

1.1 INTRODUCTION

The Government of India has embarked upon a massive National Highways Development Project (NHDP) in the country. The National Highway Authority of India (NHAI) has been assigned to take up the development of various National Highway corridors where the traffic intensity has increased significantly thereby necessitating capacity augmentation for safe and efficient movement of traffic. As part of this endeavor, the Project Implementation Unit (PIU), Pune has decided to develop the much awaited six lane tunnel in Kambhatki ghat section

1.2 PROJECT SITE & LOCATION

The existing project corridor Kambhatki Ghat from Km 772.080 to Km 781.200 is a part of Pune- Satara section of NH-4 has four lane configuration with 900 meter long two laning tunnel. It passes through almost hilly and rolling terrain. A total number of three villages namely Vele, Wanyachiwadi and Khandala come under Satara district are spread in and around of project area. As regard to Taluk wise, the proposed project road would traverse through Vele village in Wai taluka and two villages in Khandala taluka respectively. The length of habitations lie between 200 meter to 300 meter in each side of the approach road.

The starting point of realigned stretch starts just after the town Vele on Satara side. A small built-up location named Ajnuj is present on right side of the alignment on Pune side whereas Wanyachiwadi village is situated at around 500 m on left side of the alignment, on Pune side.

Table 1.1: Details of Project Corridor				
SI. No.	Particular	Design Chainge	Proposed Length (Km.)	
1	Approach Road	771.600 - 779.000 (including Tunnel)	5.300	
2	Proposed Tunnel	773.500-774.700	1.200	
Total Length			6.500	

1.3 NEED OF THE CONSTRUCTION OF PROPOSED ROAD/TUNNEL



The horizontal alignment connecting the existing tunnel at Khambatki ghat has poor geometry with deficient visibility. Congestion, bottlenecks are very frequently seen on existing road with long queues of vehicular movement, resulting in hazardous and unsafe condition.

Several accidents have taken place every year on the Pune-Satara stretch of the national highway. Most of the mishaps are caused by the sharp turns on the existing road. The increasing volume of traffic coupled with few major industrial complexes along the stretch has rendered the road capacity inadequate to contain the vehicular traffic on the route. In this regard, the National Highways Authority of India has proposed construction of a new 6 laning tunnel (Two 3 lane twin tubes) with approaches at Khambatki ghat section. Once the existing four lane national highway is converted into six lane and new tunnel is constructed, it will ease out the traffic problems and reduce the number of accidents to great extent.

Vehicular movement often slows down due to narrow road and steep gradient. The travelers usually take more than half an hour to cross the five km. long ghat road. Once the new tunnel comes up, the ghat road will not be further required. The existing four-lane road between Satara to Pune has number of points that are dangerous and have reported hotspot of frequent accidents. Most of these points are sharp or blind turns, if the rider loses his control over steering, it would lead to fatal accident.

The very famous tourist locations of the nation such as Mahabaleshwar, Panchgani, the Sajjangad and Kas plateau are close to the project road. A large scale of tourists visit all these places by which the road remains overcrowded throughout the year. Due to the above mentioned problems, in Khambatki ghat section particularly, people face a major inconvenience which is time consuming.

The main objective of the construction of tunnel and widening of the existing 4 laning road into six lane is to improve the performance of the national road transport network. Apart from connectivity considerations, the corridor has been perceived to be important from the perspective of development in Satara district in general and Khambatki region in particular.



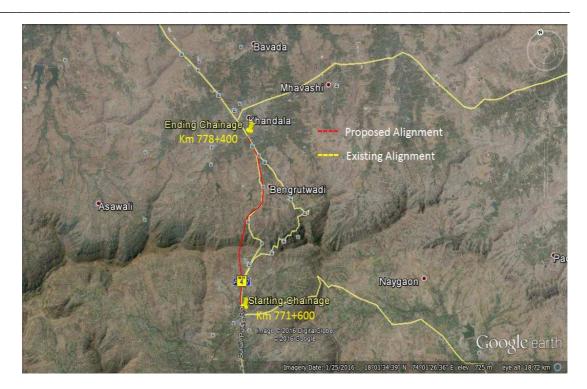


Fig-1: Existing and Proposed Road Section of NH-4 at Khambatki Ghat

1.4 SCOPE OF THE PROJECT

The scope of the project is to prepare a DPR for 1.2 km. long six laning tunnel with realigned approaches connecting proposed six lane roads on either side of the tunnel at Km.772.500 and Km. 779.000 respectively. Since this tunnel portion falls in Khambatki Ghat section where the road stretch is to be 6-lane divided carriageway, it is decided by NHAI to have twin tubes of 3-lanes each. The total length of the proposed project including tunnel is approx. six and half km. and the approach road to the tunnel is aligned from Vele, Wayachiwadi and Khandala villages ensuring land acquisition requirement is minimal. The predominant land within proposed alignment is either covered by forest or is barren/waste land. As far as possible, the construction of the alignment shall be carried out within the available government land.



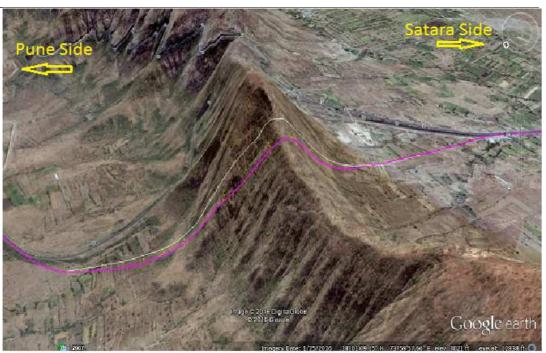


Fig-2: Proposed Tunnel location

1.5 SOCIAL SCREENING/ INITIAL SOCIAL IMAPCT ASSESSMENT

The social screening study is carried out to gauze the magnitude of impact and people's overall perception about the proposed project. It helps to understand if the project impacts are likely to be minor or limited, which can easily be predicted and evaluated, and for which mitigation measures can also be prescribed easily. Generally, information on social screening is obtained during field visit to the areas that may probably be affected by the project road and through discussions with people whom it may affect positively or otherwise. The social screening is also done to confirm whether this indeed requires a full-scale Social Impact Assessment (SIA) or not. Usually, a comprehensive SIA is required for large projects, which entails a more detailed study, time, and resources.

In order to assess the potential impacts along the project corridor, critical sections from social impact point of view are identified. Such locations are identified with the potential issues and possible options for minimising the impact are to be suggested. The primary information is collected through informal consultations with road sided people to comprehend the socio-economic characteristics, physical features and cultural set-up of the



project area before undertaking detailed field investigations. Relevant land inputs are also collected from local Revenue/Taluka offices.

As per the data obtained from the Revenue Office, the entire tract of land in project area belongs to Government constituting a major chunk owned by Satara Forest Division. The proposed approaches also need some portion of land owned by private land owners. It is inferred that the land requirement for project road will not pose any major problem. For construction of approaches for both ends of the tunnel about 25 hectares of land has to be acquired.

1. 6 OBJECTIVE OF THE STUDY

The objective of the survey is to generate an inventory of social impacts on the likely to be affected people by the project. The project impacts will be identified through a series of exercises including social screening during early project preparation stage and public consultations with villagers and road users. The screening on road section focuses on:

- a) identification of social issues such as impact on livelihood due to land acquisition;
- b) current usage of land in proposed ROW;
- c) potential impact of the proposed project on productive resources, natural resources, common property resources and social infrastructures;
- d) social, economic, cultural and demographic characteristics of the potential project affected population;
- e) identification and special need analysis of vulnerable groups, ethnic minorities and SC/STs among the population;
- f) consultation with the PAPs

1.7 METHODOLOGY

Approach and methodology mainly consist of quantitative and qualitative tools and techniques. The following are the activities undertaken for the social screening or initial social assessment survey.



1.7.1 Collection and review of project literature

This phase intends to familiarize with the concerned and important stakeholders to identify and collect the available literature and to scope the activities. The activity is involved in two pronged approach (a) discussions with Project Implementing authorities and other concerned, b) collection of available relevant project literature. The laws and regulations enacted by Government of India and state government of Maharashtra relevant to tunnel cons construction and R & R issues. Consultations were held with concerned revenue/ government officials to establish the ownership of land. Literature review and informal discussions formed the basis for identification of key stakeholders.

1.7.2 Rapid reconnaissance survey to familiarize field activities

In addition to review of literature and informal consultations, rapid preliminary field visits were conducted as part of ground truthing exercise. The reconnaissance survey helped to gather firsthand information on the likely to be affected area, revenue villages, land details e.g. private, government and forest etc.

1.7.3 Identification of Properties

For the construction of new alignment, the social team conducted an identification exercises on different types of land within proposed ROW. Proposed ROW varies from 60 to 100 meters where in forest area proposed ROW is 70 meters. Prior to initiation of physical identification of the properties, a detailed discussions were held with concerned officials to collect information on ownership of land. It is apparent that the proposed 6 laning tunnel does not necessitates any land acquisition as it would pass through a stiff valley comprising forest and government land. For, construction of 6 laning approaches private land may be required. Since, 3(a) and 3(A) activities are underway hence the type and classification of land and exact number of private land owners can not be ascertained at this stage.

As per our preliminary assessment it is found that the impact on private properties may be minimal. But, the exact number of likely to be affected households and thereby magnitude of impact can be determined after the



completion of survey. All the affected properties belonging to legitimate owners shall be incorporated in the subsequent reports.

Acquisition of land may cause social disruption and economic loss for project affected persons (APs) and their families. It is, therefore, important that disturbances and losses of APs due to project shall be minimized through proper planning. The Resettlement Action Plan needs a broad and comprehensive study and that will be incorporated in subsequent reports. While finalizing the road alignment efforts has to be made by adopting appropriate engineering designs, to minimize resettlement impacts.

1.7.4 Extent of Land Acquisition

With regard to land acquisition the proposed project road would require both private and government land of approx. 54 hectares. Of the total required land, approx. 16 hectares is already available with the government. Hence, additional 38 ha. of land is required for construction of tunnel and approaches.

1.7.5 Public Consultation Meetings

Meaningful, informed, and effective public consultations are inevitable for successful of any infrastructural project. Approaches to the public involvement can yield productive, long-term and trusting relationships between citizen and government. Consultative procedures are critical but very important aspects in entire social impact assessment process. Public consultations in social impact assessment facilitates to make a rapport with the villagers and simultaneously provide clear communication about the purpose of the consultation and its relationship to the larger decision-making process. In this regard, the social assessment ensures the involvement of local communities through participatory and structured consultations that would endorse and integrate important resettlement issues in the project cycle.

1.8 LEGAL POLICIES AND RESETTLEMENT FRAMEWORKS

1.8.1 Principles and Policies needs to be adopted for the Project

The core involuntary resettlement and rehabilitation principles for this project are: (i) land acquisition, and other involuntary resettlement impacts will be avoided or minimized exploring all viable alternative project designs; (ii) where unavoidable, time-bound resettlement action plan (RAP) will be prepared and APs will be assisted in improving or at least regaining their pre-project standard of living; (iii) Consultation with PAPs on compensation, disclosure of resettlement information to APs, and participation of in planning and implementing sub-projects will be ensured; (iv) payment of compensation to PAPs for acquired assets at replacement rates; (v) 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.

1.8.2 Minimisation of Social Impacts

According to the broad principle mentioned above, an appropriate decision by engineering, environmental and social impact assessment teams has to be taken to avoid land acquisition from fertile lands if it is required from land owners for construction of approached road.

1.8.3 Rehabilitation and Relocation of PAPs

Restoring livelihood for project affected people is an important task in resettlement plan. The required support shall be extended to the affected households during relocation (if required) and a time bound, fair & just entitlements shall also be given to the people to compensate and regain their pre-project level status.

1.8.4 Indigenous People and Vulnerable Groups

Indigenous people are defined as those having a distinct social, cultural, economic, and political tradition and institutions compared with the mainstream or dominant society. According to Indian Constitution, indigenous people with similar cultural characteristics are recognized as Scheduled Tribes (ST). The number of likely to be affected SC, ST, ethnic and other minority community population shall be covered in census and socio economic survey. Proper provisions and adequate measures need to be taken to protect these vulnerable community.



1.8.5 Gender Issues

The consideration of gender issues is crucial in the planning and implementation of resettlement and rehabilitation programs. Special needs and requirements of women must be considered and addressed in all program/aspects—site selection, site and housing design, provision of civic infrastructure, access to service, provision of land and housing title, payment of compensation, and income restoration etc. According to LARR Act the widowed, divorced and women deserted by family is to be considered separate family. As per the primary assessment, women's participation and attendance in meeting is not up to the mark in project area. However, majority of them also do not have decision making power at household level financial matters. Social and cultural factors may exclude women from participating actively in planning, implementing, and executing resettlement activities. Special efforts need to be made to ensure their inclusion. The resettlement policy provides women to be involved in the process of sustainable development.

1.8.6 National Highways Act- 1956

Land acquisition for National Highways is done in accordance with the procedure laid in "The National Highways Act, 1956". The act is applicable to the whole of India except the state of Jammu and Kashmir. The policy provides a broad guideline of procedure for land acquisition. The National Highways Act 1956 (NH Act) is commonly used for acquisition of land for public purpose of the road. It is used at the State level made to suit local requirements.

As a general practice Revenue Divisional Officer / Joint Collector in the District level is appointed as Competent Authority for Land Acquisition (CALA). Competent authority means any person or authority authorised by the Central Government, by notification in the Official Gazette, to perform the functions of the competent authority for such area as may be specified in the notification.

1.8.7 The Right To Fair Compensation And Transparency In Land Acquisition, Rehabilitation And Resettlement Act, 2013

The 1894 Land Acquisition Act was repealed and a new comprehensive legislation was brought in Parliament and it came to effect on 1^{st} January

2014. This Central Act ensures, in consultation with institutions of Local Self-Government and Gram Panchayats established under the Constitution, a humane, participative, informed and transparent process of land acquisition for industrialization, development of essential infrastructural facilities and urbanization with the least disturbance to the owners of the land and other affected families and provide just and fair compensation to the affected families whose land has been acquired or proposed to be acquired or are affected by such acquisition and make adequate provisions for such affected persons for their rehabilitation and resettlement and ensuring that the cumulative outcome of compulsory acquisition should be that the affected persons become partners in development leading to an improvement in their post-acquisition social and economic status and for matters connected therewith or incidental thereto.

The provisions of this Act Under Section 2(1) relating to land acquisition, compensation, rehabilitation and resettlement, shall apply, when the appropriate government acquires land for its own use, hold and control, including for Public Sector Undertakings and for public purpose. Under LARRA- 2013 for land acquisition for various types of project, provisions of consent has been inbuilt to secure the interest of the stakeholders. As far as this project is concerned [when the appropriate government acquires land for infrastructural projects under Section-2 (1) (B) (Vii)] consent is not required.

Table 1.2: Consent Requirements For Project As per Types and Sites				
	Consent			
Protect Type + Area	Land Owners and Tenants	Gram Sabha/ Panchayat/ Autonomous District Council		
Public + Non- Scheduled Area	Not required	Not required		
Public + Scheduled Area	Not required	Required		
PPP + Non-Scheduled Area	Required (70%)	Not required		
PPP + Scheduled Area	Required (70%)	Required		
Private + Non- Scheduled Area	Required (80%)	Not Required		
Private + Scheduled Area	Required (80%)	Required		

Source: LARR Act-2013, Ministry of Law and Justice





The LARRA, 2013 provides a framework for facilitating land acquisition in India. LARRA, 2013 enables the State Government to acquire private land for public purposes. With regard to land acquisition for the proposed alignment, NHAI has to adopt its own act (Schedule-IV, LARR Act). For provision of compensation and other applicable entitlements it is bound to abide by the guiding principles laid down under Schedule- I and II, LARR Act-2013. Table 5.2 presents the sections of LARRA Act-2013.

1.9 Scheduled Caste and Scheduled Tribes Orders (Amendment) Act, 2002

The Act provides for the inclusion in the lists of Scheduled Tribes (ST), of certain tribes or tribal communities or parts of or groups within tribes or tribal communities, equivalent names or synonyms of such tribes or communities, removal of area restrictions and bifurcation and clubbing of entries; imposition of area restriction in respect of certain castes in the lists of Scheduled Castes (SC) and the exclusion of certain castes and tribes from the lists of SCs and STs.

1.10 Various Provisions Under LARR Act-2013

Table: 1.4 - THE LAND ACQUISTION, REHABILATATION AND
RESETTLEMENT ACT, 2013

1. LAND ACQUISITION

In case of land acquisition the amount of compensation to be determined is that of the value of the land +100 percent Solatium+12 percent additional market value from the date of notification to taking over the possession or award whichever is higher. Market value of land as mentioned under section 26 of LARRA Act-2013 needs to be multiplied by the radial factor (based on the distance of project from urban area as notified by the appropriate government- e.g multiplication of 2 in Rural area and Multiplication of 1 in Urban area) plus value of assets attached to land or building (mentioned in Section 29 of LARRA Act-2013) Plus Solatium (solatium includes 100% market value multiplied by 2 plus value of assets in Rural area and multiplied by 1 plus value of assets in urban area)

2. PROVISION OF HOUSING UNITS IN CASE OF DISPLACEMENT

If a house is lost in rural areas, a constructed house shall be provided



as per the Indira Awas Yojana specifications. If a house is lost in urban areas, a constructed house shall be provided, which will be not less than 50 sq mts in plinth area.

The benefits listed above shall also be extended to any affected family which is without homestead land and which has been residing in the area continuously for a period of not less than three years preceding the date of notification of the affected area which has been involuntarily displaced from such area:

Provided that any such family in urban areas which opts not to take the house offered, shall get a one-time financial assistance for house construction, which shall not be less than one lakh fifty thousand rupees:

Provided further that if any affected family in rural areas so prefers, the equivalent cost of the house may be offered in lieu of the constructed house:

Provided also that no family affected by acquisition shall be given more than one house under the provisions of this Act.

Explanation- The houses in urban areas may, if necessary, be provided in multi-storied building complexes

3. CHOICE OF ANNUITY OR EMPLOYMENT

The appropriate Government shall ensure that the affected families are provided with the following options:

(a) where jobs are created through the project, **mandatory employment at a rate not lower than the minimum wages** provided for in any other law for the time being in force, to at least one member per affected family in the project or arrange for a job in such other project as may be required; or

(b) one time payment of five lakhs rupees per affected family; or

(c) annuity policies that shall pay not **less than two thousand rupees per month per family for twenty years,** with appropriate indexation to the Consumer Price Index for Agriculture Labourers.

4. SUBSISTENCE GRANTS

The appropriate Government shall ensure that the affected families are provided with the following options:

Given monthly subsistence allowance equivalent to **three thousand rupees per month for a period of one year** from the date of award. In addition to



this amount, the scheduled castes and the scheduled Tribes displaced from Scheduled Areas shall receive an **amount equivalent to fifty thousand rupees.**

5. TRANSPORTATION COST

The appropriate Government shall ensure that the affected families are provided with the following options:

Each affected family which is displaced shall get a one time financial assistance of **fifty thousand rupees** as transportation cost for shifting of the family, building materials, belongings and cattle.

6. CATTLE SHED/ PETTY SHOPS COST

Each affected family having cattle or having a petty shop shall get one-time financial assistance of such amount as the appropriate Government may, by notification, specify subject to a **minimum of twenty-five thousand rupees** for construction of cattle shed or petty shop as the case may be.

7. ONE TIME GRANTS TO ARTISAN, SMALL TRADERS AND OTHERS

Each affected family of an artisan, small trader or self-employed person or an affected family which owned non-agricultural land or commercial, industrial or institutional structure in the affected area, and which has been involuntarily displaced from the affected area due to land acquisition, shall get one-time financial assistance of such amount as the appropriate Government may, by notification, specify subject to a **minimum of twenty-five thousand rupees.**

8. ONE TIME RESETTLEMENT ALLOWANCE

Each affected family shall be given a one-time "Resettlement Allowance" of fifty thousand rupees only.

9. STAMP DUTY REGISTRATION

(1). The stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the Requiring Body.

(2). The land for house allotted to the affected families shall be free from all encumbrances.

(3). The land or house allotted may be in the joint names of wife and husband



of the affected family.

10. PROVISION OF INFRASTRUCTURAL AMENITIES

1. Roads within the resettled villages and an all weather road link to the nearest pucca road, passages and easement rights for all the resettled families be adequately arranged.

2. Proper drainage as well as sanitation plans executed before physical resettlement.

3. One or more assured sources of safe drinking water for each family as per the norms prescribed by the Government of India.

4. Provision of Drinking water for cattle.

5. Grazing land as per proportion acceptable in the State.

6. A reasonable number of Fair price Shops

7. Panchayat Ghars, as appropriate.

8. Village level Post Offices, as appropriate, which facilities for opening saving accounts.

9. Appropriate seed-cum-fertilizer storage facility if needed.

10. Efforts must be made to provide basic irrigation facilities to the agricultural land allocated to the resettled families if not from the irrigation project, then by developing a cooperative or under some Government scheme or special assistance.

11. All new villages established for resettlement of the displaced persons shall be provided with suitable transport facilities which must include public transport facilities through local bus services with the nearby growth centres/ urban localities.

12.Burial or cremation ground, depending on the caste communities at the site and their practices.

13. Facilities for sanitation, including individual toilet points.

14. Individual single electric connections (or connection through nonconventional sources of energy like solar energy), for each household and for public lighting.

15.Anganwadi's providing child and mother supplemental nutritional services.

16. School as per the provisions of the right of children to Free and Compulsory Education Act, 2009 (35 of 2009);

17. Sub-health centre within two kilo metres range.

18. Primary Health Centre as prescribed by the Government of India.

19. Playground for children.

20. One community centre for every hundred families.

21. Places of worship and chowpal/tree platform for every fifty families for community assembly, of numbers and dimensions consonant with the affected area.

22. Separate land must be earmarked for traditional tribal institutions.

23. The forest dweller families must be provided, where possible, with their traditional rights on non-timber forest produce and common property resources, if available close to the new place of settlement and, in case any such family can continue their access or entry to such forest or common property in the area close to the place of eviction, they must continue to enjoy



their earlier rights to the aforesaid sources of livelihood.

24. Appropriate security arrangements must be provided for the settlement, if needed.

25. Veterinary service centre as per norms.

11.SPECIAL PROVISIONS FOR SCHEDULED CASTE AND SCHEDULED TRIBES

(1) In case of a project involving land acquisition on behalf of a Requiring Body which involves involuntary displacement of the Scheduled castes or the Scheduled Tribes families, a Development plan shall be prepared, in such form as may be prescribed, laying down the details of procedure for settling land rights due but not settled and restoring titles of tribals on alienated land by undertaking a special drive together with land acquisition.

(2) The Development Plan shall also contain a programme for development of alternate fuel, fodder and non-timber forest produce resources on non-forest lands within a period of five years sufficient to meet the requirements of tribal communities as well as the Scheduled castes.

(3) The concerned Gram Sabha or the Panchayats at the appropriate level in the Scheduled Areas under the Fifth Schedule to the Constitution or , as the case may be, Councils in the Sixth Scheduled Areas shall be consulted in all cases of land acquisition in such areas, including acquisition in case of urgency, before issue of a notification under this Act, or any other Central Act or a State Act for the time being in force as per the Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (40 of 1996) and other relevant laws.

(4) In case of land being acquired from members of the Scheduled Castes or the Scheduled Tribes, at least one-third of the compensation amount due shall be paid to the affected families at the outset as first instalment and the rest shall precede the taking over of the possession of the land.

(5) The Scheduled Tribes affected families shall be resettled preferably in the same Scheduled Area in a compact block, so that they can retain their ethnic, linguistic and cultural identity.

(6) The resettlement areas predominately inhabited by the Scheduled castes and the Scheduled Tribes shall get land, to such extent as may be decided by the appropriate Government, free of cost for community and social gatherings.

(7) In case of a project involving land acquisition on behalf of a Requiring body, the affected families belonging to the Scheduled Castes and the Scheduled Tribes resettled out of the district of acquisition will get twenty-five percent. Higher monetary benefits under Rehabilitation and Resettlement Scheme.

(8) Any alienation of tribal lands or lands belonging to members of the Scheduled Castes in disregard of the laws and regulations for the time being in force shall be treated as null and avoid; and in the case of acquisition of such lands, the rehabilitation and resettlement benefits shall be available to the original tribal land owners or land owners belonging to the Scheduled Castes.

(9) The affected Scheduled Tribes, other traditional forest dwellers and the Scheduled castes families having fishing rights in a river or pond or dam in the



affected area shall be given fishing rights in the reservoir area of the irrigation or hydel projects.

(10) Where the affected Scheduled Castes and Scheduled Tribes are relocated outside of the district then they shall be paid an additional twenty-five percent. Rehabilitation and Resettlement benefits to which they are entitled in monetary terms along with a one-time entitlement of fifty thousand rupees.

1.11 ENTITLEMENT MATRIX

The broad entitlement matrix comprising the R & R compensation and assistance is presented below. The titleholder APs 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 Act gives directives for the acquisition of land in the public interest and even provides assistance under R & R provision for landless, agricultural labours, tenants, sharecropper, dependents and those who reside preceding three years prior to land acquisition for their loss of livelihood/income.

