	Rural	59	53	6	157	110	47	10	5	5	475	311	164	62	34	28	12
Saravali	Rural	96	68	28	175	92	83	37	20	17	1771	1272	499	149	67	82	20
Sawata	Rural	67	45	22	139	60	79	6	6	0	414	246	168	78	49	29	7
Motapada	Rural	48	27	21	124	63	61	3	2	1	305	204	101	16	6	10	1
Pale	Rural	70	54	16	204	126	78	11	7	4	583	425	158	160	54	106	38
Asangaon Bk.	Rural	66	47	19	113	59	54	29	9	20	444	290	154	142	49	93	22
Asangaon	Rural	41	33	8	51	31	20	1	0	1	329	237	92	220	78	142	64
Kapshi	Rural	22	13	9	52	25	27	10	5	5	300	188	112	246	125	121	64
Vangaon	Rural	188	138	50	575	330	245	198	134	64	1796	1412	384	291	184	107	64
Kolavali	Rural	168	141	27	354	197	157	24	22	2	396	293	103	19	11	8	1
Palghar Tehsil																	
Ghivali	Rural	8	6	2	1	1	0	23	15	8	680	571	109	182	101	81	15
Sawarai	Rural	7	6	1	3	2	1	1	1	0	56	48	8	57	45	12	12
Kambode	Rural	5	3	2	29	16	13	17	15	2	266	214	52	45	20	25	1
Kudan	Rural	53	48	5	22	15	7	23	10	13	670	465	205	271	191	80	46
Dahisar T. Tarapur	Rural	92	84	8	336	242	94	15	13	2	301	258	43	150	24	126	37
Navi Delwadi	Rural	8	6	2	16	13	3	3	3	0	278	213	65	62	32	30	6
Tarapur (CT)	Urban	49	48	1	192	125	67	264	195	69	1686	1304	382	482	280	202	1
Total		1263	995	268	2916	1723	1193	813	512	301	12456	9089	3367	3085	1588	1497	427
Percentage		2.57	2.02	0.54	5.93	3.50	2.43	1.65	1.04	0.61	25.33	18.48	6.85	6.27	3.23	3.04	0.87
Grand Total (0-10 KM RADIUS)		3478	2795	683	6437	3664	2773	3555	2682	873	35878	26392	9486	8360	4603	3757	1229
Percentage		2.48	2.00	0.49	4.60	2.62	1.98	2.54	1.91	0.62	25.61	18.84	6.77	5.97	3.29	2.68	0.88

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MARG_C L_M	MARG_CL _F	MARG_AL _P	MARG_A L_M	MARG_AL _F	MARG_H H_P	MARG_H H_M	MARG_HH _F	MARG_OT _P	MARG_O T_M	MARG_OT _F	MARGWO RK _3_6_P	MARGWO RK _3_6_M	MARGWO RK _3_6_F	MARG_CL 3 _6_P	MARG_CL 3 _6_M
0-3 KM RADIUS																	
Dahanu Tehsil																	
Tadiyale	Rural	5	5	10	4	6	8	2	6	11	6	5	37	16	21	9	4
Varor	Rural	12	8	72	36	36	16	11	5	29	23	6	85	54	31	19	11
Vandhavan	Rural	29	17	3	2	1	5	4	1	8	3	5	44	30	14	29	22
Gungavada	Rural	0	0	2	1	1	1	0	1	1	0	1	3	1	2	0	0
Pokharan	Rural	26	28	9	3	6	0	0	0	17	9	8	72	34	38	48	22
Bade Pokharan	Rural	3	2	12	3	9	2	0	2	2	1	1	17	5	12	1	1
Ambistewadi	Rural	59	9	3	2	1	1	1	0	10	2	8	33	18	15	22	15
Total		134	69	111	51	60	33	18	15	78	44	34	291	158	133	128	75
Percentage		1.33	0.68	1.10	0.51	0.59	0.33	0.18	0.15	0.77	0.44	0.34	2.88	1.56	1.32	1.27	0.74
3-7 KM RADIUS																	
Dahanu Tehsil																	
Tanashi	Rural	20	16	46	24	22	2	1	1	54	37	17	111	67	44	29	15
Vasgaon	Rural	2	12	20	1	19	12	9	3	12	7	5	26	8	18	7	1
Chandigaon	Rural	14	12	90	51	39	6	3	3	55	33	22	174	98	76	26	14
Dhakti Dahanu	Rural	19	9	37	23	14	40	19	21	237	90	147	223	133	90	17	13
Dhumket	Rural	35	26	75	33	42	25	15	10	162	102	60	247	142	105	39	17
Motgaon	Rural	67	78	122	51	71	78	64	14	34	15	19	273	135	138	113	51
Vadade	Rural	9	13	37	20	17	18	10	8	39	19	20	113	55	58	20	7
Osarwadi	Rural	75	57	8	2	6	7	6	1	3	1	2	142	78	64	131	75
Dedale	Rural	0	1	17	7	10	1	1	0	10	3	7	29	11	18	1	0
Bavade	Rural	24	21	143	77	66	15	10	5	12	8	4	214	118	96	45	24
Dahanu (M CI)	Urban	46	19	52	29	23	167	86	81	1696	1090	606	1721	1078	643	63	44
Chinchani (CT)	Urban	15	9	247	106	141	121	74	47	551	315	236	814	453	361	20	12
Total		326	273	894	424	470	492	298	194	2865	1720	1145	4087	2376	1711	511	273
Percentage		0.40	0.34	1.11	0.52	0.58	0.61	0.37	0.24	3.55	2.13	1.42	5.06	2.94	2.12	0.63	0.34

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MARG_C L_M	MARG_CL _F	MARG_AL _P	MARG_A L_M	MARG_AL _F	MARG_H H_P	MARG_H H_M	MARG_HH _F	MARG_OT _P	MARG_O T_M	MARG_OT _F	MARGWO RK _3_6_P	MARGWO RK _3_6_M	MARGWO RK _3_6_F	MARG_CL 3 _6_P	MARG_CL 3 _6_M
7-10 KM RADIUS																	
Dahanu Tehsil																	
Narpad	Rural	3	7	187	84	103	7	4	3	105	73	32	133	82	51	5	2
Thakurwadi	Rural	1	1	2	0	2	0	0	0	3	3	0	7	4	3	2	1
Lashkari	Rural	0	1	4	0	4	1	0	1	9	2	7	12	2	10	1	0
Kankradi	Rural	0	3	44	32	12	7	2	5	68	34	34	75	42	33	3	0
Raipada	Rural	8	4	11	7	4	1	0	1	38	19	19	61	34	27	12	8
Saravali	Rural	7	13	29	9	20	15	9	6	85	42	43	125	57	68	17	6
Sawata	Rural	4	3	19	11	8	1	0	1	51	34	17	71	44	27	7	4
Motapada	Rural	0	1	7	0	7	1	0	1	7	6	1	10	4	6	0	0
Pale	Rural	14	24	59	20	39	0	0	0	63	20	43	133	47	86	38	14
Asangaon Bk.	Rural	10	12	16	5	11	2	0	2	102	34	68	107	44	63	21	9
Asangaon	Rural	18	46	71	31	40	4	2	2	81	27	54	192	73	119	59	18
Kapshi	Rural	37	27	57	23	34	10	6	4	115	59	56	207	110	97	57	34
Vangaon	Rural	35	29	84	54	30	13	8	5	130	87	43	245	161	84	63	35
Kolavali	Rural	0	1	5	4	1	1	0	1	12	7	5	14	10	4	1	0
Palghar Tehsil																	
Ghivali	Rural	6	9	4	2	2	57	5	52	106	88	18	103	61	42	15	6
Sawarai	Rural	11	1	3	3	0	0	0	0	42	31	11	57	45	12	12	11
Kambode	Rural	1	0	2	0	2	2	0	2	40	19	21	25	10	15	0	0
Kudan	Rural	38	8	93	61	32	5	3	2	127	89	38	186	130	56	29	23
Dahisar T. Tarapur	Rural	3	34	107	19	88	2	0	2	4	2	2	57	10	47	9	1
Navi Delwadi	Rural	5	1	7	4	3	2	0	2	47	23	24	55	29	26	5	4
Tarapur (CT)	Urban	0	1	5	4	1	75	44	31	401	232	169	416	227	189	1	0
Total		201	226	816	373	443	206	83	123	1636	931	705	2291	1226	1065	357	176
Percentage		0.41	0.46	1.66	0.76	0.90	0.42	0.17	0.25	3.33	1.89	1.43	4.66	2.49	2.17	0.73	0.36
Grand Total (0-10 KM RADIUS)		661	568	1821	848	973	731	399	332	4579	2695	1884	6669	3760	2909	996	524
Percentage		0.47	0.41	1.30	0.61	0.69	0.52	0.28	0.24	3.27	1.92	1.35	4.76	2.68	2.08	0.71	0.37

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MARG_CL _3 _6_F	MARG_AL _3 _6_P	MARG_AL _3 _6_M	MARG_AL _3 6_F	MARG_HH _3 _6_P	MARG_HH _3 _6_M	MARG_HH _3 _6_F	MARG_OT _3 _6_P	MARG_OT _3 _6_M	MARG_OT _3 _6_F	MARGWO RK _0_3_P	MARGWO RK _0_3_M	MARGWO RK _0_3_F	MARG_CL _0_ 3_P	MARG_CL _0_ 3_M	MARG_CL _0_ 3_F
0-3 KM RADIUS																	
Dahanu Tehsil																	
Tadiyale	Rural	5	9	4	5	8	2	6	11	6	5	2	1	1	1	1	0
Varor	Rural	8	40	24	16	11	8	3	15	11	4	52	28	24	1	1	0
Vandhavan	Rural	7	3	2	1	5	4	1	7	2	5	18	8	10	17	7	10
Gungavada	Rural	0	1	1	0	1	0	1	1	0	1	1	0	1	0	0	0
Pokharan	Rural	26	8	3	5	0	0	0	16	9	7	8	4	4	6	4	2
Bade Pokharan	Rural	0	12	3	9	2	0	2	2	1	1	4	2	2	4	2	2
Ambistewadi	Rural	7	3	2	1	0	0	0	8	1	7	49	46	3	46	44	2
Total		53	76	39	37	27	14	13	60	30	30	134	89	45	75	59	16
Percentage		0.52	0.75	0.39	0.37	0.27	0.14	0.13	0.59	0.30	0.30	1.33	0.88	0.45	0.74	0.58	0.16
3-7 KM RADIUS																	
Dahanu Tehsil																	
Tanashi	Rural	14	40	21	19	2	1	1	40	30	10	27	15	12	7	5	2
Vasgaon	Rural	6	11	1	10	4	3	1	4	3	1	32	11	21	7	1	6
Chandigaon	Rural	12	87	48	39	6	3	3	55	33	22	3	3	0	0	0	0
Dhakti Dahanu	Rural	4	31	21	10	28	19	9	147	80	67	119	18	101	11	6	5
Dhumket	Rural	22	47	25	22	13	5	8	148	95	53	76	43	33	22	18	4
Motgaon	Rural	62	96	36	60	45	37	8	19	11	8	106	62	44	32	16	16
Vadade	Rural	13	37	20	17	17	9	8	39	19	20	3	3	0	2	2	0
Osarwadi	Rural	56	8	2	6	1	0	1	2	1	1	8	6	2	1	0	1
Dedale	Rural	1	17	7	10	1	1	0	10	3	7	0	0	0	0	0	0
Bavade	Rural	21	143	77	66	15	10	5	11	7	4	1	1	0	0	0	0
Dahanu (M Cl)	Urban	19	42	23	19	128	72	56	1488	939	549	259	173	86	2	2	0
Chinchani (CT)	Urban	8	229	100	129	110	70	40	455	271	184	129	57	72	4	3	1
Total		238	788	381	407	370	230	140	2418	1492	926	763	392	371	88	53	35
Percentage		0.29	0.98	0.47	0.50	0.46	0.28	0.17	2.99	1.85	1.15	0.94	0.49	0.46	0.11	0.07	0.04

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MARG_CL _3 _6_F	MARG_AL _3 _6_P	MARG_AL _3 _6_M	MARG_AL 3_6_F	MARG_HH _3 _6_P	MARG_HH _3 _6_M	MARG_HH _3 _6_F	MARG_OT _3 _6_P	MARG_OT 3 _6_M	MARG_OT _3 _6_F	MARGWOR K _0_3_P	MARGWO RK _0_3_M	MARGWO RK _0_3_F	MARG_CL 0_3_P	MARG_CL 0_3_M	MARG_CL _0 _3_F
7-10 KM RADIUS																	
Dahanu Tehsil																	
Narpad	Rural	3	41	20	21	7	4	3	80	56	24	176	82	94	5	1	4
Thakurwadi	Rural	1	2	0	2	0	0	0	3	3	0	0	0	0	0	0	0
Lashkari	Rural	1	3	0	3	0	0	0	8	2	6	3	0	3	0	0	0
Kankradi	Rural	3	22	16	6	0	0	0	50	26	24	47	26	21	0	0	0
Raipada	Rural	4	11	7	4	1	0	1	37	19	18	1	0	1	0	0	0
Saravali	Rural	11	24	7	17	9	6	3	75	38	37	24	10	14	3	1	2
Sawata	Rural	3	19	11	8	0	0	0	45	29	16	7	5	2	0	0	0
Motapada	Rural	0	4	0	4	1	0	1	5	4	1	6	2	4	1	0	1
Pale	Rural	24	49	16	33	0	0	0	46	17	29	27	7	20	0	0	0
Asangaon Bk.	Rural	12	16	5	11	2	0	2	68	30	38	35	5	30	1	1	0
Asangaon	Rural	41	62	28	34	4	2	2	67	25	42	28	5	23	5	0	5
Kapshi	Rural	23	49	22	27	10	6	4	91	48	43	39	15	24	7	3	4
Vangaon	Rural	28	69	49	20	10	7	3	103	70	33	46	23	23	1	0	1
Kolavali	Rural	1	3	3	0	1	0	1	9	7	2	5	1	4	0	0	0
Palghar Tehsil																	
Ghivali	Rural	9	3	2	1	17	2	15	68	51	17	79	40	39	0	0	0
Sawarai	Rural	1	3	3	0	0	0	0	42	31	11	0	0	0	0	0	0
Kambode	Rural	0	2	0	2	2	0	2	21	10	11	20	10	10	1	1	0
Kudan	Rural	6	45	28	17	3	3	0	109	76	33	85	61	24	17	15	2
Dahisar T. Tarapur	Rural	8	43	7	36	1	0	1	4	2	2	93	14	79	28	2	26
Navi Delwadi	Rural	1	5	4	1	1	0	1	44	21	23	7	3	4	1	1	0
Tarapur (CT)	Urban	1	5	4	1	68	39	29	342	184	158	66	53	13	0	0	0
Total		181	480	232	248	137	69	68	1317	749	568	794	362	432	70	25	45
Percentage		0.37	0.98	0.47	0.50	0.28	0.14	0.14	2.68	1.52	1.15	1.61	0.74	0.88	0.14	0.05	0.09
Grand Total (0-10 KM RADIUS)		472	1344	652	692	534	313	221	3795	2271	1524	1691	843	848	233	137	96
Percentage		0.34	0.96	0.47	0.49	0.38	0.22	0.16	2.71	1.62	1.09	1.21	0.60	0.61	0.17	0.10	0.07

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MARG_AL_0 _3_P	MARG_AL_0 _3_M	MARG_AL_0 _3_F	MARG_HH_0 _3_P	MARG_HH_0 _3_M	MARG_HH_0 _3_F	MARG_OT_0 _3_P	MARG_OT_0 _3_M	MARG_OT_0 _3_F	NON_WORK _P	NON_WORK _M	NON_WORK _F
0-3 KM RADIUS													
Dahanu Tehsil													
Tadiyale	Rural	1	0	1	0	0	0	0	0	0	662	218	444
Varor	Rural	32	12	20	5	3	2	14	12	2	1711	588	1123
Vandhavan	Rural	0	0	0	0	0	0	1	1	0	590	219	371
Gungavada	Rural	1	0	1	0	0	0	0	0	0	860	282	578
Pokharan	Rural	1	0	1	0	0	0	1	0	1	331	126	205
Bade Pokharan	Rural	0	0	0	0	0	0	0	0	0	1022	344	678
Ambistewadi	Rural	0	0	0	1	1	0	2	1	1	579	216	363
Total		35	12	23	6	4	2	18	14	4	5755	1993	3762
Percentage		0.35	0.12	0.23	0.06	0.04	0.02	0.18	0.14	0.04	57.00	19.74	37.26
3-7 KM RADIUS													
Dahanu Tehsil													
Tanashi	Rural	6	3	3	0	0	0	14	7	7	556	191	365
Vasgaon	Rural	9	0	9	8	6	2	8	4	4	1015	391	624
Chandigaon	Rural	3	3	0	0	0	0	0	0	0	846	294	552
Dhakti Dahanu	Rural	6	2	4	12	0	12	90	10	80	3174	1059	2115
Dhumket	Rural	28	8	20	12	10	2	14	7	7	1256	558	698
Motgaon	Rural	26	15	11	33	27	6	15	4	11	561	232	329
Vadade	Rural	0	0	0	1	1	0	0	0	0	200	77	123
Osarwadi	Rural	0	0	0	6	6	0	1	0	1	567	179	388
Dedale	Rural	0	0	0	0	0	0	0	0	0	583	212	371
Bavade	Rural	0	0	0	0	0	0	1	1	0	775	302	473
Dahanu (M CI)	Urban	10	6	4	39	14	25	208	151	57	30386	11334	19052
Chinchani (CT)	Urban	18	6	12	11	4	7	96	44	52	8042	2783	5259
Total		106	43	63	122	68	54	447	228	219	47961	17612	30349
Percentage		0.13	0.05	0.08	0.15	0.08	0.07	0.55	0.28	0.27	59.36	21.80	37.56

ANNEXURE I - SETTLEMENT WISE DEMOGRAPHIC DATA AS PER 2011 CENSUS IN 10 KM

Name	TRU	MARG_AL_0 _3_P	MARG_AL_0 _3_M	MARG_AL_0 _3_F	MARG_HH_0 _3_P	MARG_HH_0 _3_M	MARG_HH_0 _3_F	MARG_OT_0 _3_P	MARG_OT_0 _3_M	MARG_OT_0 _3_F	NON_WORK _P	NON_WORK _M	NON_WORK _F
7-10 KM RADIUS													
Dahanu Tehsil													
Narpad	Rural	146	64	82	0	0	0	25	17	8	1557	574	983
Thakurwadi	Rural	0	0	0	0	0	0	0	0	0	619	210	409
Lashkari	Rural	1	0	1	1	0	1	1	0	1	414	183	231
Kankradi	Rural	22	16	6	7	2	5	18	8	10	954	373	581
Raipada	Rural	0	0	0	0	0	0	1	0	1	1201	469	732
Saravali	Rural	5	2	3	6	3	3	10	4	6	3174	1207	1967
Sawata	Rural	0	0	0	1	0	1	6	5	1	890	385	505
Motapada	Rural	3	0	3	0	0	0	2	2	0	653	270	383
Pale	Rural	10	4	6	0	0	0	17	3	14	1541	574	967
Asangaon Bk.	Rural	0	0	0	0	0	0	34	4	30	872	365	507
Asangaon	Rural	9	3	6	0	0	0	14	2	12	691	270	421
Kapshi	Rural	8	1	7	0	0	0	24	11	13	809	354	455
Vangaon	Rural	15	5	10	3	1	2	27	17	10	4601	1752	2849
Kolavali	Rural	2	1	1	0	0	0	3	0	3	1087	348	739
Palghar Tehsil													
Ghivali	Rural	1	0	1	40	3	37	38	37	1	1502	501	1001
Sawarai	Rural	0	0	0	0	0	0	0	0	0	235	72	163
Kambode	Rural	0	0	0	0	0	0	19	9	10	516	193	323
Kudan	Rural	48	33	15	2	0	2	18	13	5	1295	489	806
Dahisar T. Tarapur	Rural	64	12	52	1	0	1	0	0	0	1126	403	723
Navi Delwadi	Rural	2	0	2	1	0	1	3	2	1	620	211	409
Tarapur (CT)	Urban	0	0	0	7	5	2	59	48	11	4289	1510	2779
Total		336	141	195	69	14	55	319	182	137	28646	10713	17933
Percentage		0.68	0.29	0.40	0.14	0.03	0.11	0.65	0.37	0.28	58.25	21.78	36.46
Grand Total (0-10 KM RADIUS)		477	196	281	197	86	111	784	424	360	82362	30318	52044
Percentage		0.34	0.14	0.20	0.14	0.06	0.08	0.56	0.30	0.26	58.80	21.64	37.16

Annexure II

Educational Facilities in 10 km Radius of Port Area

ANNEXURE II - EDUCATIONAL FACILITIES IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Govt Pre - Primary School (Nursery/LKG/UKG) (Numbers)	Govt Primary School (Numbers)	Private Primary School (Numbers)	Govt Middle School (Numbers)	Private Middle School (Numbers)	Govt Secondary School (Numbers)	Private Secondary School (Numbers)	Govt Senior Secondary School (Numbers)
0-3 km RADIUS port area											
Dahanu Tehsil											
1	27	551723	Varor	3	2	1	2	0	1	0	0
2	27	551722	Vandhavan	1	2	0	1	0	0	0	0
3	27	551718	Gungavada	1	2	0	0	0	0	0	0
4	27	551715	Tadiyale	1	2	0	1	0	0	0	0
5	27	551717	Pokharan	1	1	0	0	0	0	0	0
6	27	551719	Bade Pokharan	3	2	0	2	0	1	0	0
7	27	551721	Ambistewadi	1	2	0	1	0	0	0	0
Total				11	13	1	7	0	2	0	0
3-7 KM RADIUS											
8											
9	27	551728	Tanashi	1	2	0	1	0	0	0	0
10	27	551724	Vasgaon	3	3	0	1	0	0	0	0
11	27	551720	Chandigaon	2	2	0	1	0	1	0	0
12	27	551714	Dhakti Dahanu	5	5	0	1	0	0	0	0
13	27	551716	Dhumket	3	2	0	2	0	0	0	0
14	27	551725	Motgaon	2	3	0	1	0	0	0	0
15	27	551726	Vadade	1	1	0	0	0	0	0	0
16	27	551727	Osarwadi	2	2	0	0	0	0	0	0
17	27	551729	Dedale	1	2	0	1	0	0	0	0
18	27	551730	Bavade	3	4	0	1	0	0	0	0
19			Dahanu-urban	23			16		5		2
20			Chinchani_Urban				13		6		1
Total				46	26	0	38	0	12	0	3

ANNEXURE II - EDUCATIONAL FACILITIES IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Govt Pre - Primary School (Nursery/LKG/UKG) (Numbers)	Govt Primary School (Numbers)	Private Primary School (Numbers)	Govt Middle School (Numbers)	Private Middle School (Numbers)	Govt Secondary School (Numbers)	Private Secondary School (Numbers)	Govt Senior Secondary School (Numbers)
7-10 KM RADIUS											
21	27	551589	Narpad	3	3	1	1	1	1	0	0
22	27	551590	Thakurwadi	1	1	0	0	0	0	0	0
23	27	551599	Lashkari	1	1	0	1	0	0	0	0
24	27	551600	Kankradi	3	2	0	2	0	0	0	0
25	27	551601	Raipada	3	2	0	1	0	1	0	0
26	27	551611	Sawata	3	2	0	1	0	0	0	0
27	27	551614	Motapada	1	2	0	1	0	0	0	0
28	27	551615	Pale	3	5	0	2	0	0	0	0
29	27	551731	asangaon								
30	27	551733	asangaon kd								
31	27	551733	Kapshi	2	2	0	1	0	0	0	0
32	27	551739	Vangaon	8	5	1	2	1	1	1	1
33	27	551740	Kolavali	3	3	0	2	0	0	0	0
Palghar Tehsil											
34	27	552183	Ghivali	3	3	0	1	0	0	0	0
35	27	552184	Sawarai	1	1	0	0	0	0	0	0
36	27	552185	Kambode	1	1	0	0	0	0	0	0
37	27	552186	Kudan	3	2	0	1	0	0	0	0
38	27	552187	Dahisar T.	3	3	0	1	0	0	0	0
39	27	552192	Navi Delwadi	1	1	0	0	0	0	0	0
40			Tarapur				8		4		2
Total				43	39	2	25	2	7	1	3

ANNEXURE II - EDUCATIONAL FACILITIES IN 10 KM RADIUS OF PORT AREA

S. N.	Private Senior Secondary School (Numbers)	Govt Arts and Science Degree College (Numbers)	Private Arts and Science Degree College (Numbers)	Govt Engineering College (Numbers)	Private Engineering College (Numbers)	Govt Medicine College (Numbers)	Private Medicine College (Numbers)	Nearest Facility Status (Govt(1)/ Private(2))	Nearest Village/ Town Name	Govt Management Institute (Numbers)	Private Management Institute (Numbers)	Nearest Village/ Town Name
0-3 km RADIUS port area												
Dahanu Tehsil												
1	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
2	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
3	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
4	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
5	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
6	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
7	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
Total	0	0	0	0	0	0	0	7	0	0	0	0
3-7 KM RADIUS												
8												
9	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
10	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
11	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
12	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
13	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
14	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
15	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
16	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
17	0	0	0	0	0	0	0	1	CHINCHANI	0	0	CHINCHANI
18	0	0	0	0	0	0	0	1	CHINCHANI	0	0	CHINCHANI
19		1										
20		1										
Total	0	2	0	0	0	0	0	10	0	0	0	0

ANNEXURE II - EDUCATIONAL FACILITIES IN 10 KM RADIUS OF PORT AREA

S. N.	Private Senior Secondary School (Numbers)	Govt Arts and Science Degree College (Numbers)	Private Arts and Science Degree College (Numbers)	Govt Engineering College (Numbers)	Private Engineering College (Numbers)	Govt Medicine College (Numbers)	Private Medicine College (Numbers)	Nearest Facility Status (Govt(1)/Private(2))	Nearest Village/Town Name	Govt Management Institute (Numbers)	Private Management Institute (Numbers)	Nearest Village/Town Name
7-10 KM RADIUS												
21	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
22	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
23	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
24	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
25	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
26	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
27	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
28	0	0	0	0	0	0	0	1	DAHANU	0	0	DAHANU
29												
30												
31	0	0	0	0	0	0	0	1	MUMBAI	0	0	MUMBAI
32	0	0	0	0	0	0	0	1	MUMBAI	0	0	MUMBAI
33	0	0	0	0	0	0	0	1	CHINCHANI	0	0	CHINCHANI
Palghar Tehsil												
34	0	0	0	0	0	0	0	2	VIRAR	0	0	VIRAR
35	0	0	0	0	0	0	0	2	VIRAR	0	0	VIRAR
36	0	0	0	0	0	0	0	1	MUMBAI	0	0	MUMBAI
37	0	0	0	0	0	0	0	1	MUMBAI	0	0	MUMBAI
38	0	0	0	0	0	0	0	1	MUMBAI	0	0	MUMBAI
39	0	0	0	0	0	0	0	2	CHINCHANI	0	0	CHINCHANI
40			2						Boisar			
Total	0	0	2	0	0	0	0	20	0	0	0	0

Annexure III

Health Facilities in 10 km Radius of Port Area

ANNEXURE III - HEALTH FACILITIES IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Community Health Centre (Numbers)	Community Health Centre Doctors Total Strength (Numbers)	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Primary Health Centre Doctors Total Strength (Numbers)	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+	Primary Health Sub Centre (Numbers)	Primary Health Sub Centre Doctors Total Strength (Numbers)	Primary Health Sub Centre Doctors In Position (Numbers)	Primary Health Sub Centre Para Medical Staff Total Strength (Numbers)	Primary Health Sub Centre Para Medical Staff In Position (Numbers)
0-3 KM RADIUS port area													
1	27	551723	Varor	0	0	c	0	b	1	0	0	2	2
2	27	551722	Vandhavan	0	0	c	0	b	0	0	0	0	0
3	27	551718	Gungavada	0	0	c	0	b	0	0	0	0	0
4	27	551715	Tadiyale	0	0	c	0	b	0	0	0	0	0
5	27	551717	Pokharan	0	0	c	0	b	0	0	0	0	0
6	27	551719	Bade Pokharan	0	0	c	0	b	1	0	0	2	2
7	27	551721	Ambistewadi	0	0	c	0	b	0	0	0	0	0
Total				0	0	0	0	0	2	0	0	4	4
3-7 KM RADIUS													
8	27	551728	Tanashi	0	0	c	0	b	0	0	0	0	0
9	27	551724	Vasgaon	0	0	c	0	b	0	0	0	0	0
10	27	551720	Chandigaon	0	0	c	0	b	1	0	0	2	2
11	27	551714	Dhakti Dahanu	0	0	c	0	b	1	0	0	2	2
12	27	551716	Dhumket	0	0	c	0	b	0	0	0	0	0
13	27	551725	Motgaon	0	0	c	0	b	0	0	0	0	0
14	27	551726	Vadade	0	0	c	0	b	0	0	0	0	0
15	27	551727	Osarwadi	0	0	c	0	b	0	0	0	0	0
16	27	551729	Dedale	0	0	c	0	b	0	0	0	0	0
17	27	551730	Bavade	0	0	c	0	b	1	0	0	2	2
18			Dahanu Urban	1					1				
19			Chinchani	0									
Total				0	0	0	0	0	3	0	0	6	6

ANNEXURE III - HEALTH FACILITIES IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Community Health Centre (Numbers)	Community Health Centre Doctors Total Strength (Numbers)	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Primary Health Centre Doctors Total Strength (Numbers)	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Primary Health Sub Centre (Numbers)	Primary Health Sub Centre Doctors Total Strength (Numbers)	Primary Health Sub Centre Doctors In Position (Numbers)	Primary Health Sub Centre Para Medical Staff Total Strength (Numbers)	Primary Health Sub Centre Para Medical Staff In Position (Numbers)
7-10 KM RADIUS													
20	27	551589	Narpad	0	0	c	0	b	1	0	0	2	2
21	27	551590	Thakurwadi	0	0	c	0	b	0	0	0	0	0
22	27	551599	Lashkari	0	0	c	0	b	0	0	0	0	0
23	27	551600	Kankradi	0	0	c	0	b	0	0	0	0	0
24	27	551601	Raipada	0	0	c	0	b	0	0	0	0	0
25	27	551610	Saravali	0	0	c	0	b	2	0	0	4	4
26	27	551611	Sawata	0	0	c	0	b	0	0	0	0	0
27	27	551614	Motapada	0	0	c	0	b	0	0	0	0	0
28	27	551615	Pale	0	0	c	0	b	0	0	0	0	0
29		551731	asangaon	0	0	0	0	0	0	0	0	0	0
30		551732	asangaon	0	0	0	0					0	0
31	27	551733	Kapshi	0	0	c	0	b	0	0	0	0	0
32	27	551739	Vangaon	1	4		0	b	1	0	0	2	2
33	27	551740	Kolavali	0	0	c	0	b	0	0	0	0	0
Palghar Tehsil													
34	27	552183	Ghivali	0	0	c	0	b	0	0	0	0	0
35	27	552184	Sawarai	0	0	c	0	b	0	0	0	0	0
36	27	552185	Kambode	0	0	c	0	b	1	0	0	2	2
37	27	552186	Kudan	0	0	c	0	b	0	0	0	0	0
38	27	552187	Dahisar T.	0	0	c	0	b	0	0	0	0	0
39	27	552192	Navi Delwadi	0	0	c	0	b	0	0	0	0	0
40			Tarapur						1				
Total				1	4	0	0	0	6	0	0	10	10
Grand Total				1	4	0	0	0	11	0	0	20	20

ANNEXURE III - HEALTH FACILITIES IN 10 KM RADIUS OF PORT AREA

Village Code	Village Name	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Maternity And Child Welfare Centre (Numbers)	Maternity And Child Welfare Centre Doctors Total Strength (Numbers)	Maternity And Child Welfare Centre Doctors In Position (Numbers)	Maternity And Child Welfare Centre Para Medical Staff Total Strength (Numbers)	Maternity And Child Welfare Centre Para Medical Staff In Position (Numbers)	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	TB Clinic (Numbers)	TB Clinic Doctors Total Strength (Numbers)	TB Clinic Doctors In Position (Numbers)	TB Clinic Para Medical Staff Total Strength (Numbers)	TB Clinic Para Medical Staff In Position (Numbers)
7-10 KM RADIUS													
551589	Narpad		0	0	0	0	0	b	0	0	0	0	0
551590	Thakurwadi	a	0	0	0	0	0	b	0	0	0	0	0
551599	Lashkari	b	0	0	0	0	0	b	0	0	0	0	0
551600	Kankradi	c	0	0	0	0	0	b	0	0	0	0	0
551601	Raipada	b	0	0	0	0	0	b	0	0	0	0	0
551610	Saravali		0	0	0	0	0	b	0	0	0	0	0
551611	Sawata	a	0	0	0	0	0	b	0	0	0	0	0
551614	Motapada	b	0	0	0	0	0	b	0	0	0	0	0
551615	Pale	b	0	0	0	0	0	b	0	0	0	0	0
551731	asangaon	0	0	0	0	0	0	0	0	0	0	0	0
551732	asangaon	0	0	1	0	0	2	2		0	0	0	0
551733	Kapshi	a	0	0	0	0	0	b	0	0	0	0	0
551739	Vangaon		1	1	1	1	1		1	1	1	1	1
551740	Kolavali	a	0	0	0	0	0	b	0	0	0	0	0
Palghar Tehsil													
552183	Ghivali	b	0	0	0	0	0	b	0	0	0	0	0
552184	Sawarai	a	0	0	0	0	0	b	0	0	0	0	0
552185	Kambode		0	0	0	0	0	b	0	0	0	0	0
552186	Kudan	a	0	0	0	0	0	b	0	0	0	0	0
552187	Dahisar T.	a	0	0	0	0	0	b	0	0	0	0	0
552192	Navi Delwadi	b	0	0	0	0	0	b	0	0	0	0	0
	Tarapur		1		1								
Total			0	2	2	2	1	3	2	1	1	1	1
Grand Total			0	2	2	2	1	3	2	1	1	1	1

ANNEXURE III - HEALTH FACILITIES IN 10 KM RADIUS OF PORT AREA

Village Code	Village Name	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Hospital Allopathic (Numbers)	Hospital Allopathic Doctors Total Strength (Numbers)	Hospital Allopathic Doctors In Position (Numbers)	Hospital Allopathic Para Medical Staff Total Strength (Numbers)	Hospital Allopathic Para Medical Staff In Position (Numbers)	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Dispensary (Numbers)	Dispensary Doctors Total Strength (Numbers)	Dispensary Doctors In Position (Numbers)	Dispensary Para Medical Staff Total Strength (Numbers)
7-10 KM RADIUS												
551589	Narpad	b	0	0	0	0	0	b	0	0	0	0
551590	Thakurwadi	b	0	0	0	0	0	b	0	0	0	0
551599	Lashkari	b	0	0	0	0	0	b	0	0	0	0
551600	Kankradi	b	0	0	0	0	0	b	0	0	0	0
551601	Raipada	b	0	0	0	0	0	b	0	0	0	0
551610	Saravali	b	0	0	0	0	0	b	0	0	0	0
551611	Sawata	b	0	0	0	0	0	b	0	0	0	0
551614	Motapada	b	0	0	0	0	0	b	0	0	0	0
551615	Pale	b	0	0	0	0	0	b	0	0	0	0
551731	asangaon	0	0	0	0	0	0	0	0	0	0	0
551732	asangaon	0	0	0	0	0	0	0	0	0	0	0
551733	Kapshi	b	0	0	0	0	0	b	0	0	0	0
551739	Vangaon		1	1	1	2	2		1	1	1	1
551740	Kolavali	b	0	0	0	0	0	b	0	0	0	0
Palghar Tehsil												
552183	Ghivali	b	0	0	0	0	0	b	0	0	0	0
552184	Sawarai	b	0	0	0	0	0	b	0	0	0	0
552185	Kambode	b	0	0	0	0	0	b	0	0	0	0
552186	Kudan	b	0	0	0	0	0	b	0	0	0	0
552187	Dahisar T. Tarapur	b	0	0	0	0	0	b	0	0	0	0
552192	Navi Delwadi	b	0	0	0	0	0	b	0	0	0	0
	Tarapur											
Total		0	1	1	1	2	2	0	1	1	1	1
Grand Total		0	1	1	1	2	2	0	1	1	1	1

ANNEXURE III - HEALTH FACILITIES IN 10 KM RADIUS OF PORT AREA

Village Code	Village Name	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Veterinary Hospital (Numbers)	Veterinary Hospital Doctors Total Strength (Numbers)	Mobile Health Clinic (Numbers)	Mobile Health Clinic Doctors Total Strength (Numbers)	Mobile Health Clinic Doctors In Position (Numbers)	Family Welfare Centre (Numbers)	Family Welfare Centre Doctors Total Strength (Numbers)	Family Welfare Centre Doctors In Position (Numbers)	Non Government Medical facilities Out Patient (Numbers)	Non Government Medical facilities In And Out Patient (Numbers)	Non Government Medical facilities Charitable (Numbers)	Non Government Medical facilities Practitioner with MBBS Degree (Numbers)
0-3 KM RADIUS port area														
551723	Varor	b	0	0	0	0	0	0	0	0	1	0	0	0
551722	Vandhavan	b	0	0	0	0	0	0	0	0	1	0	0	0
551718	Gungavada	b	0	0	0	0	0	0	0	0	1	0	0	0
551715	Tadiyale	b	0	0	0	0	0	0	0	0	1	0	0	0
551717	Pokharan	b	0	0	0	0	0	0	0	0	0	0	0	0
551719	Bade Pokharan	b	0	0	0	0	0	0	0	0	1	0	0	0
551721	Ambistewadi	b	0	0	0	0	0	0	0	0	1	0	0	0
Total		0	0	0	0	0	0	0	0	0	6	0	0	0
3-7 KM RADIUS														
551728	Tanashi	b	0	0	0	0	0	0	0	0	1	0	0	0
551724	Vasgaon	b	0	0	0	0	0	0	0	0	1	0	0	0
551720	Chandigaon	b	0	0	0	0	0	0	0	0	1	0	0	0
551714	Dhakti Dahanu	b	0	0	0	0	0	0	0	0	1	0	0	0
551716	Dhumket	b	0	0	0	0	0	0	0	0	1	0	0	0
551725	Motgaon	b	0	0	0	0	0	0	0	0	1	0	0	0
551726	Vadade	b	0	0	0	0	0	0	0	0	0	0	0	0
551727	Osarwadi	b	0	0	0	0	0	0	0	0	1	0	0	0
551729	Dedale	b	0	0	0	0	0	0	0	0	1	0	0	0
551730	Bavade	b	0	0	0	0	0	0	0	0	1	0	0	0
	Dahanu Urban													
	Chinchani													
Total		0	0	0	0	0	0	0	0	0	9	0	0	0

ANNEXURE III - HEALTH FACILITIES IN 10 KM RADIUS OF PORT AREA

Village Code	Village Name	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Veterinary Hospital (Numbers)	Veterinary Hospital Doctors Total Strength (Numbers)	Mobile Health Clinic (Numbers)	Mobile Health Clinic Doctors Total Strength (Number)	Mobile Health Clinic Doctors In Position (Number)	Family Welfare Centre (Numbers)	Family Welfare Centre Doctors Total Strength (Numbers)	Family Welfare Centre Doctors In Position (Numbers)	Non Government Medical facilities Out Patient (Numbers)	Non Government Medical facilities In And Out Patient (Numbers)	Non Government Medical facilities Charitable (Numbers)	Non Government Medical facilities Prctitioner with MBBS Degree (Numbers)
7-10 KM RADIUS														
551589	Narpad	b	0	0	0	0	0	0	0	0	1	0	0	0
551590	Thakurwadi	b	0	0	0	0	0	0	0	0	0	0	0	0
551599	Lashkari	b	0	0	0	0	0	0	0	0	0	0	0	0
551600	Kankradi	b	0	0	0	0	0	0	0	0	1	0	0	0
551601	Raipada	b	0	0	0	0	0	0	0	0	1	0	0	0
551610	Saravali	b	0	0	0	0	0	0	0	0	1	1	0	1
551611	Sawata	b	0	0	0	0	0	0	0	0	1	0	0	0
551614	Motapada	b	0	0	0	0	0	0	0	0	1	0	0	0
551615	Pale	b	0	0	0	0	0	0	0	0	1	0	0	0
551731	asangaon	0	0	0	0	0	0	0	0	0	0	b	0	0
551732	asangaon	0	0	0	0	0	0	0	0	0	0	b	0	0
551733	Kapshi	b	0	0	0	0	0	0	0	0	1	0	0	0
551739	Vangaon		0	0	0	0	0	1	1	1	1	1	0	1
551740	Kolavali	b	0	0	0	0	0	0	0	0	1	0	0	0
Palghar Tehsil														
552183	Ghivali	b	0	0	0	0	0	0	0	0	1	0	0	0
552184	Sawarai	b	0	0	0	0	0	0	0	0	0	0	0	0
552185	Kambode	b	0	0	0	0	0	0	0	0	0	0	0	0
552186	Kudan	b	0	0	0	0	0	0	0	0	1	0	0	0
552187	Dahisar T. Tarapur	b	0	0	0	0	0	0	0	0	1	0	0	0
552192	Navi Delwadi	b	0	0	0	0	0	0	0	0	0	0	0	0
	Tarapur													
Total		0	0	0	0	0	0	1	1	1	13	2	0	2
Grand Total		0	0	0	0	0	0	1	1	1	28	2	0	2

Annexure IV

***Drinking Water Facility in 10 km
Radius of Port Area***

ANNEXURE IV - DRINKING WATER FACILITY IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Tap Water-Treated (Status A(1)/NA(2))	Tap Water-Treated Functioning All round the year (Status A(1)/NA(2))	Tap Water-Treated Functioning in Summer months (April-September) (Status A(1)/NA(2))	Tap Water Untreated (Status A(1)/NA(2))	Tap Water Untreated Functioning All round the year (Status A(1)/NA(2))	Tap Water Untreated Functioning in Summer months (April- September) (Status A(1)/NA(2))	Covered Well (Status A(1)/NA(2))	Covered Well Functioning All round the year (Status A(1)/NA(2))	Covered Well Functioning in Summer months (April-September) (Status A(1)/NA(2))
7-10 KM RADIUS												
20	27	551589	Narpad	2	2	2	2	2	2	2	2	2
21	27	551590	Thakurwadi	2	2	2	2	2	2	2	2	2
22	27	551599	Lashkari	2	2	2	2	2	2	2	2	2
23	27	551600	Kankradi	1	1	1	2	2	2	2	2	2
24	27	551601	Raipada	1	2	2	2	2	2	2	2	2
25	27	551610	Saravali	1	1	1	1	1	1	2	2	2
26	27	551611	Sawata	1	2	2	2	2	2	2	2	2
27	27	551614	Motapada	1	1	1	2	2	2	2	2	2
28	27	551615	Pale	1	2	2	2	2	2	2	2	2
29		551731	asangaon bk	1	2	2	2	2	2	2	2	2
30		551732	asangaon	1	2	2	2	2	2	2	2	2
31	27	551733	Kapshi	1	1	1	2	2	2	2	2	2
32	27	551739	Vangaon	1	1	1	2	2	2	2	2	2
33	27	551740	Kolavali	1	1	1	2	2	2	2	2	2
Palghar Tehsil												
34	27	552183	Ghivali	2	2	2	1	1	1	2	2	2
35	27	552184	Sawarai	2	2	2	1	1	1	2	2	2
36	27	552185	Kambode	2	2	2	1	1	1	2	2	2
37	27	552186	Kudan	2	2	2	1	1	1	2	2	2
38	27	552187	Dahisar T.	2	2	2	1	1	1	2	2	2
39	27	552192	Navi Delwadi	2	2	2	1	1	1	2	2	2
40			Tarapur									
Total				29	34	34	33	33	33	40	40	40

ANNEXURE IV - DRINKING WATER FACILITY IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Uncovered Well (Status A(1)/NA(2))	Uncovered Well Functioning All round the year (Status A(1)/NA(2))	Uncovered Well Functioning in Summer months (April-September) (Status A(1)/NA(2))	Hand Pump (Status A(1)/NA(2))	Hand Pump Functioning All round the year (Status A(1)/NA(2))	Hand Pump Functioning in Summer months (April-September) (Status A(1)/NA(2))	Tube Wells/Borehole (Status A(1)/NA(2))	Tube Wells/Borehole Functioning All round the year (Status A(1)/NA(2))	Tube Wells/Borehole Functioning in Summer months (April-September) (Status A(1)/NA(2))
0-3 KM RADIUS												
port area												
1	27	551723	Varor	1	1	1	1	1	1	2	2	2
2	27	551722	Vandhavan	1	1	1	1	1	1	2	2	2
3	27	551718	Gungavada	1	2	2	1	2	2	2	2	2
4	27	551715	Tadiyale	1	2	2	1	2	2	1	2	2
5	27	551717	Pokharan	1	2	2	1	2	2	2	2	2
6	27	551719	Bade Pokharan	1	2	2	1	2	2	2	2	2
7	27	551721	Ambistewadi	1	1	1	1	1	1	2	2	2
Total				7	11	11	7	11	11	13	14	14
3-7 KM RADIUS												
8	27	551728	Tanashi	1	1	1	1	1	1	1	1	1
9	27	551724	Vasgaon	1	2	1	1	1	1	2	2	2
10	27	551720	Chandigaon	1	1	1	1	1	1	1	1	1
11	27	551714	Dhakti Dahanu	1	1	1	1	2	2	2	2	2
12	27	551716	Dhumket	1	1	1	1	1	1	2	2	2
13	27	551725	Motgaon	1	1	1	1	1	1	1	1	1
14	27	551726	Vadade	1	1	1	1	1	1	1	1	1
15	27	551727	Osarwadi	1	1	1	1	1	1	1	1	1
16	27	551729	Dedale	1	2	1	1	1	1	1	2	2
17	27	551730	Bavade	1	1	1	1	1	1	1	1	1
18			Dahanu-Urban									
19			Chinchani-Urban									
Total				10	12	10	10	11	11	13	14	14

ANNEXURE IV - DRINKING WATER FACILITY IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Uncovered Well (Status A(1)/NA(2))	Uncovered Well Functioning All round the year (Status A(1)/NA(2))	Uncovered Well Functioning in Summer months (April-September) (Status A(1)/NA(2))	Hand Pump (Status A(1)/NA(2))	Hand Pump Functioning All round the year (Status A(1)/NA(2))	Hand Pump Functioning in Summer months (April-September) (Status A(1)/NA(2))	Tube Wells/Borehole (Status A(1)/NA(2))	Tube Wells/Borehole Functioning All round the year (Status A(1)/NA(2))	Tube Wells/Borehole Functioning in Summer months (April-September) (Status A(1)/NA(2))
7-10 KM RADIUS												
20	27	551589	Narpad	1	1	1	1	1	1	1	1	1
21	27	551590	Thakurwadi	1	1	1	1	1	1	1	1	1
22	27	551599	Lashkari	1	1	1	1	1	1	1	1	1
23	27	551600	Kankradi	1	1	1	1	1	1	2	2	2
24	27	551601	Raipada	1	1	1	1	2	2	2	2	2
25	27	551610	Saravali	1	1	1	1	2	2	1	1	1
26	27	551611	Sawata	1	1	1	1	1	1	2	2	2
27	27	551614	Motapada	1	1	1	1	1	1	1	1	1
28	27	551615	Pale	1	1	1	1	1	1	2	2	2
29		551731	asangaon bk	1	1	1	1	1	1	2	2	2
30		551732	asangaon	1	1	1	1	1	1	2	2	2
31	27	551733	Kapshi	1	1	1	1	1	1	2	2	2
32	27	551739	Vangaon	1	1	1	1	1	1	2	2	2
33	27	551740	Kolavali	1	1	1	1	1	1	2	2	2
Palghar Tehsil												
34	27	552183	Ghivali	1	2	2	2	2	2	2	2	2
35	27	552184	Sawarai	2	2	2	1	1	1	2	2	2
36	27	552185	Kambode	1	1	1	1	1	1	2	2	2
37	27	552186	Kudan	1	1	1	2	2	2	1	1	1
38	27	552187	Dahisar T.	1	1	1	1	1	1	2	2	2
39	27	552192	Navi Delwadi	1	1	1	1	1	1	1	1	1
40			Tarapur									
Total				21	22	22	22	24	24	3	33	33

ANNEXURE IV - DRINKING WATER FACILITY IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Tank/Pond/Lake (Status A(1)/NA(2))	Tank/Pond/Lake Functioning All round the year (Status A(1)/NA(2))	Tank/Pond/Lake Functioning in Summer months (April-September) (Status A(1)/NA(2))	Community Toilet Complex (including Bath) for General Public (Status A(1)/NA(2))	Community Toilet Complex (excluding Bath) for General Public (Status A(1)/NA(2))	Post Office (Status A(1)/NA(2))	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5- 10 Kms and c for 10+ kms).	Sub Post Office (Status A(1)/NA(2))	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5- 10 Kms and c for 10+ kms).
0-3 KM RADIUS												
port area												
1	27	551723	Varor	1	2	2	2	2	2	a	1	
2	27	551722	Vandhavan	1	1	1	2	2	2	b	1	
3	27	551718	Gungavada	2	2	2	2	2	2	a	2	a
4	27	551715	Tadiyale	1	1	1	2	2	2	b	2	b
5	27	551717	Pokharan	2	2	2	2	2	2	a	1	
6	27	551719	Bade Pokharan	1	2	2	2	2	2	b	1	
7	27	551721	Ambistewadi	1	2	2	2	2	2	c	2	c
Total				9	12	12	14	14	1	0	1	0
3-7 KM RADIUS												
8	27	551728	Tanashi	2	2	2	2	2	2	b	1	
9	27	551724	Vasgaon	1	2	2	2	2	2	c	2	c
10	27	551720	Chandigaon	2	2	2	2	2	2	b	1	
11	27	551714	Dhakti Dahanu	1	1	1	2	1	1		2	c
12	27	551716	Dhumket	2	2	2	2	2	2	c	2	c
13	27	551725	Motgaon	2	2	2	2	2	2	a	1	
14	27	551726	Vadade	2	2	2	2	2	2	c	2	c
15	27	551727	Osarwadi	2	2	2	2	2	2	b	1	
16	27	551729	Dedale	1	1	1	2	2	2	b	1	
17	27	551730	Bavade	1	2	2	2	2	2	b	1	
18			Dahanu-Urban									
19			Chinchani-									
Total				16	18	18	20	19	1	0	1	0

ANNEXURE IV - DRINKING WATER FACILITY IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Tank/Pond/Lake (Status A(1)/NA(2))	Tank/Pond/Lake Functioning All round the year (Status A(1)/NA(2))	Tank/Pond/Lake Functioning in Summer months (April-September) (Status A(1)/NA(2))	Community Toilet Complex (including Bath) for General Public (Status A(1)/NA(2))	Community Toilet Complex (excluding Bath) for General Public (Status A(1)/NA(2))	Post Office (Status A(1)/NA(2))	(If not available within the village, the distance code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5- 10 Kms and c for 10+ kms).	Sub Post Office (Status A(1)/NA(2))	(If not available within the village, the distance code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5- 10 Kms and c for 10+ kms).
7-10 KM RADIUS												
20	27	551589	Narpad	1	1	1	2	2	2	b	1	
21	27	551590	Thakurwadi	2	2	2	2	2	2	c	2	c
22	27	551599	Lashkari	2	2	2	2	2	2	a	2	a
23	27	551600	Kankradi	2	2	2	2	2	2	a	2	a
24	27	551601	Raipada	2	2	2	2	2	2	b	2	b
25	27	551610	Saravali	2	2	2	2	1	1		2	c
26	27	551611	Sawata	1	1	1	2	2	2	b	1	
27	27	551614	Motapada	2	2	2	2	2	2	b	1	
28	27	551615	Pale	2	2	2	2	2	2	b	2	b
29		551731	asangaon bk	2	2	2	2	2	2	b	2	b
30		551732	asangaon	2	2	2	2	2	2	b	2	b
31	27	551733	Kapshi	2	2	2	2	2	2	a	1	
32	27	551739	Vangaon	1	2	2	2	1	1		2	c
33	27	551740	Kolavali	1	1	1	2	2	2	c	1	
Palghar Tehsil												
34	27	552183	Ghivali	1	2	2	2	2	2	a	1	
35	27	552184	Sawarai	2	2	2	2	2	2	a	2	a
36	27	552185	Kambode	2	2	2	2	2	2	a	2	a
37	27	552186	Kudan	2	2	2	2	2	2	a	1	
38	27	552187	Dahisar T.	2	2	2	2	2	2	b	1	
39	27	552192	Navi Delwadi	2	2	2	2	2	2	a	2	a
40			Tarapur									
Total				3	37	37	40	38	3	0	3	0

ANNEXURE IV - DRINKING WATER FACILITY IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Post And Telegraph Office (Status A(1)/NA(2))	Telephone (landlines) (Status A(1)/NA(2))	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Public Call Office /Mobile (PCO) (Status A(1)/NA(2))	Other District Road (Status A(1)/NA(2))	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Black Topped (pucca) Road (Status A(1)/NA(2))	Power Supply For Domestic Use (Status A(1)/NA(2))	Power Supply For Domestic Use Summer (April-Sept.) per day (in Hours)
0-3 KM RADIUS												
port area												
1	27	551723	Varor	2	1		1	1		1	1	15
2	27	551722	Vandhavan	2	1		1	1		1	1	15
3	27	551718	Gungavada	2	1		1	2	b	1	1	15
4	27	551715	Tadiyale	2	1		1	2	b	1	1	15
5	27	551717	Pokharan	2	2	a	2	2	b	1	1	15
6	27	551719	Bade Pokharan	2	1		1	2	c	1	1	15
7	27	551721	Ambistewadi	2	1		1	2	b	1	1	15
Total				14	8	0	8	12	0	7	7	105
3-7 KM RADIUS												
8	27	551728	Tanashi	2	1		1	2	b	1	1	12
9	27	551724	Vasgaon	2	1		1	2	b	1	1	15
10	27	551720	Chandigaon	2	1		1	2	a	1	1	16
11	27	551714	Dhakti Dahanu	1	1		1	1		2	1	16
12	27	551716	Dhumket	2	1		1	2	b	1	1	16
13	27	551725	Motgaon	2	1		1	1		1	1	12
14	27	551726	Vadade	2	2	a	2	2	b	1	1	16
15	27	551727	Osarwadi	2	1		1	1		1	1	12
16	27	551729	Dedale	2	1		1	2	b	1	1	18
17	27	551730	Bavade	2	1		1	2	b	1	1	18
18			Dahanu-Urban									
19			Chinchani-Urban									
Total				19	11	0	11	17	0	11	10	151

ANNEXURE IV - DRINKING WATER FACILITY IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Post And Telegraph Office (Status A(1)/NA(2))	Telephone (landlines) (Status A(1)/NA(2))	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Public Call Office /Mobile (PCO) (Status A(1)/NA(2))	Other District Road (Status A(1)/NA(2))	(If not available within the village, the distance range code of nearest place where facility is available is given viz; a for < 5 Kms, b for 5-10 Kms and c for 10+ kms).	Black Topped (pucca) Road (Status A(1)/NA(2))	Power Supply For Domestic Use (Status A(1)/NA(2))	Power Supply For Domestic Use Summer (April-Sept.) per day (in Hours)
7-10 KM RADIUS												
20	27	551589	Narpad	2	1		1	1		1	1	12
21	27	551590	Thakurwadi	2	1		2	2	b	1	1	12
22	27	551599	Lashkari	2	1		2	1		1	1	8
23	27	551600	Kankradi	2	1		1	2	b	1	1	8
24	27	551601	Raipada	2	1		1	1		1	1	12
25	27	551610	Saravali	1	1		1	1		1	1	18
26	27	551611	Sawata	2	1		1	2	a	1	1	18
27	27	551614	Motapada	2	1		1	1		1	1	17
28	27	551615	Pale	2	1		1	1		1	1	8
29		551731	asangaon bk	2	1							
30		551732	asangaon	2	1							
31	27	551733	Kapshi	2	1		1	2	a	1	1	16
32	27	551739	Vangaon	1	1		1	1		1	1	16
33	27	551740	Kolavali	2	1		1	2	b	1	1	18
Palghar Tehsil												
34	27	552183	Ghivali	2	1		1	1		1	1	18
35	27	552184	Sawarai	2	2	a	2	2	b	1	1	16
36	27	552185	Kambode	2	1		2	2	b	1	1	18
37	27	552186	Kudan	2	1		1	1		1	1	16
38	27	552187	Dahisar T.	2	1		1	2	b	1	1	16
39	27	552192	Navi Delwadi	2	1		2	2	b	1	1	16
40			Tarapur									
Total				38	21	0	23	27	0	18	18	263

Annexure V

Village wise Land Use Pattern in 10 km Radius of Port Area

ANNEXURE V - VILLAGE WISE LAND USE PATTERN IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Total Geographical Area (in Hectares)	Forest Area (in Hectares)	Area under Non-Agricultural Uses (in Hectares)	Barren & Uncultivable Land Area (in Hectares)	Permanent Pastures and Other Grazing Land Area (in Hectares)	Land Under Miscellaneous Tree Crops etc. Area (in Hectares)	Culturable Waste Land Area (in Hectares)
0-3 km radius										
1	27	551715	Tadiyale	0	0	0	0	0	0	0
2	27	551723	Varor	663	0	15.86	0	0	0	93.45
3	27	551722	Vandhavan	352.7	0	8.27	4.48	66.89	29.14	82.74
4	27	551718	Gungavada	0	0	0	0	0	0	0
5	27	551717	Pokharan	0	0	0	0	0	0	0
6	27	551719	Bade Pokharan	1509.17	0	36.68	55.03	66.7	444.57	45.08
7	27	551721	Ambistewadi	311.83	0	2	0	0	61.07	85.19
Total				2524.87	0	60.81	59.51	133.59	473.71	221.27
Percentage					0.00	2.41	2.36	5.29	18.76	8.76
3-7 km radius										
8	27	551728	Tanashi	654	75.61	31.8	0	0	0	1.61
9	27	551724	Vasgaon	345.09	0	11.68	8.35	71.15	47.23	47.89
10	27	551720	Chandigaon	561.7	0	7.87	0	0	0	3.55
11	27	551714	Dhakti Dahanu	0	0	0	0	0	0	0
12	27	551716	Dhumket	0	0	0	0	0	0	0
13	27	551725	Motgaon	2001	0.57	92.95	0	0	0	936.92
14	27	551726	Vadade	226.74	9.84	1.05	0	0	0	1.01
15	27	551727	Osarwadi	175	64.32	3.88	0	0	0	0.53
16	27	551729	Dedale	279.43	0	2	0	78.94	0	15.63
17	27	551730	Bavade	696.07	99.82	2	10.81	0	0	40.26
18			Dahanu--Urban	0	0	0	0	0	0	0
19			Chinchani- Urban	777	0	197	0	0	0	62
Total				5716.03	250.16	350.23	19.16	150.09	47.23	1109.4
Percentage					4.38	6.13	0.34	2.63	0.83	19.41

ANNEXURE V - VILLAGE WISE LAND USE PATTERN IN 10 KM RADIUS OF PORT AREA

S. N.	State Code	Village Code	Village Name	Total Geographical Area (in Hectares)	Forest Area (in Hectares)	Area under Non-Agricultural Uses (in Hectares)	Barren & Uncultivable Land Area (in Hectares)	Permanent Pastures and Other Grazing Land Area (in Hectares)	Land Under Miscellaneous Tree Crops etc. Area (in Hectares)	Culturable Waste Land Area (in Hectares)
7-10 km radius										
20	27	551589	Narpad	669.33	1.41	2.77	70.87	3.1	0	12.91
21	27	551590	Thakurwadi	74	0.57	7.6	0	0	0	0.19
22	27	551599	Lashkari	700	24.96	8.81	0	0	0	0.21
23	27	551600	Kankradi	517	0	7.54	0	0	0	0.48
24	27	551601	Raipada	210	0.32	120.95	0	0	0	1.62
25	27	551610	Saravali	1952	0	13.3	0	0	0	92.34
26	27	551611	Sawata	283.95	76.01	12.1	30.29	5.74	16.74	39.12
27	27	551614	Motapada	2986	139.22	141.98	0	0	0	621.03
28	27	551615	Pale	820.43	111.17	3.47	13.44	43.72	0	318.4
29		551731	Asangaon Bk.	8	92.95	0	85.12	0	0	0
30		551732	Asangaon	8.57	13.49	0	32.47	0	14.1	1.06
31	27	551733	Kapshi	413.51	0.6	2	40	6	51.91	35
32	27	551739	Vangaon	524.47	92.55	4.95	15	3	38.97	20
33	27	551740	Kolavali	907.89	21.45	1.77	40.01	0	0	20.48
Palghar										
34	27	552183	Ghivali	675	0	465	0	0	0	9
35	27	552184	Sawarai	90	0	2	0	21	1	2
36	27	552185	Kambode	189	0	2	14	0	0	8.2
37	27	552186	Kudan	354	0	64	0	40	10	17
38	27	552187	Dahisar T. Tarapur	582	0	158	61	14.1	20	30
39	27	552192	Navi Delwadi	35	0	1	0	28	0	0
40			Tarapur Urban	721	0	211				60
Total				12721.15	574.7	1230.24	402.2	164.66	152.72	1289.04
Percentage					4.52	9.67	3.16	1.29	1.20	10.13
Grand Total (0 - 10 km)				20962.05	824.86	1641.28	480.87	448.34	673.66	2619.71
Percentage					3.94	7.83	2.29	2.14	3.21	12.50

ANNEXURE V - VILLAGE WISE LAND USE PATTERN IN 10 KM RADIUS OF PORT AREA

Village Name	Fallows Land other than Current Fallows Area (in Hectares)	Current Fallows Area (in Hectares)	Net Area Sown (in Hectares)	Total Unirrigated Land Area (in Hectares)	Area Irrigated by Source (in Hectares)	Canals Area (in Hectares)	Wells/Tube Wells Area (in Hectares)	Tanks/Lakes Area (in Hectares)	Waterfall Area (in Hectares)	Other Source (specify) Area (in Hectares)
0-3 km radius										
Tadiyale	0	0	0	0	0	0	0	0	0	0
Varor	0	0	553.69	518.09	35.6	0	35.6	0	0	0
Vandhavan	0.86	6.76	153.56	143.64	9.92	0	0	9.92	0	0
Gungavada	0	0	0	0	0	0	0	0	0	0
Pokharan	0	0	0	0	0	0	0	0	0	0
Bade Pokharan	74.6	46.46	740.05	727.05	13	0	0	13	0	0
Ambistewadi	30.89	39.29	93.39	88.78	4.61	0	0	4.61	0	0
Total	75.46	53.22	1447.3	1388.78	58.52	0	35.6	22.92	0	0
Percentage	2.99	2.11	57.32	55.00	2.32	0.00	1.41	0.91	0.00	0.00
3-7 km radius										
Tanashi	0	0	544.98	499.98	45	0	45	0	0	0
Vasgaon	7.35	0	151.44	148.17	3.27	0	1	2.27	0	0
Chandigaon	0.18	375.46	174.64	125.64	49	0	49	0	0	0
Dhakti Dahanu	0	0	0	0	0	0	0	0	0	0
Dhumket	0	0	0	0	0	0	0	0	0	0
Motgaon	0	0	970.56	953.56	17	0	17	0	0	0
Vadade	0	39.4	175.44	162.44	13	0	13	0	0	0
Osarwadi	0	0	106.27	86.27	20	0	20	0	0	0
Dedale	34	0	148.86	119.86	29	0	29	0	0	0
Bavade	142.52	4.02	396.64	395.54	1.1	0	0.1	1	0	0
Dahanu--Urban	0	0	0	0	0	0	0	0	0	0
Chinchani-Urban			519	495						
Total	184.05	418.88	3187.83	2986.46	177.37	0	174.1	3.27	0	0
Percentage	3.22	7.33	55.77	52.25	3.10	0.00	3.05	0.06	0.00	0.00

ANNEXURE V - VILLAGE WISE LAND USE PATTERN IN 10 KM RADIUS OF PORT AREA

Village Name	Fallows Land other than Current Fallows Area (in Hectares)	Current Fallows Area (in Hectares)	Net Area Sown (in Hectares)	Total Unirrigated Land Area (in Hectares)	Area Irrigated by Source (in Hectares)	Canals Area (in Hectares)	Wells/Tube Wells Area (in Hectares)	Tanks/Lakes Area (in Hectares)	Waterfall Area (in Hectares)	Other Source (specify) Area (in Hectares)
7-10 km radius										
Narpad	0	4.94	573.33	568.05	5.28	0	0	5.28	0	0
Thakurwadi	0	0	65.64	63.47	2.17	0	2.17	0	0	0
Lashkari	0	0	666.02	641.02	25	0	25	0	0	0
Kankradi	0	0	508.98	472.98	36	0	36	0	0	0
Raipada	0	0	87.11	55.11	32	0	32	0	0	0
Saravali	0	0	1846.36	1814.36	32	0	32	0	0	0
Sawata	23.19	0	80.76	64.02	16.74	0	16.74	0	0	0
Motapada	0	0	2083.77	1993.77	90	0	90	0	0	0
Pale	36.63	0	293.6	276.6	17	0	17	0	0	0
Asangaon Bk.	0	758.85	741.85	17	0	17	0	0	0	
Asangaon	959.09	760.51	760.51	0	0	0	0	0	0	
Kapshi	10	20	248	237	11	10	1	0	0	0
Vangaon	20	20	310	270	40	0	1	2	0	37
Kolavali	4.55	59.01	760.62	759.62	1	0	1	0	0	0
Palghar										
Ghivali	0	0	201	201	0	0	0	0	0	0
Sawarai	3	1	60	20	40	0	0	0	0	40
Kambode	1	4	159.8	20.8	139	0	0	0	0	139
Kudan	0	0	223	187.6	35.4	0	0	0	0	35.4
Dahisar T. Tarapur	8.9	30	260	201.8	58.2	0	0	0	0	58.2
Navi Delwadi	0	0	6	6	0	0	0	0	0	0
Tarapur Urban			227	202						
Total	1066.36	1658.31	10163.35	8072.2	580.79	27	253.91	7.28	0	309.6
Percentage	8.38	13.04	79.89	63.45	4.57	0.21	2.00	0.06	0.00	2.43
Grand Total (0 - 10 km)	1325.87	2130.41	14798.48	12447.44	816.68	27	463.61	33.47	0	309.6
Percentage	6.33	10.16	70.60	59.38	3.90	0.13	2.21	0.16	0.00	1.48

Annexure VI

Demographic Details Rail Road Alignment

ANNEXURE VI - DEMOGRAPHIC DETAILS RAIL ROAD ALIGNMENT

S. N.	District	Subdistt	Town/ Village	Ward	EB	Level	Name	TRU	No_HH	TOT_P	TOT_M	TOT_F
Palghar Tehsil												
1	517	04163	552225	0000	000000	VILLAGE	Akegavhan	Rural	161	784	376	408
2	517	04163	552231	0000	000000	VILLAGE	Akoli	Rural	134	690	346	344
3	517	04163	552227	0000	000000	VILLAGE	Ambedhe	Rural	169	817	418	399
4	517	04163	552300	0000	000000	VILLAGE	Bhadave	Rural	164	634	310	324
5	517	04163	552224	0000	000000	VILLAGE	Chinchare	Rural	171	913	461	452
6	517	04163	552221	0000	000000	VILLAGE	Hanuman Nagar	Rural	327	1691	848	843
7	517	04163	552226	0000	000000	VILLAGE	Nanivali	Rural	591	3288	1667	1621
8	517	04163	552219	0000	000000	VILLAGE	Newale	Rural	103	513	244	269
9	517	04163	552232	0000	000000	VILLAGE	Ravate	Rural	177	927	472	455
10	517	04163	552234	0000	000000	VILLAGE	Shigaon	Rural	998	4642	2322	2320
11	517	04163	552233	0000	000000	VILLAGE	Khanivade	Rural	222	966	475	491
12	517	04163	552222	0000	000000	VILLAGE	Sumadi	Rural	223	1066	525	541
Dahanu Tehsil												
13	517	04158	551712	0000	000000	VILLAGE	Dhamatane	Rural	285	1331	644	687
14	517	04158	551709	0000	000000	VILLAGE	Ghol	Rural	312	1655	828	827
15	517	04158	551740	0000	000000	VILLAGE	Kolavali	Rural	486	2048	1012	1036
16	517	04158	551711	0000	000000	VILLAGE	Kolhan	Rural	122	693	340	353
17	517	04158	551750	0001	000000	WARD	Chinchani (CT) WARD NO.-0001	Urban	3129	13646	6793	6853
18	517	04158	551710	0000	000000	VILLAGE	Tawa	Rural	289	1905	1133	772
19	517	04158	551728	0000	000000	VILLAGE	Tanashi	Rural	255	1053	522	531
20	517	04158	551723	0000	000000	VILLAGE	Varor	Rural	678	2810	1392	1418
21	517	04158	551739	0000	000000	VILLAGE	Vangaon	Rural	1645	7649	3950	3699
Total									10641	49721	25078	24643
Percentage											50.44	49.56

ANNEXURE VI - DEMOGRAPHIC DETAILS RAIL ROAD ALIGNMENT

S. N.	P_06	M_06	F_06	P_SC	M_SC	F_SC	P_ST	M_ST	F_ST	P_LIT	M_LIT	F_LIT	P_ILL	M_ILL
Palghar Tehsil														
1	152	68	84	0	0	0	780	373	407	327	193	134	457	183
2	104	53	51	0	0	0	681	343	338	223	148	75	467	198
3	107	53	54	0	0	0	441	222	219	472	276	196	345	142
4	54	27	27	0	0	0	102	47	55	530	272	258	104	38
5	195	99	96	0	0	0	909	458	451	341	211	130	572	250
6	282	139	143	6	4	2	1623	813	810	898	531	367	793	317
7	512	255	257	8	6	2	3009	1516	1493	1553	951	602	1735	716
8	99	53	46	0	0	0	415	190	225	284	151	133	229	93
9	164	89	75	0	0	0	868	442	426	405	245	160	522	227
10	931	479	452	0	0	0	4207	2089	2118	1916	1124	792	2726	1198
11	172	93	79	0	0	0	948	467	481	424	244	180	542	231
12	211	107	104	0	0	0	1064	523	541	442	262	180	624	263
Dahanu Tehsil														
13	257	134	123	0	0	0	1303	629	674	486	288	198	845	356
14	305	158	147	0	0	0	1596	787	809	559	352	207	1096	476
15	226	116	110	105	53	52	637	306	331	1547	821	726	501	191
16	134	65	69	0	0	0	680	333	347	326	192	134	367	148
17	1133	561	572	117	56	61	2820	1359	1461	11166	5801	5365	2480	992
18	232	128	104	3	1	2	1773	1054	719	1091	788	303	814	345
19	105	57	48	0	0	0	369	184	185	804	420	384	249	102
20	247	136	111	204	99	105	506	251	255	2246	1166	1080	564	226
21	909	463	446	231	131	100	2629	1317	1312	5554	3083	2471	2095	867
Total	6531	3333	3198	674	350	324	27360	13703	13657	31594	17519	14075	18127	7559
%	13.14	6.70	6.43	1.36	0.70	0.65	55.03	27.56	27.47	63.54	35.23	28.31	36.46	15.20

ANNEXURE VI - DEMOGRAPHIC DETAILS RAIL ROAD ALIGNMENT

S. N.	F_ILL	TOT_WOR K_P	TOT_WOR K_M	TOT_WOR K_F	MAINWO RK_P	MAINWO RK_M	MAINWO RK_F	MAIN_CL _P	MAIN_CL _M	MAIN_CL _F	MAIN_AL _P	MAIN_AL _M	MAIN_AL _F
Palghar Tehsil													
1	274	422	202	220	100	49	51	72	35	37	26	13	13
2	269	356	172	184	336	164	172	149	74	75	176	81	95
3	203	406	276	130	297	265	32	216	196	20	54	46	8
4	66	363	217	146	258	158	100	139	76	63	33	17	16
5	322	470	238	232	429	218	211	144	70	74	235	109	126
6	476	807	498	309	463	236	227	21	11	10	401	199	202
7	1019	1485	747	738	1453	738	715	864	505	359	513	186	327
8	136	232	139	93	227	137	90	23	19	4	175	97	78
9	295	549	279	270	531	268	263	150	76	74	355	174	181
10	1528	1857	1225	632	1195	930	265	186	154	32	496	360	136
11	311	415	254	161	238	202	36	5	3	2	77	60	17
12	361	511	285	226	263	207	56	52	48	4	184	139	45
Dahanu Tehsil													
13	489	882	409	473	559	263	296	267	122	145	24	9	15
14	620	898	455	443	629	380	249	470	282	188	105	52	53
15	310	961	664	297	942	653	289	168	141	27	354	197	157
16	219	390	190	200	322	165	157	185	90	95	16	9	7
17	1488	5604	4010	1594	4661	3500	1161	187	177	10	682	382	300
18	469	1059	641	418	808	569	239	295	178	117	97	60	37
19	147	497	331	166	359	249	110	64	56	8	185	107	78
20	338	1099	804	295	962	722	240	64	49	15	242	129	113
21	1228	3048	2198	850	2757	2014	743	188	138	50	575	330	245
Total	10568	22311	14234	8077	17789	12087	5702	3909	2500	1409	5005	2756	2249
%	21.25	44.87	28.63	16.24	35.78	24.31	11.47	7.86	5.03	2.83	10.07	5.54	4.52

ANNEXURE VI - DEMOGRAPHIC DETAILS RAIL ROAD ALIGNMENT

S. N.	MAIN_HH _P	MAIN_HH _M	MAIN_HH _F	MAIN_OT _P	MAIN_OT _M	MAIN_OT _F	MARGWO RK_P	MARGWO RK_M	MARGWO RK_F	MARG_CL _P	MARG_CL _M	MARG_CL _F	MARG_AL _P	MARG_AL _M
Palghar Tehsil														
1	0	0	0	2	1	1	322	153	169	34	19	15	286	133
2	0	0	0	11	9	2	20	8	12	4	1	3	16	7
3	1	0	1	26	23	3	109	11	98	5	2	3	69	8
4	0	0	0	86	65	21	105	59	46	69	41	28	26	13
5	0	0	0	50	39	11	41	20	21	0	0	0	4	1
6	3	2	1	38	24	14	344	262	82	4	3	1	246	180
7	12	7	5	64	40	24	32	9	23	6	4	2	24	4
8	0	0	0	29	21	8	5	2	3	0	0	0	4	2
9	2	2	0	24	16	8	18	11	7	0	0	0	17	11
10	20	19	1	493	397	96	662	295	367	86	22	64	438	189
11	2	2	0	154	137	17	177	52	125	0	0	0	102	17
12	1	1	0	26	19	7	248	78	170	7	3	4	230	69
Dahanu Tehsil														
13	70	34	36	198	98	100	323	146	177	262	116	146	37	21
14	4	3	1	50	43	7	269	75	194	219	58	161	13	3
15	24	22	2	396	293	103	19	11	8	1	0	1	5	4
16	1	1	0	120	65	55	68	25	43	8	4	4	12	2
17	740	624	116	3052	2317	735	943	510	433	24	15	9	247	106
18	15	9	6	401	322	79	251	72	179	77	39	38	140	20
19	2	2	0	108	84	24	138	82	56	36	20	16	46	24
20	153	127	26	503	417	86	137	82	55	20	12	8	72	36
21	198	134	64	1796	1412	384	291	184	107	64	35	29	84	54
Total	1248	989	259	7627	5842	1785	4522	2147	2375	926	394	532	2118	904
%	2.51	1.99	0.52	15.34	11.75	3.59	9.09	4.32	4.78	1.86	0.79	1.07	4.26	1.82

ANNEXURE VI - DEMOGRAPHIC DETAILS RAIL ROAD ALIGNMENT

S. N.	MARG_AL_F	MARG_H_H_P	MARG_H_H_M	MARG_H_H_F	MARG_O_T_P	MARG_O_T_M	MARG_O_T_F	MARGWO_RK_3_6_P	MARGWOR_K_3_6_M	MARGWOR_K_3_6_F	MARG_CL_3_6_P	MARG_CL_3_6_M	MARG_CL_3_6_F
Palghar Tehsil													
1	153	0	0	0	2	1	1	283	134	149	31	17	14
2	9	0	0	0	0	0	0	19	7	12	4	1	3
3	61	25	1	24	10	0	10	109	11	98	5	2	3
4	13	0	0	0	10	5	5	94	59	35	65	41	24
5	3	0	0	0	37	19	18	39	19	20	0	0	0
6	66	13	12	1	81	67	14	173	123	50	3	2	1
7	20	0	0	0	2	1	1	25	8	17	5	3	2
8	2	1	0	1	0	0	0	5	2	3	0	0	0
9	6	0	0	0	1	0	1	17	11	6	0	0	0
10	249	7	6	1	131	78	53	596	273	323	81	21	60
11	85	1	1	0	74	34	40	132	48	84	0	0	0
12	161	2	0	2	9	6	3	152	56	96	6	2	4
Dahanu Tehsil													
13	16	7	2	5	17	7	10	96	47	49	58	29	29
14	10	4	0	4	33	14	19	165	33	132	118	16	102
15	1	1	0	1	12	7	5	14	10	4	1	0	1
16	10	4	2	2	44	17	27	59	21	38	6	2	4
17	141	121	74	47	551	315	236	814	453	361	20	12	8
18	120	14	6	8	20	7	13	210	66	144	72	36	36
19	22	2	1	1	54	37	17	111	67	44	29	15	14
20	36	16	11	5	29	23	6	85	54	31	19	11	8
21	30	13	8	5	130	87	43	245	161	84	63	35	28
Total	1214	231	124	107	1247	725	522	3443	1663	1780	586	245	341
%	2.44	0.46	0.25	0.22	2.51	1.46	1.05	6.92	3.34	3.58	1.18	0.49	0.69

ANNEXURE VI - DEMOGRAPHIC DETAILS RAIL ROAD ALIGNMENT

S. N.	MARG_AL _3_6_P	MARG_AL _3_6_M	MARG_AL _3_6_F	MARG_H H_3_6_P	MARG_HH _3_6_M	MARG_H H_3_6_F	MARG_O T_3_6_P	MARG_O T_3_6_M	MARG_O T_3_6_F	MARGWO RK_0_3_P	MARGWO RK_0_3_M	MARGWO RK_0_3_F	MARG_CL _0_3_P
Palghar Tehsil													
1	250	116	134	0	0	0	2	1	1	39	19	20	3
2	15	6	9	0	0	0	0	0	0	1	1	0	0
3	69	8	61	25	1	24	10	0	10	0	0	0	0
4	22	13	9	0	0	0	7	5	2	11	0	11	4
5	3	0	3	0	0	0	36	19	17	2	1	1	0
6	118	74	44	3	3	0	49	44	5	171	139	32	1
7	18	4	14	0	0	0	2	1	1	7	1	6	1
8	4	2	2	1	0	1	0	0	0	0	0	0	0
9	16	11	5	0	0	0	1	0	1	1	0	1	0
10	394	177	217	4	4	0	117	71	46	66	22	44	5
11	59	14	45	1	1	0	72	33	39	45	4	41	0
12	135	48	87	2	0	2	9	6	3	96	22	74	1
Dahanu Tehsil													
13	16	10	6	6	1	5	16	7	9	227	99	128	204
14	11	3	8	3	0	3	33	14	19	104	42	62	101
15	3	3	0	1	0	1	9	7	2	5	1	4	0
16	10	1	9	4	2	2	39	16	23	9	4	5	2
17	229	100	129	110	70	40	455	271	184	129	57	72	4
18	105	17	88	14	6	8	19	7	12	41	6	35	5
19	40	21	19	2	1	1	40	30	10	27	15	12	7
20	40	24	16	11	8	3	15	11	4	52	28	24	1
21	69	49	20	10	7	3	103	70	33	46	23	23	1
Total	1626	701	925	197	104	93	1034	613	421	1079	484	595	340
%	3.27	1.41	1.86	0.40	0.21	0.19	2.08	1.23	0.85	2.17	0.97	1.20	0.68

ANNEXURE VI - DEMOGRAPHIC DETAILS RAIL ROAD ALIGNMENT

S. N.	MARG_CL _0_3_M	MARG_CL _0_3_F	MARG_AL _0_3_P	MARG_AL _0_3_M	MARG_AL _0_3_F	MARG_H H_0_3_P	MARG_H H_0_3_M	MARG_H H_0_3_F	MARG_O T_0_3_P	MARG_O T_0_3_M	MARG_O T_0_3_F	NON_WO RK_P	NON_WO RK_M	NON_WO RK_F
Palghar Tehsil														
1	2	1	36	17	19	0	0	0	0	0	0	362	174	188
2	0	0	1	1	0	0	0	0	0	0	0	334	174	160
3	0	0	0	0	0	0	0	0	0	0	0	411	142	269
4	0	4	4	0	4	0	0	0	3	0	3	271	93	178
5	0	0	1	1	0	0	0	0	1	0	1	443	223	220
6	1	0	128	106	22	10	9	1	32	23	9	884	350	534
7	1	0	6	0	6	0	0	0	0	0	0	1803	920	883
8	0	0	0	0	0	0	0	0	0	0	0	281	105	176
9	0	0	1	0	1	0	0	0	0	0	0	378	193	185
10	1	4	44	12	32	3	2	1	14	7	7	2785	1097	1688
11	0	0	43	3	40	0	0	0	2	1	1	551	221	330
12	1	0	95	21	74	0	0	0	0	0	0	555	240	315
Dahanu Tehsil														
13	87	117	21	11	10	1	1	0	1	0	1	449	235	214
14	42	59	2	0	2	1	0	1	0	0	0	757	373	384
15	0	0	2	1	1	0	0	0	3	0	3	1087	348	739
16	2	0	2	1	1	0	0	0	5	1	4	303	150	153
17	3	1	18	6	12	11	4	7	96	44	52	8042	2783	5259
18	3	2	35	3	32	0	0	0	1	0	1	846	492	354
19	5	2	6	3	3	0	0	0	14	7	7	556	191	365
20	1	0	32	12	20	5	3	2	14	12	2	1711	588	1123
21	0	1	15	5	10	3	1	2	27	17	10	4601	1752	2849
Total	149	191	492	203	289	34	20	14	213	112	101	27410	10844	16566
%	0.30	0.38	0.99	0.41	0.58	0.07	0.04	0.03	0.43	0.23	0.20	55.13	21.81	33.32

Annexure VII

Educational Facilities Rail Road Alignment

ANNEXURE VII - EDUCATIONAL FACILITIES RAIL ROAD ALIGNMENT

Village Code	Village Name	CD Block Code	CD Block Name	Govt Pre-Primary School (Nursery/LKG /UKG) (Status A(1)/NA(2))	Govt Pre - Primary School (Nursery/LKG / UKG) (Numbers)	Private Pre - Primary School (Nursery/LKG /UKG) (Status A(1)/NA(2))	Govt Middle School (Status A(1)/NA(2))	Private Secondary School (Status A(1)/NA(2))	Govt Arts and Science Degree College (Status A(1)/NA(2))	Govt Engineering College (Numbers)	Private Engineering College (Status A(1)/NA(2))	Govt Medicine College (Numbers)	Private Medicine College (Status A(1)/NA(2))	Private Medicine College (Numbers)
552225	Akegavhan	0214	Palghar	1	1	2		0	0	2	0	2	0	2
552231	Akoli	0214	Palghar	1	1	2		0	0	2	0	2	0	2
552227	Ambedhe	0214	Palghar	1	2	2		0	0	2	0	2	0	2
552300	Bhadave	0214	Palghar	1	2	2	1	0	0	2	0	2	0	2
552224	Chinchare	0214	Palghar	1	2	2		0	0	2	0	2	0	2
552221	Hanuman Nagar	0214	Palghar	1	3	2		0	0	2	0	2	0	1
552226	Nanivali	0214	Palghar	1	5	2		0	0	2	0	2	0	2
552219	Newale	0214	Palghar	1	2	2		0	0	2	0	2	0	1
552232	Ravate	0214	Palghar	1	2	2		0	0	2	0	2	0	2
552233	Khanivade	0214	Palghar	1	1	2	1	0	0	2	0	2	0	1
552234	Shigaon	0214	Palghar	1	5	2		4	0	2	0	2	0	1
552222	Sumadi	0214	Palghar	1	2	2		0	0	2	0	2	0	1
551712	Dhamatane	0209	Dahanu	1	2	2		0	0	2	0	2	0	2
551709	Ghol	0209	Dahanu	1	3	2		0	0	2	0	2	0	2
551740	Kolavali	0209	Dahanu	1	3	2		0	0	2	0	2	0	2
551711	Kolhan	0209	Dahanu	1	1	2		0	0	2	0	2	0	2
	chinchani			2	2	2	1							
Total				18	39	34	3	4	0	32	0	32	0	27

ANNEXURE VII - EDUCATIONAL FACILITIES RAIL ROAD ALIGNMENT

Village Code	Village Name	Govt Management Institute (Status A(1)/NA(2))	Private Management Institute (Numbers)	Nearest Facility Status (Govt(1)/Private(2))	Govt Polytechnic (Status A(1)/NA(2))	Private Polytechnic (Status A(1)/NA(2))	Govt Vocational Training School/ITI (Status A(1)/NA(2))	Private Vocational Training School/ITI (Status A(1)/NA(2))	Government Non Formal Training Centre (Numbers)	Private Non Formal Training Centre (Numbers)	Government School For Disabled (Numbers)	Private School For Disabled (Numbers)	Government Others (Numbers)	Private Others (Numbers)
552225	Akegavhan	0	2	BOISER	0	0	0	0	2	2	2	2	2	2
552231	Akoli	0	1	VIRAR	0	0	0	0	2	1	2	1	2	1
552227	Ambedhe	0	1	VIRAR	0	0	0	0	2	1	2	1	2	1
552300	Bhadave	0	2	MUMBAI	0	0	0	0	2	2	2	2	2	2
552224	Chinchare	0	2	VIRAR	0	0	0	0	2	2	2	2	2	2
552221	Hanuman Nagar	0	2	VIRAR	0	0	0	0	2	1	2	2	2	2
552226	Nanivali	0	2	VIRAR	0	0	0	0	2	2	2	2	2	2
552219	Newale	0	2	VIRAR	0	0	0	0	2	1	2	2	2	2
552232	Ravate	0	2	VIRAR	0	0	0	0	2	1	2	1	2	1
552233	Khanivade	0	1	BEREGION	0	0	0	0	2	1	2	1	2	1
552234	Shigaon	0	1	VIRAR	0	0	0	0	2	1	2	1	2	1
552222	Sumadi	0	2	VIRAR	0	0	0	0	2	1	2	2	2	2
551712	Dhamatane	0	1	BORDI	0	0	0	0	2	1	2	1	2	1
551709	Ghol	0	2	BORDI	0	0	0	0	2	1	2	1	2	1
551740	Kolavali	0	1	CHINCHANI	0	0	0	0	2	1	2	2	2	1
551711	Kolhan	0	2	BORDI	0	0	0	0	2	1	2	1	2	1
	chinchani													
Total		0	26	0	0	0	0	0	32	20	32	24	32	23

Annexure VIII

Health Facilities Rail Road Alignment

ANNEXURE VIII - HEALTH FACILITIES RAIL ROAD ALIGNMENT

State Code	State Name	District Code	District Name	Sub District Code	Sub District Name	Village Code	Village Name	Community Health Centre (Numbers)	Primary Health Centre (Numbers)	Primary Health Sub Centre (Numbers)	Maternity And Child Welfare Centre (Numbers)	TB Clinic (Numbers)	Hospital Allopathic (Numbers)	Dispensary (Numbers)	Mobile Health Clinic (Numbers)	Family Welfare Centre (Numbers)	Family Welfare Centre Doctors Total Strength (Numbers)	Non Government Medical facilities Out Patient (Numbers)	Non Government Medical facilities Others (Numbers)
RAIL ROAD ALIGNMENT																			
1	Maharashtra	517	Thane	04163	Palghar	552225	Akegavhan	0	0	0	0	0	0	0	0	0	0	0	0
2	Maharashtra	517	Thane	04163	Palghar	552231	Akoli	0	0	0	0	0	0	0	0	0	0	0	0
3	Maharashtra	517	Thane	04163	Palghar	552227	Ambedhe	0	0	0	0	0	0	0	0	0	0	0	0
4	Maharashtra	517	Thane	04163	Palghar	552300	Bhadave	0	0	0	0	0	0	0	0	0	0	0	0
5	Maharashtra	517	Thane	04163	Palghar	552224	Chinchare	0	0	0	0	0	0	0	0	0	0	0	0
6	Maharashtra	517	Thane	04163	Palghar	552221	Hanuman Nagar	0	0	1	0	0	0	0	0	0	0	1	0
7	Maharashtra	517	Thane	04163	Palghar	552226	Nanivali	0	0	1	0	0	0	1	0	0	0	1	0
8	Maharashtra	517	Thane	04163	Palghar	552219	Newale	0	0	0	0	0	0	0	0	0	0	0	0
9	Maharashtra	517	Thane	04163	Palghar	552232	Ravate	0	0	0	0	0	0	0	0	0	0	0	0
10	Maharashtra	517	Thane	04163	Palghar	552233	Khanivade	0	0	0	0	0	0	0	0	0	0	0	0
11	Maharashtra	517	Thane	04163	Palghar	552234	Shigaon	0	0	1	0	0	0	1	0	0	0	1	0
12	Maharashtra	517	Thane	04163	Palghar	552222	Sumadi	0	0	0	0	0	0	0	0	0	0	1	0
Dahanu Tehsil																			
13	Maharashtra	517	Thane	04158	Dahanu	551712	Dhamatane	0	0	0	0	0	0	0	0	0	0	1	0
14	Maharashtra	517	Thane	04158	Dahanu	551709	Ghol	0	0	0	0	0	0	0	0	0	0	1	0
15	Maharashtra	517	Thane	04158	Dahanu	551740	Kolavali	0	0	0	0	0	0	0	0	0	0	1	0
16	Maharashtra	517	Thane	04158	Dahanu	551711	Kolhan	0	0	0	0	0	0	0	0	0	0	0	0
Total								0	0	3	0	0	0	2	0	0	0	7	0

Annexure IX

Drinking Water & Other Facilities Rail Road Alignment

ANNEXURE IX - DRINKING WATER & OTHER FACILITIES RAIL ROAD ALIGNMENT

State Code	State Name	District Code	District Name	Sub District Code	Sub District Name	Village Code	Village Name	Tap Water-Treated (Status A(1)/NA(2))	Tap Water-Treated Functioning All round the year (Status A(1)/NA(2))	Tap Water-Treated Functioning in Summer months (April-September) (Status A(1)/NA(2))	Tap Water Untreated (Status A(1)/NA(2))	Tap Water Untreated Functioning All round the year (Status A(1)/NA(2))	Tap Water Untreated Functioning in Summer months (April-September) (Status A(1)/NA(2))
RAIL ROAD ALIGNMENT													
1	Maharashtra	517	Thane	04163	Palghar	552225	Akegavhan	2	2	2	2	2	2
2	Maharashtra	517	Thane	04163	Palghar	552231	Akoli	2	2	2	2	2	2
3	Maharashtra	517	Thane	04163	Palghar	552227	Ambedhe	1	2	2	2	2	2
4	Maharashtra	517	Thane	04163	Palghar	552300	Bhadave	1	1	1	2	2	2
5	Maharashtra	517	Thane	04163	Palghar	552224	Chinchare	2	2	2	2	2	2
6	Maharashtra	517	Thane	04163	Palghar	552221	Hanuman Nagar	2	2	2	1	1	1
7	Maharashtra	517	Thane	04163	Palghar	552226	Nanivali	1	1	1	2	2	2
8	Maharashtra	517	Thane	04163	Palghar	552219	Newale	2	2	2	1	1	1
9	Maharashtra	517	Thane	04163	Palghar	552232	Ravate	2	2	2	2	2	2
10	Maharashtra	517	Thane	04163	Palghar	552233	Khanivade	1	1	1	2	2	2
11	Maharashtra	517	Thane	04163	Palghar	552234	Shigaon	2	2	2	1	1	1
12	Maharashtra	517	Thane	04163	Palghar	552222	Sumadi	2	2	2	1	1	1
Dahanu Tehsil													
13	Maharashtra	517	Thane	04158	Dahanu	551712	Dhamatane	1	2	2	2	2	2
14	Maharashtra	517	Thane	04158	Dahanu	551709	Ghol	2	2	2	2	2	2
15	Maharashtra	517	Thane	04158	Dahanu	551740	Kolavali	1	1	1	2	2	2
16	Maharashtra	517	Thane	04158	Dahanu	551711	Kolhan	2	2	2	2	2	2
17							Chinchani						

Annexure X

Village Wise Landuse Pattern Rail Road Rlignment

ANNEXURE X - VILLAGE WISE LANDUSE PATTERN RAIL ROAD RLIGNMENT

State Code	State Name	District Code	Village Code	Village Name	Total Geographical Area (in Hectares)	Forest Area (in Hectares)	Area under Non-Agricultural Uses (in Hectares)	Barren & Un-cultivable Land Area (in Hectares)	Permanent Pastures and Other Grazing Land Area (in Hectares)	Land Under Miscellaneous Tree Crops etc. Area (in Hectares)	Culturable Waste Land Area (in Hectares)
RAIL ROAD ALIGNMENT											
Dahanu Tehsil											
1	Maharashtra	517	551723	Varor	663	0	15.86	0	0	0	93.45
2	Maharashtra	517	551728	Tanashi	654	75.61	31.8	0	0	0	1.61
3	Maharashtra	517	551739	Vangaon	524.47	92.55	4.95	15	3	38.97	20
4	Maharashtra	517	551710	Tawa	515	282.95	24.66	0	0	0	0
5	Maharashtra	517	552225	Akegavhan	258	132	22	0	0	0	6
6	Maharashtra	517	552231	Akoli	1443	257	17	0	0	0	7
7	Maharashtra	517	552227	Ambedhe	674.73	284	122.94	22.64	122.01	0	0
8	Maharashtra	517	552300	Bhadave	196.53	0	2.04	0	88.99	0	7.68
9	Maharashtra	517	552224	Chinchare	488	101	21	0	0	0	17
10	Maharashtra	517	552221	Hanuman Nagar	1523.5	1087.56	24.19	17.25	0	15	5
11	Maharashtra	517	552226	Nanivali	1410.7	891.13	6.52	65.82	0	0	98.33
12	Maharashtra	517	552219	Newale	913	482	30	0	0	0	10
13	Maharashtra	517	552232	Ravate	607	192	13	0	0	0	21
14	Maharashtra	517	552233	Khanivade	800	304	15	0	0	0	3
15	Maharashtra	517	552234	Shigaon	2116	0	17	0	0	0	26
16	Maharashtra	517	552222	Sumadi	506	20	59	0	0	0	26
Palghar											
17	Maharashtra	517	551712	Dhamatane	391.93	121.91	16.87	28.85	0	0	18.44
18	Maharashtra	517	551709	Ghol	549.8	251.34	8.17	36.31	0	0	23.35
19	Maharashtra	517	551740	Kolavali	907.89	21.45	1.77	40.01	0	0	20.48
20	Maharashtra	517	551711	Kolhan	122	1.87	7.68	0	0	19.61	0
21				chinchani	777	0	197	0	0	0	62
Total					16041.55	4598.37	658.45	225.88	214	73.58	466.34
Percentage						28.66	4.10	1.40	1.33	0.458	2.90

ANNEXURE X - VILLAGE WISE LANDUSE PATTERN RAIL ROAD RLIGNMENT

State Code	Village Name	Fallows Land other than Current Fallows Area (in Hectares)	Current Fallows Area (in Hectares)	Net Area Sown (in Hectares)	Total Unirrigated Land Area (in Hectares)	Area Irrigated by Source (in Hectares)	Canals Area (in Hectares)	Wells/Tube Wells Area (in Hectares)	Tanks/Lakes Area (in Hectares)	Waterfall Area (in Hectares)	Other Source (specify) Area (in Hectares)
RAIL ROAD ALIGNMENT											
Dahanu Tehsil											
1	Varor	0	0	553.69	518.09	35.6	0	35.6	0	0	0
2	Tanashi	0	0	544.98	499.98	45	0	45	0	0	0
3	Vangaon	20	20	310	270	40	0	1	2	0	37
4	Tawa	0	0	207.39	203.39	4	4	0	0	0	0
5	Akegavhan	0	0	98	98	0	0	0	0	0	0
6	Akoli	0	0	1162	1162	0	0	0	0	0	0
7	Ambedhe	0	0	123.14	123.14	0	0	0	0	0	0
8	Bhadave	0	6.31	91.51	89.89	1.62	0	0	1.62	0	0
9	Chinchare	0	0	349	349	0	0	0	0	0	0
10	Hanuman Nagar	4	2.5	368	360	8	0	8	0	0	0
11	Nanivali	0	0	348.9	348.9	0	0	0	0	0	0
12	Newale	0	0	391	373	18	0	18	0	0	0
13	Ravate	0	0	381	381	0	0	0	0	0	0
14	Khanivade	0	0	478	478	0	0	0	0	0	0
15	Shigaon	0	0	2073	2065	8	0	8	0	0	0
16	Sumadi	0	0	401	393	8	0	8	0	0	0
Palghar											
17	Dhamatane	0	0	205.86	200.86	5	5	0	0	0	0
18	Ghol	0	0	230.63	223.63	7	7	0	0	0	0
19	Kolavali	4.55	59.01	760.62	759.62	1	0	1	0	0	0
20	Kolhan	0	0	92.84	92.84	0	0	0	0	0	0
21	chinchani			519	495	0	0	0	0	0	0
Total		28.55	87.82	9689.56	9484.34	181.22	16	124.6	3.62	0	37
Percentage		0.17	0.54	60.40	59.12	1.12	0.09	0.77	0.02	0	0.23