



सत्यमेव जयते

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(MoRT&H)**

**GREEN NATIONAL HIGHWAYS CORRIDOR PROJECT
(GNHCP)**

Resettlement Action Plan

For

Rehabilitation and Upgradation to Intermediate lane/2-lane/2-lane with paved shoulders/4-lane configuration of Paonta-Gumma section (Km 0.000 to Km 94.900) of NH-707 in the State of Himachal Pradesh under Green National Highways Corridor Project (GNHCP) with the loan assistance of World Bank

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ABBREVIATIONS

B.P.L.	:	Below Poverty Line
BP	:	Bank Policy
B.S.R.	:	Basic Schedule of Rates
HLARRP	:	Himachal Pradesh Land Acquisition, Resettlement and Rehabilitation Policy
C.O.I	:	Corridor of Impact
C.P.R.	:	Common Property Resources
RRO	:	Rehabilitation and Resettlement Officer
CD	:	Cross Drainage
Ch.	:	Chainage
CW	:	Carriageway
DLC	:	District Level Committee
EP	:	Entitled Person
EA	:	Executing agency
ESMF	:	Environment and Social Management framework
GP	:	Gram Panchayat
GoH	:	Government of Himachal Pradesh
GDP	:	Gross Domestic Product
GRC	:	Grievance Redreassal Committee
Ha	:	Hectare
IEC	:	Information Education Communication
Km.	:	Kilometer

RTFCTLARR	:	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement
LHS	:	Left Hand Side
m.	:	Meter
Max.	:	Maximum
Min.	:	Minimum
MoRT&H	:	Ministry of Road Transport and Highways
N.G.O.	:	Non-Government Organization
NRRP	:	National Resettlement and Rehabilitation Policy, 2007
N.H.A.	:	National Highways Act
NH	:	National Highways
NHDP	:	National Highways Development Project
GNHCP	:	Green National Highway Corridor Project
OD	:	Operational Directive
SCHM	:	Suggestion Complain Handling Mechanism

EXECUTIVE SUMMARY

E.1 PROJECT BACKGROUND & INTRODUCTION

The Road wing of MORTH has taken up massive development work of existing National Highways in the country. Up gradation, improvement, widening and strengthening of main and important arteries of National Highway network is taken up under 'National Highway Development Programme' (NHDP). About 19,702 km single lane or intermediate lane National Highways (non-NHDP roads) exist in the country. Also substantial length of such National Highways has already been taken up for improvement in one scheme or the other but 5,937 km stretches are not covered for improvement under any scheme. The Ministry of Road Transport and Highways with an aim to improve interconnectivity has under taken development of about 3800 km single or intermediate lane National Highways to 2 lane/2 lane with hard shoulders configuration under National Highways Interconnectivity Project (NHIIP) aided by the World Bank. The total No of Project Roads under this scheme is 33 including Paonta - Guma Section of NH 72B (New NH-707) in Himachal Pradesh.

The Ministry of Road Transport and Highways (MORTH), as the employer has commissioned the Consultancy Services of Consulting Engineers Group Ltd, Jaipur (CEG), for Preparation of Detailed Project Report for Rehabilitation and Upgrading to 2 Lane/2 Lane with paved shoulder configuration and strengthening of Paonta Sahib-Guma Section of National Highway No. 72B (New-NH-707) in the State of Himachal Pradesh (Package No. SP/C/5). In pursuance to the above, the consultants commenced the service w.e.f 15th June, 2010. The Final DPR of the project is submitted vide letter no. CEG/PR/DPR/Pao-Guma/NH-72B/220 dated 11th June, 2014. Accordingly Modified DPR after incorporating all comments was approved vide letter No. PW/CE-NH-WB/NH-72B (Ponta-Guma km 0/0 to 97/00)- 1121-26 dated 20.12.2017. Further in December, 2018, it was suggested by PWD/RO MORTH to modify DPR as per latest World Bank Guidelines and requirements after World Bank site visits and various meeting at CE (NH), World Bank, and MORTH. To modify DPR as per latest guidelines and Update the project cost as per revised proposal, additional consultancy services was asked to execute in above contract that was recommended to CE(EAP) MORTH by RO MORTH vide letter RO/HP/CONSULTANCY(NH-72B)/2018-19/383 dated 20.03.2019. This DPR incorporates all the comments/suggestions for latest Modification.

The main objective of the consultancy service is to establish the technical, environmental, social, economic and financial viability of the project and prepare detailed project reports for rehabilitation and upgrading of the existing intermediate /single lane road to 2-lane/2-lane with paved shoulders configuration and/or its strengthening. The location map of the project road is given in figure below.

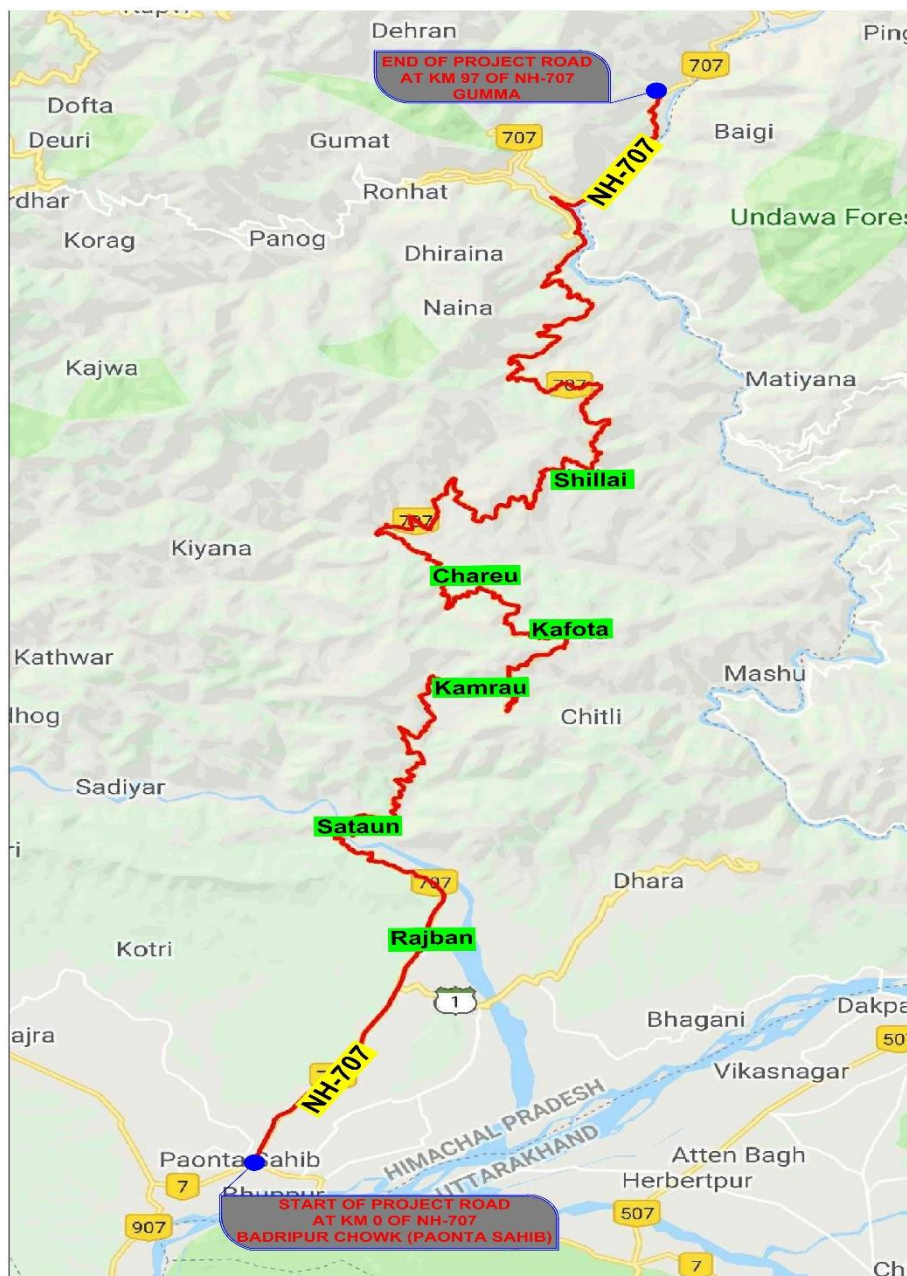


Figure 0-1: Location Map of Paonta -Gumma Section of NH-707

E.2 PROJECT DESCRIPTION

Additional land area is needed for various purposes namely, widening of project road, junction improvement, Curve improvements etc. Approximately, **25.4892** hectare of additional land area which includes **2.2998** ha of Govt. land and **23.1894** ha private land would be required for the project road from 29 revenue villages. Efforts have been made to minimize the adverse impacts of the project by (i) utilizing available ROW as much as possible, (ii) adopting the principle of Corridor of Impact (CoI) for land requirements in open sections of project stretch instead of having a uniform land width throughout the road stretch (iii) different type of cross sections has been used for different locations to minimize the impact.

After detailed discussion with MoRTH, the project road is proposed to be developed under four number of packages as shown in table below:

Table 0-1: Project Road

Package No.	Place		Existing Chainage		Design Chainage		Length (km)
	From	To	From	To	From	To	
I	Paonta Sahib	Hewna	0.000	25.345	0.000	25.000	25.000
II	Hewna	Ashyari	25.345	50.700	25.000	50.000	25.000
III	Ashyari	Shri Kyari	50.700	76.010	50.000	75.000	25.000
IV	Shri Kyari	Gumma	76.010	95.922	75.000	94.900	19.900
Total Length							94.900

Source: Final DPR survey

Based on traffic scenario and present road condition, the development proposal for the road project has been made as follows.

(i) The initial 1.5 km of road stretch is under built-up area of Paonta Sahib and hence proposed to be widened to four lane configuration.

(ii) Beyond this, the project road is surrounded by industrial area and scattered built up area up to Km 11.500 is proposed to develop as two lane with paved shoulder configuration along with provision of footpath. The project road up to Sataun (Km 18) carries heavy amount of truck load and hence is being proposed to be developed as two lane with paved shoulder configuration.

(iii) Due to less traffic and existing road having single lane /intermediate lane, Proposal made for two lane only up to Ch. 70+000.

(iv) After Ch. 70+000, only intermediate lane proposal was finalized by MORTH and World Bank officials due to less traffic. Hence beyond this point the intermediate lane configuration with geometrics improvement is proposed.

The project include 1 Major bridge, 13 Minor bridges and 347 culverts. Various Engineering (Breast Wall, Gabion Structures, Toe Wall, Retaining Structure with Gabion Facing etc.) and Bio-engineering (Erosion Blanket, Hedge Brush Layer, bamboo plantation etc.) measures for slope protection will be adopted.

Various provisions like Thrie beam crash barriers, parapet wall, road studs, rumble strip, Road Signs and Road Markings is proposed along the project road to improve the safety for the commuters. Facilities as Bus bays are truck lay-by are provided. Solar lights and Water harvesting are also proposed under facilities in the project.

E.3 SOCIO ECONOMIC PROFILE OF THE PROJECT AREA

The Sirmaur District has 5,29,855 and Shimla District has 8,14,010 Population as per 2011 Census of India. Population density per km sq in Himachal Pradesh is 123, while in project districts Shimla and Sirmaur it is 159 and 188 respectively. The sex ratio of Sirmaur district is 918 against of Shimla district's 915. Literacy rates in the project districts are good as 84% in Shimla and 79% in Sirmaur district. Shimla district has Human development index of 0.409 and Sirmaur has 0.433 as per Census data 2011.

E.4 R & R PRINCIPLES, POLICY FRAME WORK & ENTITLEMENT MATRIX

A Resettlement Policy Framework has been prepared by the Ministry of Road, Transport & Highways of Government of India for Green National Highways Corridor Project (GNHCP). This RPF includes resettlement and rehabilitation principles and approach which is to be followed in minimizing and mitigating adverse impacts likely to be caused by the project implementation, entitlements as per eligibility criteria and commensurate to the type and nature of impact, institutional arrangements, monitoring and evaluation and grievance redressal mechanism etc.

E.5 STAKEHOLDER'S CONSULTATIONS AND DISCLOSURE

Public information and consultations were held during the social screening, census cum socio-economic survey stages. The different techniques of consultation with stakeholders were used during project preparation, viz., public meetings, group discussions, interactions with affected households, media interactions etc. The consultations have also been carried out with special emphasis on the vulnerable and women groups. It ensured participation of potential project affected persons (PAPs), local community and other stakeholders.

During consultations brief description about the project, road development agency, involvement of the funding agency, likely adverse impacts and positive impacts, employment generation, etc were discussed. Concerns, views and suggestions expressed by the participants during these consultations have been shared with design team for minimizing the impacts wherever possible. District level Consultations were held at 6 places and Village level Consultations were held at 20 Panchayat covering 23 villages during the project preparation.

Concerns and apprehensions expressed by the community covered compensation amount for land, structure and other assets, impacts on structures, impacts on sources of earning, road accidents, etc. Overall, project affected persons and other stakeholders are in favor of the proposed project. The community perceives that the project will help development in the area and also generate employment opportunities.

E.6 ANALYSIS OF ALTERNATIVES

The project is to widen the existing 2 lane road to 2 lanes with paved shoulder and hence there is no alternative site involved. Keeping in view the site conditions and the scope of development of the area, the 'with' and 'without' project scenarios have been compared under chapter-6 of this report. It was concluded that "With" project scenario positive/beneficial impacts will enhance social and economic development of the region compared to the "Without" project scenario, which will further deteriorate the present Socio-environmental setup and quality of life.

The project will increase the potential of the area and fast connectivity between Himachal Pradesh, Uttarakhand and Haryana. Travel time will be reduced due to improved pavement conditions and road geometry. Trade of local produce like dairy products, agriculture products, and small scale industrial product will also be increased. Development of tourism and pilgrimage, Reduction in accidents, Improved quality of life for people etc. are some other benefits from the project.

E.7 PROJECT IMPACTS

According to census survey and updated 3D, a total of 1455 plots are getting affected which also includes 274 Structure (with & without Landholders). During study, only structure holders were surveyed because either land owners were unavailable or living outside the state, hence no information could be collected.

The land required as per final design, which is 25.49 ha, includes both government and private land. Out of 25.49 Ha, 23.19 ha is private land and 2.29 ha. Government Land.

Out of 1455 affected households, 1181 Titleholders (THs) are losing land only and 99 Titleholders (THs) are losing both land and structure. Other than that, 175 are Non-titleholders (NTHs) which are mostly Kiosks/temporary shops. Package-wise affected Households and population is given in below table.

As per the Census survey, a total of 290 structures will be impacted due to project activities which includes 274 private structures and 16 Community Property resources. Out of 274 private structures 99 belongs to Titleholders which includes residential, commercial and Residential cum Commercial, 175 belongs to Non-title holders (Squatters & Encroachers) which are located within PRow.

Out of 274 affected private structures, mostly (154 nos.) are commercial structure. About 66 nos. are resident-cum-commercial structures and 54 are residential structures.

Out of total 290 structures, 56.21% structures are permanent in nature which includes 16 CPRs/Govt. structures. About 31.03% of affected structures are temporary in nature and 12.76% structures are semi-permanent.

The socio-economic survey of affected households (losing structure) along with census survey was conducted in Sept.-Oct., 2019. During the census survey, details of 274 project affected households (PAHs) and 938 project affected persons (PAPs) were collected. Out of 938 PAPs, 55.54% are male and 44.46% are female. It is found that more of the families are nuclear families i.e, 149 (54.38%) than 125 (48.62%) of the joint families. Out of the 274 PAFs, 60.95% are General category, 14.96% belong to Other Backward Castes (OBC), and 11.68% are SC households impacted due to the project. As per census survey, none of the affected family belong to ST category. The literacy rate (read, write and understand) in the affected PAPs is around 83%. Among the literate PAPs, which completed up to primary, upper primary, high school, graduate and post graduate education level are 15.78%, 18.76%, 17.38%, 13.22% and 2.99% respectively. About 6% of the PAPs didn't respond about their educational qualification.

Occupational pattern reflects the dominant economic activity in the area. The affected PAPs are mainly engaged in trade and business (38%). A good percentage of earning members (22.12%) is either servicemen or are in professional jobs. Total 22% persons are engaged in agriculture activities and agriculture labor work.

As per available information collected during survey, the Income Level of the affected households is mostly (89%) above Rs. 1,20,000 per annum. About 11% families earn between 60,000 to 1,20,000 per annum.

As per the socio-economic survey, Women Headed Household and BPLs are least in number among the affected households. None of the affected household belong to ST category. Total affected SCs households are 32 Nos. There are 8 BPL families getting affected.

E.8 REHABILITATION & RESETTLEMENT BUDGET

Based on the Entitlement Matrix, the R&R budget for the Paonta-Gumma Road Project has been estimated. It comprises of two broad components namely compensation and assistance.

The total estimated R&R budget for the project works out to Rs. 91.72 crore of which Rs. 57.85 crore is towards compensation for land, cost of Structures is Rs.9.14 crore, Costs for R&R Assistances is 15.39 crore and Administrative expenses of 1.00 cr. 10% contingency is additional to Land, Structures, R&R Assistance and Administrative expenses.

E.9 INSTITUTIONAL ARRANGEMENT FOR RAP IMPLEMENTATION

Institutional arrangements for the implementation of RAP have been made fixed by making it a part of the RPF. The Institutional Arrangements will be set up at three levels viz., MoRT&H (Central Govt.), State Level and Sub-Project Level on partnership model wherein concerned agencies at different levels supplement and complement each other efforts. The key elements of institutional arrangements are co-operation/ support, collaboration and sharing of responsibilities with clearly defined roles, involvement of key stakeholders and vertical and horizontal linkages amongst different agencies.

E.10 GRIEVANCE REDRESSAL MACHANISM

Any disputes or grievances will be addressed through the grievance redressal mechanism proposed here. The GRCs are expected to resolve the grievances of the eligible persons within a stipulated time. The decision of the GRCs is binding, unless vacated by court of law.

The GRC will be constituted by the Project Authority with the aim to settle as many disputes as possible on LA and R&R through consultations and negotiations. There will be one GRC for each PIU. The GRC will comprise six members headed by a retired Revenue Officer/Social Welfare Officer not below Group I officer rank . Other members of the GRC will include the concerned Project Director-cum-Executive, a retired PWD Officer (not below the rank of Executive Engineer), RRO, representative of PAPs and Sarpanch (Elected Head of Village) of the concerned village.

Grievances of PAPs in writing will be brought to GRC for redressal by the RAP implementation agency. The RAP implementation agency 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 normally meet once in a month but may meet more frequently, if the situation so demands. A time period of 45 days will be available for redressing the grievance of PAPs. The decision of the GRC will not be binding to PAPs. The decision of the Grievance Committees will not be binding on the DPs and they will have the option of taking recourse to court of law, if s/he so desires at his or her own expense.

E.11 MONITORING AND EVALUATION (M&E)

The overall purpose of the monitoring is to keep track of the implementation processes and progress, achievement of performance targets fixed in the annual work plans, learning lessons and taking corrective actions to deal with emerging constraints and issues.

The evaluation study 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. Reports on the progress of RAP and TDP implementation including mobilization of staff members, opening of site offices, etc of the project would be prepared by Implementation agency and submitted to the R&R officer at sub-project level. The Monthly Progress Report shall be prepared by the Implementation agency. Quarterly Progress Reports shall be prepared by LA cum SDO, and six monthly progress reports shall be prepared by M&E agency. Evaluation Report shall be prepared by the M&E agency at the end of the project implementation as part of the project completion report.

The Resettlement Policy Framework (RPF) stipulates hiring services of an external agency (third party) for monitoring and evaluation of RAP implementation. This means the project authority through an external agency will carry out monitoring and evaluation from the subsequent month of the mobilization of RAP IA at project site. Internal monitoring will be carried out by the Social Officer of Project Coordination Unit (PCU) with assistance from R&R officer and RAP IA whereas external monitoring and evaluation will be carried by the third party engaged for the purpose. This will help monitor project activities closely. Regular monitoring by undertaking site visits and consultations with PAPs will help identify potential difficulties and problems faced in the implementation and accordingly help take timely corrective measures including deviations, if needed.

Components of monitoring will include performance monitoring i.e., physical progress of the work and impact monitoring and external evaluation. Indicative indicators to be monitored related to performance are provided in the following sections. In case during the project implementation, if some other indicators are found relevant they will also be considered for monitoring.

CHAPTER 1: PROJECT BACKGROUND AND INTRODUCTION

1.1 Project Background

The Road wing of MORTH has taken up massive development work of existing National Highways in the country. Up gradation, improvement, widening and strengthening of main and important arteries of National Highway network is taken up under 'National Highway Development Programme' (NHDP). About 19,702 km single lane or intermediate lane National Highways (non-NHDP roads) exist in the country. Also, substantial length of such National Highways has already been taken up for improvement in one scheme or the other, but 5,937 km stretches are not covered for improvement under any scheme. The Ministry of Road Transport and Highways with an aim to improve interconnectivity has under taken development of about 3800 km single or intermediate lane National Highways to 2 lane/2 lane with hard shoulders configuration under National Highways Interconnectivity Project (NHIP) aided by the World Bank. The total No of Project Roads under this scheme is 33 including Paonta - Gumma Section of NH 72B (New NH-707) in Himachal Pradesh.

The Ministry of Road Transport and Highways (MORTH), as the employer has commissioned the Consultancy Services of Consulting Engineers Group Ltd, Jaipur (CEG), for Preparation of Detailed Project Report for Rehabilitation and Upgrading to 2 Lane/2 Lane with paved shoulder configuration and strengthening of Paonta Sahib-Gumma Section of National Highway No. 72B (New-NH-707) in the State of Himachal Pradesh (Package No. SP/C/5). In pursuance to the above, the consultants commenced the service w.e.f 15th June, 2010. The Final DPR of the project is submitted vide letter no. CEG/PR/DPR/Pao-Gumma/NH-72B/220 dated 11th June, 2014. Accordingly Modified DPR after incorporating all comments was approved vide letter No. PW/CE-NH-WB/NH-72B (Ponta-Gumma km 0/0 to 97/00)- 1121-26 dated 20.12.2017. Further in December, 2018, it was suggested by PWD/RO MORTH to modify DPR as per latest World Bank Guidelines and requirements after World Bank site visits and various meeting at CE (NH), World Bank, and MORTH. To modify DPR as per latest guidelines and to update the project cost as per revised proposal under GNHCP (Green National Highway Corridor Project) scheme additional consultancy services was asked to execute in above contract that was recommended to CE(EAP) MORTH by RO MORTH vide letter RO/HP/CONSULTANCY(NH-72B)/2018-19/383 dated 20.03.2019. This DPR incorporates all the comments/suggestions for latest Modification.

The MoRTH intends to rehabilitate and up-grade the existing single lane/intermediate lane between Paonta Sahib to Gumma section of NH-707 to 2-lane/2-lane with paved

shoulders configuration. The total length of the project is 97 Km passing through Sirmaur and Shimla districts. The existing highway NH-707 alignment passes through North Eastern part of Himachal Pradesh. The Existing project road predominantly passes through 85.50 km mountainous terrain, 11.5 km in rolling and plain terrain. This SIA and RAP report pertains to Paonta Sahib to Gumma Section (Km 0.00 to Km 97.00) of NH-707 in the State of Himachal Pradesh.

1.2 Project Road Description

The Project Road, section of NH-707 (Old NH-72 B), starts at Badripur Chowk near Paonta Sahib at km 0 of NH-707 and ends near near Gumma at km 97 of NH-707. The total length of project road as per existing chainage is 97 km and passes entirely through Himachal Pradesh. Total length as per design comes out to be 94.900 km. The latitude and longitude of project road are as follows:

- (a) Start Point (Paonta Sahib) - 30°26' 40.18" N longitude, 77°36'23.026" E latitude
- (b) End Point (Gumma) - 30 ° 48' 15.113" E longitude, 77 ° 43' 43.566" N latitude

The Project Highway transverses through two districts viz Sirmaur and Shimla about 89 (km) of the highway is in Sirmaur district and rest about 8 (km) is passing through Shimla district. After detailed discussion with MoRTH, the project road is proposed to be developed under four number of packages as shown in table below:

Table 1-1: Project Road

Package No.	Place		Existing Chainage		Design Chainage		Length (km)
	From	To	From	To	From	To	
I	Paonta Sahib	Hewna	0.000	25.345	0.000	25.000	25.000
II	Hewna	Ashyari	25.345	50.700	25.000	50.000	25.000
III	Ashyari	Shri Kyari	50.700	76.010	50.000	75.000	25.000
IV	Shri Kyari	Gumma	76.010	95.922	75.000	94.900	19.900
Total Length							94.900

Source: CEG survey and Final DPR, 2020_____

Only first 11.500 Km of the road falls in plain / rolling terrain and rest about 85.500 km are in Mountainous /steep Terrain. From Km 11.500 to 18.500 the hills are low rise with mild slopes, consists of earthen boulder or soft rocks. From Km 18.500 onward the Terrain is Mountainous / steep as road traverses in interior and on high altitude. A Geographical map of route plan of Project Highway is shown in figure 1.1.

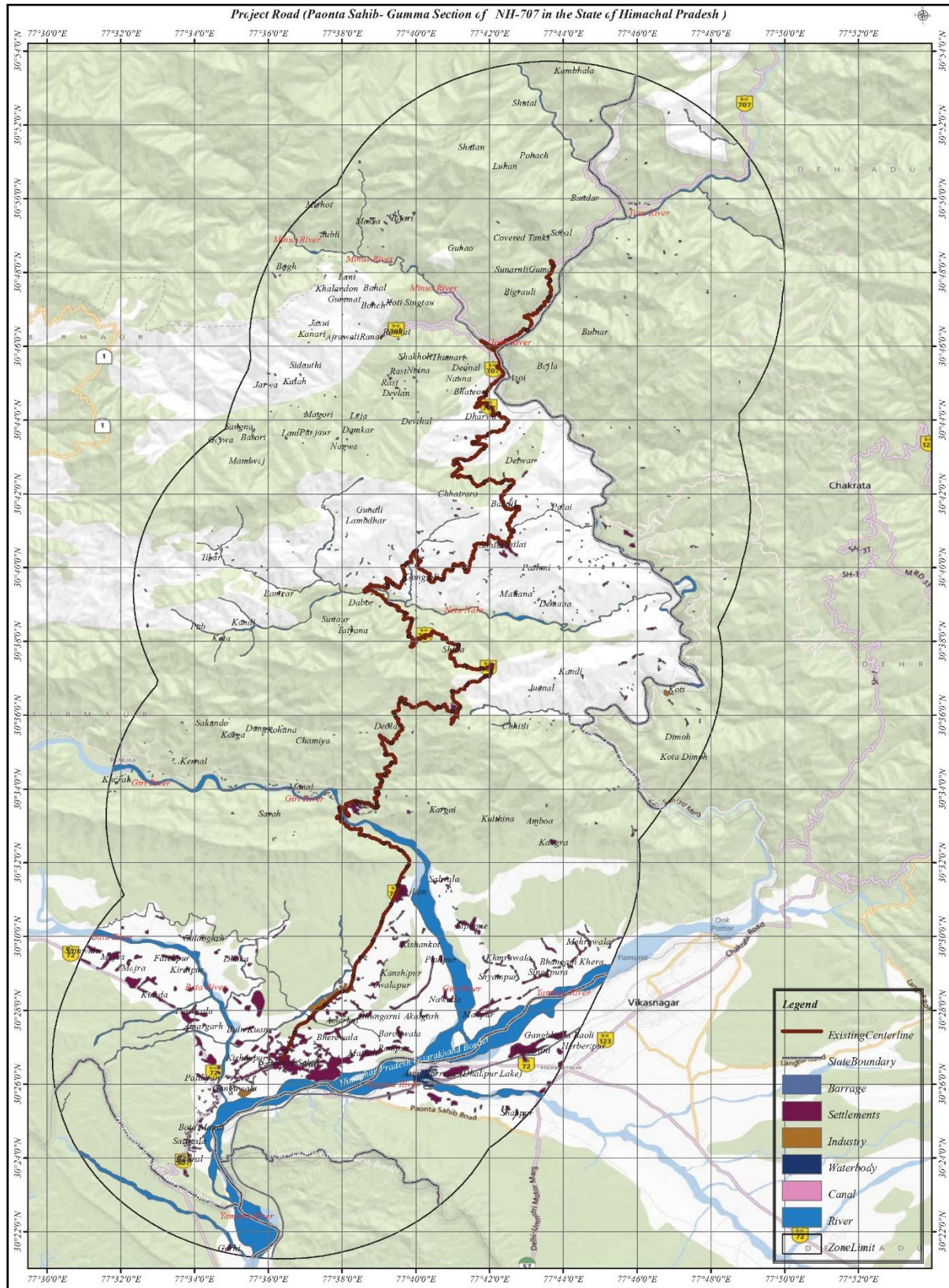


Figure 1-1: Geographical Map of Project Area

1.3 Importance and need for Project

The project road is a vital life line for the people living in interiors of Sirmour and Shimla District. Around 30 villages having about 2.7 lacs population will be directly benefited from this project road besides many other small habitats living in close vicinity of this road. It is the only single road connecting the area for commutation of people. At present, there are no major medical facilities and marketing area in the villages along the road and people are fully dependent on this road to access these facilities in the nearby town like Paunta, Sataun, Kafota, Shillai, Gumma for their day to day needs.

People of area grow cash crops mainly like Ginger, Potato, Cauliflower, Peas, capsicum, Tomato etc. Rajmah, Kulth, Maize & Urd Dals. Wall nuts are also grown in abundance in this area. All these produces are transported for marketing at New Delhi & Faridabad through this route only. In peak season, approximately 500 truck loads are daily transported to these markets from this area. The apple crop from Rohru, Jubbal and Chopal is also carried out only through this shortest road for marketing to New Delhi via Yamuna Nagar. Around 200 truckloads of apple ply through this road daily in productive season which may increase by another 200% as many other transporters using another route via Solan Parwanu will also shift to this route after its improvement. This route is the shortest route for New Delhi via Yamuna Nagar.

The area is rich in mines of lime stones between (Sataun) Km 18/0 to (Bohrad) Km 48/0 from where lime stone is quarried and stacked at stack yard in Sataun on Km 20/0 through small tippers from approved mines daily. From Sataun onwards, this lime stone is transported to various industrial units all over India after gradations as per requirements of industries. On a daily average, more than 180 truckloads carry this lime stone through Paonta Sahib and this project road is going to benefit these transporters directly by all means which will save their transportation time and running cost as well.

The project road will further improve the connectivity for tourists visiting various famous destinations like much famous Chanshal Valley Himalayan Raid de, pilgrimage places like Churdhar, Maa Hateshwari Temple, famous Mahasu Temple at Hanol and leading to much famous Chardham yatra.

Since the road further leads to Indo Tibetan border, its importance from defense point of view also makes it more important. Dehradun where Indian Military Academy (IMA) is located is just 45 Km away from its project road Starting point and Defence Research and Development Organisation has its heavy base on RD 12/0 (Rajban) along this project road.

There are 71 industries operating at present in industrial area along this road and around 17 more are in pipelines which are going to be operational in near future. The project road will be a major life line for these industries from where currently almost 200 trucks per day transport the raw material and manufactured produce to various destinations and the number is likely to be increased with setting up of new industries. A major cement plant has also been proposed at Gumma which will further generate more traffic through this route. The portion from Gumma km 97/0 to km 106/0 Feddus has been proposed under NH-(O) for further improvements which will further enhance the utility of this project road by feeding traffic to then on to Yamunotri, Gangotri etc. in Utrakhand and Chopal area which is most backward area of district Shimla at present. Also, people working in Industrial area along the road, commute daily using this road.

Hence it can be said that this project road is utmost required and will directly benefit the industries and the local people.

The map showing connectivity to different important Location and roads is shown in *Annexure-1A & Annexure-1B*.

1.4 Scope of Impact

The existing ROW, as per details obtained from State PWD, varies from 8 mtrs to 32.5 mtrs. Details of existing ROW is attached as **Annexure 2**. The proposed ROW for widening and improvement works is maximum 18 mtrs. At most of the locations, the existing ROW is sufficient and only at few locations, majorly requiring curve improvements, acquisition of private land will be required. To minimize the impact on private land, the design has such been finalized that few densely settlement areas the width of carriageway has been accommodated within the existing ROW. Also, different type of cross sections has been used for different locations to minimize the impact. The typical cross section schedule and its detail is given in **Annexure 3**. Thus, proposed width of carriageway is different in many sections of the project road. As per the final design, **23.1894** Ha of private land will be acquired and about 290 structures will be impacted due to the project.

The major towns along the project road are Paonta Sahib, Sataun, Kamrau, Kafota and Shillai. Apart from this, there are few small towns also along the project road. List of settlements and habitation along the project road is given in below table:

Table 1-2: List of Settlements and Habitation along the Project Road

Villages	Design Chainage	
	From	To
Paonta Sahib	0.000	0.630
Taruwala	0.630	2.320
Gondpur	2.420	3.520

Villages	Design Chainage	
	From	To
Nihalgarh	3.620	5.650
Jawalapur	5.650	5.950
Nariwala	5.950	6.450
Kishan Kot	6.450	7.250
Baliwala	8.450	9.250
Rajban	9.450	11.050
Rajban Chodiwala	11.380	11.640
Sirmour	13.120	13.220
Sataun	17.800	18.900
Barwas	28.400	29.400
Kamrau	30.300	32.600
Kamrau	32.800	33.100
Tillordhar	35.300	35.500
Dugana	37.900	38.200
Kafota	39.100	40.100
Shilla	42.000	42.200
Borar	44.900	45.150
Chadeu	47.520	48.800
Ashyari	49.920	50.020
TImbi	50.800	51.020
Gangtoli	54.150	55.880
Uttri	58.300	58.400
Shillai	60.100	60.350
Tikkar	60.700	60.800
Dhakali	63.500	63.900
Shillai	64.320	65.300
Bandli	67.700	67.800
Kandobhathol	70.070	70.170
Shri Kiyari	73.220	73.750
Dravil	78.300	78.450
Brasal	79.250	79.350
Dharwa	82.060	82.160
Jhakando	83.640	83.760
Meenus	87.000	87.100
Rohana	90.430	91.050
Gumma	93.910	94.950

1.5 Objective of SIA and RAP

The objective of the project is to augment capacity for safe and efficient movement of traffic in the project corridor, better connectivity among the settlement area, reducing the travel time and help the population to have easy accessibility of various basic facilities like health facilities, education facilities etc. The implementation of the sub-project is likely to have positive as well as adverse impacts on the local people and community. To identify these impacts, a Social Impact Assessment (SIA) study has been conducted. During the SIA, the profiling of the project area has been done for better planning and implementation of the project. Based on the findings of SIA, a Resettlement Action Plan (RAP) has been prepared to deal with the likely impacts due to project implementation. The Resettlement Action plan aims to mitigate the adverse impacts of the project.

Thus, the objective of SIA study and preparation of RAP is:

- to identify the project activities and assessment of potential impacts associated with these activities;
- to conduct stakeholders' consultation and make more informed decision making by involving public since the beginning of project;
- to assess the extent of asset loss and undertake the census of the project affected people
- to outline the entitlements for the affected persons for payment of compensation and assistance for establishing their livelihoods
- to propose suggest mitigation measures taking into consideration the suggestions of the community;

1.6 Approach and Methodology

This report is largely based on primary data collected during field survey and is well supported by a review of available secondary data for preparation of baseline information. A Census of the affected households (structure owners) was conducted in Sep.-Oct, 2019. Project specific Census Survey and Socio-Economic Questionnaires (attached as **Annexure- 4**) were administered to assess the potential adverse social impacts with the objectives to manage the social aspect of the subproject.

- **Census and Socio-economic Survey:** The census and the socio-economic survey were required in order to generate necessary data/input for preparing the Rehabilitation Action Plan. All the structures within the CoI were counted. The census and socio-economic survey were carried out jointly and covered all the affected households which included non-titleholders and squatters also. The Corridor of Impact (CoI) is the width considered for up-gradation of the road and

curve improvements. A Chainage-wise table of proposed RoW and CoI is given in **Annexure-5**.

During the census survey, the location, size and shape, type of construction of the structures were recorded. Information about the affected household/ family, their occupation, literacy level, income and other socio-economic information was also collected to determine whether the households were to be categorized as vulnerable (for special considerations under the entitlement framework of the project). The existing ROW details were obtained from Public Works Department (PWD) and Revenue maps were collected from Revenue Department to ascertain the ownership status of the land and the structures falling within the CoI during the census survey. Assets such as boundary wall, public property and institutions were also recorded. With the completion of final designs for the project, only those within the CoI had been considered eligible for entitlement under the project.

- **Stakeholder's Consultation:** Public consultations, FGDs with stakeholder at village levels were also conducted during the SIA study and RAP preparation. Community consultations were held along major settlements near to the proposed alignment and with those who are likely to be affected due to project implementation. Meetings were conducted with affected titleholders, cultivators, shopkeepers, squatters, kiosks etc. at important junctions along the project stretch. Focus Group Discussions were also organized, in separate sessions, with groups like, youth / elders, shopkeepers / operators, women & especially vulnerable people who were available during survey. Government line agencies, implementing agencies were also consulted during this study.
- **Key informant interviews** were conducted with local leaders / village Panchayat functionaries, members & Senior citizen of the area to gain an insider's views regarding specific highway related issues in the area. In some cases, interviews were undertaken at places convenient to the key persons, even beyond project impact zone.
- **Gender Analysis** has been given proper emphasis during public consultation discussions. Separate discussion sessions were held with women who could share their experience related to highway for the purpose that are specific for the women. Their collective perception about project impacts and probable benefits particularly for the women has been taken.
- **Review of Secondary Information-** Relevant baseline data on socio-economic were collected from available secondary sources, like census of India 2011, District Handbooks and respective government portals and website. Published

works, research reports, National Human Development reports, State women development cell reports and periodic reviews has been referred to get an overview of some important topics like general gender, health, trafficking issues. In addition, relevant information from 3D notification (published on 23.04.2020, 15.05.2020, 08.09.2020, 15.09.2020, 27.11.2020, 07.04.2021, 07.05.2021) was also reviewed and accordingly the level of impact on the affected landholders were studied. A brief analysis of the same is reflected in Chapter 7 on Social Impacts.

- **Structure of the Report**

The SIA study and preparation of RAP requirement is to assess and analyse the impacts on the properties, people and key stakeholders and prepare a mitigation plan to minimize, mitigate and compensate the affected people for their losses. It thus requires identification of broad categories of affected properties and project-affected people (PAPs) including assessment of beneficial and adverse social impacts. To meet the above requirements, this report has been organized in following Chapters:

Chapter 1: Background and Introduction

Chapter 2: Project Description

Chapter 3: Socio-Economic Profile of the Project Area

Chapter 4: R&R Principals, Policy Framework & Entitlement Matrix

Chapter 5: Stakeholder's Consultation and Disclosure

Chapter 6: Analysis of Alternatives and Minimization of Impacts

Chapter 7: Project Impacts

Chapter 8: Gender Issue & Women Participation

Chapter 9: R&R Budget

Chapter 10: Institutional Framework for RAP Implementation

Chapter 11: Grievance Redressal Mechanism

Chapter 12: Monitoring and Evaluation

CHAPTER 2: PROJECT DESCRIPTION

2.1 Introduction

The present project road NH-707 under consideration for Rehabilitation and Upgrading to 2 lane / 2 lane with paved shoulders configuration and strengthening from km 0.00 (Poanta Sahib) to km 97.00 (Gumma) Section of NH 707 package no SO (C/5). Aims to:

- Improve and strengthen the existing quality of the pavement to take heavy loads so that pavement failure, maintenance etc. are minimized.
- Improve the horizontal and vertical alignment of the existing road.
- Improve the existing speed of traffic flow by removing all bottlenecks at various important points.
- Increase the carrying capacity of the existing traffic volume and enable it to cater to the future traffic.
- Improve accessibility of the existing road network.
- Provide highway amenities like Truck Lay-bye, bus bay, traffic and medical aid center, parking space etc.
- Improve the numerous intersections on entire stretch of the NH-707 within the section.

2.2 Project Description

The Project Road section of NH-707 (Old NH-72 B), starts at Badripur Chowk near Paonta Sahib at km 0 of NH-707 and ends near Gumma at km 97 of NH-707.

The total length of project road as per existing chainage is 97 km and passes through Sirmaur and Shimla districts in Himachal Pradesh. Total length as per design comes out to be 94.900 km.

The location map of the project road is given in **Figure 2-1** below:

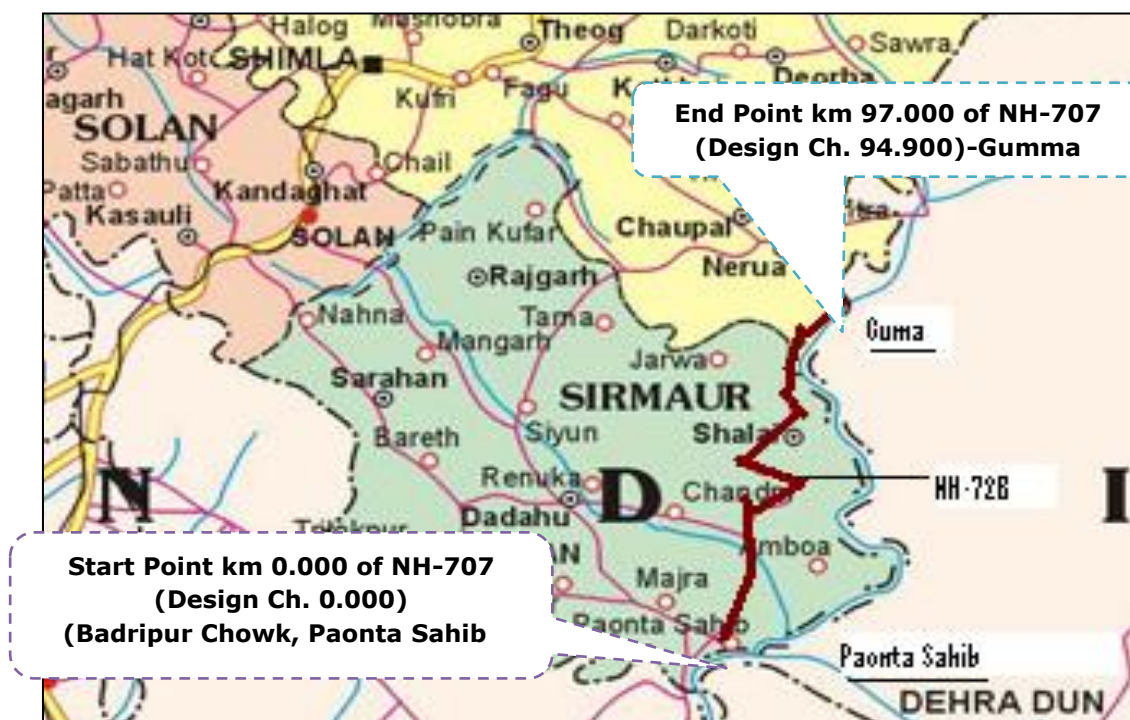


Figure 2-1: Location map of the project road

2.3 Existing Road and Structures

The road traverses through plain, rolling and mountainous terrain having mostly carriageway configuration as 2 lane and single lane road. The major towns along the project road are Paonta Sahib, Sataun, Kamrau, Kafota and Shillai. Apart from this, there are few small towns also along the project road. List of settlements and habitation along the project road is given in table no. 1.2 of chapter 1.

The inventory of road includes kilometer wise information regarding type of terrain, adjacent land use pattern, location of habitations along the road, carriageway and shoulders width and surface type, height of embankment/cutting, road side drains and type, horizontal and vertical curves with their approximate length, details of road side furniture, right of way, general drainage conditions etc. The summary of road inventory is shown in Table 2-1.

Table 2-1: Summary of Road Inventory

S. No.	Particulars	Details
1	Project stretch	Km 0.000 to Km 97.000 of NH-707
2	Length (km)	97 Km
3	District	Sirmaur- 89.500 km Shimla- 7.500 km

S. No.	Particulars	Details
4	Type of Terrain	Plain Terrain- 1.500 km Rolling Terrain-10.000 km Steep Terrain- 85.500 km
5	Land Use	km 0 to km 11.500- Built-up Areas with commercial establishments km 11.500 to km 97.000- Mostly Barren Hilly land with patches of forest and Habitations
6	Right of way (m)	8.0 m to 32.50 m
7	Height of Embankment (m)	Varies from 1.0 m to 1.50 m
8	Road Configuration	Km 0 to Km 11.500- Intermediate/Two Lane Km 11.500 to Km 97.000- Single/Intermediate Lane
9	Type of Pavement	Flexible
10	Carriageway Width (m)	Km 0 to km 11.500- BT- 5.5 m to 7 m Km 11.500 to km 97.000- BT- 3.5 m to 5.5 m
11	Type of Shoulder and width (m)	Earthen Shoulder (varies from 1.0 m to 1.5m on both sides)
12	Junctions	Major Junction - 05 Nos. Minor Junction - 71 Nos.
13	Cross Drainage Structure	Major Bridge- 01 No. Minor Bridges- 13 Nos. Culverts- 320 Nos.
14	Bus Bay	07 Nos.
15	Hill Slopes	Ranges from 50° to 85°
16	No. of Built up Areas	38 Nos.
17	Road Safety Features	W-beam and Concrete crash barriers
18	Slope Protection Works	Masonry Wall and Gabion Wall
19	Utilities	(i) BSNL Main Optical Fiber Cables (OFC)- km 0 to km 10 (Both Side), km 10 to km 97 (Hill Side)

S. No.	Particulars	Details
		(ii) Local network OFC- valley side in Sataun (3 km), Kamrau (2 km), in Kafota (2.6 km), Timbi (1 km), Shillai (2.4 km) (iii) Water supply mains-km 0 to km 11. (iv) Sewer line km 0 to km 2.000. (v) Electric lines- km 0 to km 10 (Both Side), km 10 to km 97 (Hill Side)
20	Major Landslide Zones	km 15.500 to km 17.300 km 59.500 to km 64.100

2.4 Corridor of Impact (COI)

The existing ROW, as per details obtained from State PWD, varies from 8 mtrs to 32.5 mtrs. Details of existing ROW is attached as **Annexure 2**. The proposed ROW for widening and improvement works is maximum 18 mtrs. At most of the locations, the existing ROW is sufficient and only at few locations, majorly requiring curve improvements, acquisition of private land will be required. To minimize the impact on private land, the design has such been finalized that at few densely settlement areas the width of carriageway has been accommodated within the existing ROW. Also different type of cross sections has been used for different locations to minimize the impact. The typical cross section schedule and its detail is given in **Annexure 3**. Thus, proposed Width of carriageway is different in many sections of the project road. In context of present project improvement of NH-707 as 2-lane/2 lane with paved shoulders configuration, the Corridor of Impact was the most important parameter in determining the number of PAPs. The requirement of the project demands that the entire corridor of impact should be free from any encroachment, human habitation and structure causing hindrances to traffic. The details of proposed right of way and corridor of impact is shown in **Annexure-5**.

In context of Corridor of impact of project road and the encroachments in the ROW, total 290 Nos. the structures comprising of Temporary Hutments / Katcha, Semi Pucca and Pucca falling within the Corridor of Impact are likely to be partially or fully affected. These project-affected households are mainly encroachers and squatters.

Large number of kiosks is also located along the highway. They are in the form of Gumti, Tea stalls hutments, Booth, Fruit Stalls, Vegetable stalls, Small Carts.

2.5 Design Considerations

2.5.1 Proposed Design Standards for Highway

Due importance and care has been given to environmental and social issues while road designing. The coordination between environmental, social and design team helped in minimizing the negative impact due to project. In view of its proposed development, Eccentric widening option has been proposed as most of the project section as most of the project road terrain is hilly in one side and to minimize the negative environmental Impact for one side only.

The improvement proposals will include widening, curve improvement, design and strengthening of pavement with all ancillaries such as the improvements of geometries; widening and reconstruction of culverts and bridges; providing drainage; junction improvements; providing road marking; signs and other safety devices; to enable all road users (motor vehicles, animal drawn vehicles, cyclists, pedestrians and animals) to use the facility without degrading the environment.

Based on traffic scenario and present road condition, the development proposal for the road project has been made as follows.

(i) The initial 1.5 km of road stretch is under built-up area of Paonta Sahib and hence proposed to be widened to four lane configuration.

(ii) Beyond this, the project road is surrounded by industrial area and scattered built up area up to Km 11.500 is proposed to develop as two lane with paved shoulder configuration along with provision of footpath. The project road up to Sataun (Km 18) carries heavy amount of truck load and hence is being proposed to be developed as two lane with paved shoulder configuration.

(iii) Due to less traffic and existing road having single lane /intermediate lane, Proposal made for two lane only up to Ch. 70+000.

(iv) After Ch. 70+000, only intermediate lane proposal was finalized by MORTH and World Bank officials due to less traffic. Hence beyond this point the intermediate lane configuration with geometrics improvement is proposed.

For above improvements the major consideration has been adopted for minimum land acquisition. Maximum improvements have been done within existing ROW. Land acquisition has been proposed for very deficient curve improvement only and for dumping areas (for dumping of cut material) which are to be developed for project facilities.

For Implementation purpose whole project road divided into four packages as per client requirement. The details of packages proposed and finalized are as below.

The package wise length of proposed project road is given in **Table 2-2** below.

Table 2-2: Package-wise Length of Project Road

Package No.	Place		Existing Chainage		Design Chainage		Length (km)
	From	To	From	To	From	To	
I	Paonta Sahib	Hewna	0.000	25.345	0.000	25.000	25.000
II	Hewna	Ashyari	25.345	50.700	25.000	50.000	25.000
III	Ashyari	Shri Kyari	50.700	76.010	50.000	75.000	25.000
IV	Shri Kyari	Gumma	76.010	95.922	75.000	94.900	19.900
Total Length							94.900

The typical cross section schedule for the project road is shown **Table 2-3** and the drawing of the same is attached in **Annexure-3**. The details of proposed right of way and corridor of impact is shown in **Annexure-5**.

Table 2-3: Typical Cross Section Schedule

S. No.	Existing Km of NH-707 as Per Site		Proposed Chainage		Length (km)	Type of Cross - Section
	From	To	From	To		
PACKAGE-I						
1	0+000	1+495	0.000	1.500	1.500	Type-1
2	1+495	4+490	1.500	4.500	3.000	Type-2
3	4+490	11+560	4.500	11.500	7.000	Type-2A
3	11+560	15+310	11.500	15.160	3.660	Type-3A
4	15+310	17+105	15.160	16.950	1.790	Type-5A
5	17+105	17+960	16.950	17.800	0.850	Type-3A
6	17+960	19+072	17.800	18.900	1.100	Type-4
7	19+072	25+345	18.900	25.000	6.100	Type-3B
Total Length (Km)					25.000	
PACKAGE-II						
1	25+345	32+275	25.000	31.880	6.880	Type-3B
2	32+275	32+945	31.880	32.550	0.670	Type-4
3	32+945	35+000	32.550	34.500	1.950	Type-3B
4	35+000	35+867	34.500	35.360	0.860	Type-3C
5	35+867	39+635	35.360	39.100	3.740	Type-3B
6	39+635	40+390	39.100	39.820	0.720	Type-4

S. No.	Existing Km of NH-707 as Per Site		Proposed Chainage		Length (km)	Type of Cross - Section
	From	To	From	To		
7	40+390	45+777	39.820	45.000	5.180	Type-3B
8	45+777	50+700	45.000	50.000	5.000	Type-3B
Total Length (Km)					25.000	
PACKAGE-III						
1	50+700	51+450	50.000	50.750	0.750	Type-3B
2	51+450	51+670	50.750	50.970	0.220	Type-4
3	51+670	58+345	50.970	57.520	6.550	Type-3B
4	58+345	62+480	57.520	61.580	4.060	Type-5B
5	62+480	65+065	61.580	64.270	2.690	Type-3B
6	65+065	66+035	64.270	65.250	0.980	Type-4
7	66+035	70+905	65.250	70.000	4.750	Type-3B
8	70+905	76+010	70.000	75.000	5.000	Type-6A
Total Length (Km)					25.000	
PACKAGE-IV						
1	76+010	88+035	75.000	87.035	12.035	Type-6A
2	88+035	88+390	87.035	87.395	0.360	Type-6B
3	88+390	95+922	87.395	94.900	7.505	Type-6A
Total Length (Km)					19.900	
Grand Total (Km)					94.900	

2.5.2 Intersection/Junction – With Improvement of Cross Road

1. Intersection Improvement Proposals

Table 2-4: Major Intersection Improvement Proposals

S. No.	Existing Chainage of New NH-707	Design Ch.	Type of Junction	Side	Remarks
PACKAGE-I					
1	0.000	0.000	+	BS	Junction of NH-7 and NH-707 (Starting Point of Project)
2	8.130	8.100	T	RHS	Link Road to Kishankot (SH-1) via. Bangran
3	18.675	18.510	+	BS	Link Road to Renukaji (Declared in Principle NH)

S. No.	Existing Chainage of New NH-707	Design Ch.	Type of Junction	Side	Remarks
PACKAGE-II					
4	39.920	39.355	Y	RHS	Link Road to village Jakhana (Declared in Principle NH)
PACKAGE-III					
5	65.795	65.015	Y	RHS	Link Road to Village Balikoti (Declared in Principle NH)

2. Minor Intersections

Table 2-5: Schedule for Junctions With Minor Roads

S. No.	Existing Chainage of New NH-707	Design Ch.	Type of Junction	Side	Remarks
PACKAGE-I					
1	0+215	0.200	T	LHS	Paonta Sahib Town Road
2	0+550	0.545	T	LHS	Link Road to Jamniwala Road
3	0+790	0.780	T	RHS	Paonta Sahib Town Road
4	1+170	1.180	Y	LHS	Tamwala to Jambu Khala
5	1+210	1.220	T	RHS	Taruwala to Heerpur Road Village Taruwala
6	1+950	1.900	Y	RHS	Link Road to Jat Colony
7	3+280	3.320	Y	LHS	Link Road to Industry
8	3+600	3.630	+	Both Side	Link Road to Amarkota
9	3+985	4.000	Y	RHS	Link Road to Nihalgarh
10	4+105	4.100	Y	LHS	Link Road to Factory
11	4+735	4.750	Y	RHS	Link Road to Laribast/Nihalgarh
12	4+845	4.860	T	LHS	Link Road to AIPL
13	5+505	5.520	Y	RHS	Link Road to Jawalpur & Bashipur
14	6+650	6.670	Y	RHS	Link Road to Naraingarh to Ajali Village Narainagarh
15	10+255	10.130	+	Both	Link Road to Army Camp &

S. No.	Existing Chainage of New NH-707	Design Ch.	Type of Junction	Side	Remarks
				Side	C.C.I Colony
16	10+390	10.360	Y	RHS	Link Road to C.C.I Colony
17	11+000	10.980	Y	RHS	Link Road to Rajban Village
18	11+165	11.130	Y	RHS	Link Road to Giri Basti
19	11+685	11.570	Y	RHS	Link Road
20	11+840	11.950	Y	LHS	Link Road to Village Chhachati (MDR)
21	13+435	13.350	Y	RHS	Link Road Sirmauri Taal
22	13+905	13.800	Y	RHS	Link Road Sirmauri Taal
23	17+520	17.400	Y	LHS	Link Road
24	18+350	18.180	Y	RHS	Link Road
25	18+265	19.080	Y	RHS	Link Road
26	19+795	19.600	Y	RHS	Link Road
PACKAGE-II					
1	26+530	26.190	Y	LHS	Link Road to Village Badwas
2	27+310	26.890	Y	RHS	Link Road to Mines Area
3	28+220	27.840	Y	RHS	Link Road
4	28+855	28.450	Y	RHS	Link Road
5	29+610	29.200	Y	RHS	Link Road
6	29+780	29.355	Y	RHS	Link Road
7	29+955	29.550	Y	LHS	Link Road
8	30+965	30.550	Y	LHS	Link Road
9	31+535	31.105	Y	LHS	Link Road
10	32+635	32.240	Y	RHS	Link Road
11	35+850	35.350	+	Both Side	To village Bhandh (RHS) & Tibati Colony (LHS)
12	36+490	35.990	Y	RHS	Link Road
13	38+580	38.050	Y	LHS	Link Road
14	38+785	38.330	Y	RHS	Link Road
15	39+640	39.200	Y	LHS	Link Road
16	42+540	41.920	+	RHS	Link Road
17	43+950	43.260	Y	LHS	Link Road to Village Sharii
18	44+350	43.650	Y	RHS	Link Road to village Simladar

S. No.	Existing Chainage of New NH-707	Design Ch.	Type of Junction	Side	Remarks
19	44+910	44.150	Y	RHS	Link Road to Village Dadla
20	46+800	46.010	Y	RHS	Link Road
21	47+300	46.535	Y	LHS	Link Road
PACKAGE-III					
1	51+485	50.785	Y	LHS	Link Road
2	51+580	50.880	Y	LHS	Link Road
3	52+050	51.415	Y	LHS	Link Road to village Millar
4	55+805	55.000	Y	LHS	Link Road to village Bambal
5	58+970	58.050	Y	RHS	Link Road
6	59+825	58.920	Y	LHS	Link Road to village Pad Manal
7	62+070	61.150	Y	RHS	Link Road to village Tikee
8	64+790	63.950	Y	RHS	Link Road
9	65+600	64.700	Y	LHS	Link Road to village Tiker
10	66+600	65.700	Y	RHS	Link Road
11	67+200	66.360	Y	RHS	Link Road
12	68+485	67.625	Y	RHS	Link Road to village Bandli
13	69+125	68.240	Y	RHS	Link Road to village Bandli
14	70+430	69.550	Y	LHS	Link Road
15	71+160	71.250	Y	RHS	Link Road
PACKAGE-IV					
1	76+280	75.250	Y	LHS	Link Road to village Gattusanail
2	78+660	77.620	Y	LHS	Link Road
3	80+710	79.670	Y	RHS	Link Road
4	81+310	80.285	Y	LHS	Link Road
5	81+860	80.800	Y	LHS	Link Road
6	82+990	81.850	Y	RHS	Link Road
7	84+120	83.950	Y	LHS	Link Road to village Ronhat (Junction with Old SH-1)
8	87+360	86.350	Y	RHS	Uttarkhand & Vikasnagar
9	90+400	89.420	Y	LHS	Link Road to village Ronhat (Junction with Old SH-1)

2.5.3 Improvement Proposal for Bridges and Culverts

There is only one existing major bridge on the project road at km 17.415 over river Giri which is to be retained without any improvement proposal. There are 13 nos. of minor bridges on the project road out of which only four are having 7.5 m carriageway width and are in sound condition. These bridges are proposed to be retained with minor rehabilitation. One no. of bridge is proposed to be reconstructed and remaining eight nos. of bridges are proposed for new construction of single lane bridges adjacent and parallel to the existing bridges.

Out of the 320 nos. of existing culverts, 25 nos. of culverts (21 nos. of pipe culvert and 04 nos. of slab culvert) are discarded being redundant. 52 nos. of new culverts are proposed at the locations where cross drainage is found inadequate. Hence, there will be 347 nos. of culverts in the project.

Table 2-6: Improvement Proposal for Bridges

Structure Type	Total No. Existing	Retained	Rehabilitation	Reconstruction	New Construction adjacent to old structure	Total after Improvement
Major Bridges	01	01	-	-	-	1
Minor Bridges	13	-	04	01	08	13

Table 2-7: Improvement Proposal for Culverts

Structure Type	Total No. Existing	Retained	Abandoned	Wideened	Reconstruction	Choked/ Not visible	New Construction	Total after Improvement
Culverts	320	-	25	04	291	-	52	347

2.5.4 Slope Protection Structures

Slope protection works has been provided in the form of breast wall, gabion wall, toe wall and retaining wall with gabion facing. The summary of the structures are shown in the table below,

Table 2-8: Summary of slope protection structures

S. No.	Side of Road	Provision	Length (m)
1	Hill Side	Breast Wall	21,658
2		Gabion Structure	9,630
3	Valley Side	Toe Wall	19,829
4		Retaining Structure with Gabion Facing	21,351

2.5.5 Bioengineering

Bioengineering in the form of jute netting/erosion blanket with shrub plantation, geo cell with bamboo plantation, hydro seeding and bamboo plantation has been proposed to ensure slope stability and reduce soil erosion. The summary of the same is shown in the table below,

Table 2-9: Summary of Bioengineering Provisions

S. No.	Type of Provision	Length (Km)/ Nos.	Avg. Height (m)	Criteria
1	Erosion Blanket with Grass and Shrub Plantation	7.169	8	Altitude-700 m to max altitude Hill Slope- upto 60 degree Geological Feature- Slight to moderately weathered rock
2	Hydroseeding	15.465	6	Hill Slope- 60 to 85 degrees Geological Feature- Slight to moderately weathered rock
3	Shotcrete Crib with Vegetation	6.641	10	Geological Feature- Moderately weak soil starta/Land slide prone area
4	Chain Link Mesh with Grass Strips	51.032	8	Altitude-700 m to max altitude Hill Slope-60 to 85 degrees Geological Feature- Hard rock
5	Hedge Brush Layer	3.170	8	At dumping sites along with provision of gabion wall on valley side

2.5.6 Project Facilities

The project facilities proposed along the project stretch are shown in the section below. Project facilities mainly consists Bus stops and bays and truck lay-bye. Out of total 6 bus bays proposed 3 nos. are Bus bays with rain shelter and 3 nos. are bus stops only due to unavailability of RoW in curve portion. There is one truck lay-bye proposed near sataun in project section.

Bus Bay

The location of proposed Bus bay is shown in the table below,

Table 2-10: Details of Proposed Bus bay

S. No.	Design Chainage	Side	Village/Town Name	Type of Project Facilities
1	5+450	LHS	Rajban	Bus Bay
2	18+400	LHS	Sataun	Bus Bay
3	32+275	RHS	Kamrau	Pick-up Bus Stop
4	39+890	RHS	Kafota	Pick-up Bus Stop
5	64+414	RHS	Shillai	Bus Bay
6	94+010	RHS	Gumma	Pick-up Bus Stop

Truck Lay-Bye

The location of proposed truck lay bye is shown in the table below,

Table 2-11: Details of Proposed Truck Lay Bye

S. No.	Design Chainage	Side	Village/Town Name
1	18+700	LHS	Sataun

2.5.7 Other Features

The project will provide various safety aspects to the users. Various provisions like Thrie beam crash barriers, parapet wall, road studs, rumble strip, Road Signs and Road Markings is proposed along the project road to improve the safety for the commuters.

Roadside drainage has been proposed throughout the project stretch with provision of rectangular closed drain along the built-up areas and trapezoidal drain in open country area. Footpaths, paver blocks, walkways and public toilets are provided with provisions for physically disabled persons and elderly persons. **Annexure-6** with this report provides specifications for the same.

Adequate illumination is provided in form of solar lights at built up areas and project facilities along the project stretch at 49 Nos. of locations on an approximate length of 18 Kms. Water harvesting structures has been proposed at 73 Nos. of locations along the project stretch for local use of people.

Details of the above features are provided under section salient features of the project road. The package-wise salient features are presented in **Table 2.12** below.

Table 2-12: Salient Features of the Project

S.No.	Salient Features	PKG-I	PKG-II	PKG-III	PKG-IV	Total
1	Chainage	0+000 to 25+000	25+000 to 50+000	50+000 to 75+000	75+000 to 94+900	0+000 to 94+900
2	Overall Length (Km)	25	25	25	19.9	94.900
3	Large/Small Habitations (Nos)	12	9	12	6	39
4	Junctions					
A	Major Junctions (Nos)	3	1	1	0	5
B	Minor Junctions (Nos)	26	21	15	9	71
5	Cross Drainage Works					
A	Major Bridge	1 No. (93.40 m)	-	-	-	1 (93.40 m)
B	Minor Bridge	3 Nos. (72.65m)	1 No. (18 m)	6 Nos. (157 m)	3 Nos. (83 m)	13 Nos. (330.650m)
C	Culverts	87	87	92	81	347
6	Retaining Structure for slope protection					
A	Breast Wall (m)	4,560	5,998	7,436	3,664	21,658
B	Gabion Wall (m)	3,120	710	5,730	70	9,630
C	Retaining wall with gabion facing (m)	2,063	3,546	5,599	10,143	21,351
D	Toe wall (m)	1,793	6,140	7,058	4,838	19,829
7	Slope Protection Measures					
A	Erosion Blanket with Grass and Shrub Plantation (m ²)	37,304	15,600	4,448	0.000	5735.2
B	Hydroseeding (m ²)	0.000	48,336	44,454	0.000	92,790
C	Shotcrete Crib with Vegetation (m ²)	23,690	0.000	42,720	0.000	66,410
D	Chain Link Mesh with Grass Strips (m ²)	42,472	1,14,360	92,504	1,58,920	4,08,256
E	Hedge Brush Layer	0.000	7.760	8.880	8.720	25,360

S.No.	Salient Features	PKG-I	PKG-II	PKG-III	PKG-IV	Total
	(m ²)					
F	Others					
8	Project facilities					
A	Bus Bay (Nos.)	2	2	1	1	6
B	Truck Lay bye (Nos.)	1	0	0	0	1
9	Others					
A	Metal Beam Crash Barrier (m)	2.063	3.546	5.599	10.143	21.351
B	Parapet Wall (m)	10.191	20.044	18.050	9.668	57.953
C	Sub Surface Drainage (Nos.)	3	10	7	6	26
D	Water Harvesting Structure (Nos.)	9	27	24	13	73
E	Solar Lighting (Nos.)	12	14	14	9	49 Locations (Length 19.170 Km)
F	Road Studs (Nos.)	6,100	6,310	5,742	4,040	22,192
G	Rumble Strips (Nos.)	Length-4,530 m Location-10 Nos.	Length-3,150 m Location-11 Nos.	Length-5,980 m Location-12 Nos.	Length-940 m Location-7 Nos.	Length-14,600 m Location-40 Nos.
H	Road Sign (Nos.)	222	222	185	131	760
I	Road Furniture (Nos.)	1,493	1,411	1,921	4,849	9,674
J	Footpath (m)	12,600	1,390	1,200	0	15,190
K	Paver Block (m)	10,000	0	0	0	10,000
L	Roadside Drainage (m)	Rectangular Closed Drain-12,600 Trapezoidal Lined Drain-12,400	Rectangular Closed Drain-1,390 Trapezoidal Lined Drain-23,610	Rectangular Closed Drain- 1,200 Trapezoidal Lined Drain-23,800	Trapezoidal Lined Drain-19,900	Rectangular Closed Drain-15,190 Trapezoidal Lined Drain-79,710

CHAPTER 3: SOCIO-ECONOMIC PROFILE OF THE PROJECT AREA

3.1 Introduction

Himachal Pradesh is spread over an area of 55,673 (Sq.Km) which is 1.69% of country area. It is located between 30°22' and 30°12' north latitude and between 75°47' and 79°4' east longitude. Himachal Pradesh is almost wholly mountainous with altitudes ranging from 350 meters to 6,975 meters above the mean sea level. It has a deeply dissected topography, complex geological structure and a rich temperate flora in the sub-tropical latitudes.

Population density per km sq in Himachal Pradesh is 123, while in project districts Shimla and Sirmaur it is 159 and 188 respectively. In 2011, the total population of H.P. was about 6,864,602 out of which 3,481,873 were males (50.72 %) and 3,382,729 (49.28%) were females.

Himachal Pradesh is one of the well literate states in India. Literacy rate among population age seven and above is 83% compared with 73% for India as a whole. The literacy rate is 91% for males and 77% for females. Notably the gender gap in literacy in state is not significant as compared to that of India.

The population living in a village with health facilities is 7% for hospitals and 41% for dispensaries or clinics. Overall 60% of women live in village that has some kind of health facility. Average distances from particular health facilities are 6.4 km from a primary Health Centers, 1.5 km from a sub centre, 9.9 km from a hospital and 2.3 km from dispensary or clinic. 8% rural population in Himachal Pradesh needs to travel a maximum 5-9 km in order to reach the nearest health facility.

3.2 Socio- economic status of Project Influence Districts

The Project Highway transverses through two districts viz Sirmaur and Shimla about 89 (km) of the highway are in Sirmaur district and rest about 8 (km) are in Shimla district.

3.2.1 Shimla & Sirmaur District Profile

Shimla District lies between 30° 45'48"-30°43'0" North latitude and 76° 59' 22" - 78° 18' 40" East longitude. It is bounded by Kinnaur district in the Northeast, by Kullu and Mandi districts in the Northwest, by Solan and Sirmaur districts in the Southwest and by the State of Utterakhand in the Southeast. The total area of the present district is 5,131 Sq. Kms. It has a total number of 2,897 villages, of these 2311 villages are inhabited and the remaining is uninhabited. The district comprises of 7 sub-divisions and 17 tehsil and sub tehsil the sub-divisions are, namely Shimla (rural), Shimla (urban), Thoeg, Rampur, Rohru, Chopal and Dodra Kwar. The tehsil are namely

Seoni, Shimla urban, Theog, Kumarsain, Rampur, Rohru, Kotkhai, Chopal, Jubbal-Cirgaon and Dodra Kwar while Junga, Nankhari, Tikkar, Chela, Nerwa are the Sub-Tehsil. For the rural development, the district has been divided into nine community development Blocks. The topology of the district is hilly and rolling.

District Sirmaur is the southern end district of Himachal Pradesh. The district shares its Boundary with district Shimla in the north; district Solan in the northwest, Panchkula and Yamuna Nagar districts of Haryana in the southwest and, Dehradun district of Uttaranchal and Saharanpur district of Uttar Pradesh in the east. Its longitudinal and latitudinal extend is from 77° 01' 12" to 77° 49' 40" East and from 30° 22' 30" to 31° 01' 20" North respectively. The district has an area of 2825 Sq km, which is only about 5 per cent of the area of the state.

The terrain is generally flat with a few areas having high mountainous slopes .It is one of the three districts to experience substantial industrialization in the state, the other two being Solan and Una. The district has a comparatively higher level of urbanization 10.4%.

Demography- Population density per km sq in Himachal Pradesh is 123, while in project districts Shimla and Sirmaur it is 159 and 188 respectively. In 2011, the total population of H.P. was about 6,864,602 out of which 3,481,873 were males (50.72 %) and 3,382,729 (49.28%) were females. In Shimla district, total population 8,14,010 consisting of 4,25,039 males and 388971 females. In Sirmaur district, total population 5,29,855 consisting of 2,76,289 males and 2,53,566 females.

Himachal Pradesh is one of the well literate states in India. Literacy rate among population age seven and above is 83% compared with 73% for India as a whole. The literacy rate is 91% for males and 77% for females. Notably the gender gap in literacy in state is not significant as compared to that of India. Literacy rates in the project districts are good as 84% in Shimla and 79% in Sirmaur district. Number of females per thousand males in Himachal Pradesh is 972 which is unfavorable to female nonetheless better than all India Sex ratio which is 943. On the other hand, Sex ratios in the project districts are very poor as 915 in Shimla and 918 in Sirmaur.

Table 3.1 shows the demographical statistics of Himachal Pradesh, Sirmaur & Shimla.

Table 3-1: Demographic Features of the State and PIA Districts

State/District	Himachal		Shimla		Sirmaur	
	2001	2011	2001	2011	2001	2011
Area Sq. Km.	55,673		5131		2825	
Persons	60,77,900	6,864,602	7,22,502	8,14,010	458,593	5,29,855
Male	3087940	3,481,873	38,0,996	4,25,039	241,299	2,76,289
Female	29,89,960	3,382,729	3,41,506	3,88,971	217,294	2,53,566

State/District	Himachal		Shimla		Sirmaur	
	2001	2011	2001	2011	2001	2011
Population growth	12.94%		12.67%		15.54%	
Population Density per Sq km	109	123	141	159	162	188
Literacy Rate %						
Male	86.02	90.83	87.72	90.73	63.20	79.73
Female	68.08	76.60	70.68	77.80	38.45	60.93
Sex -ratio	970	972	898	915	901	918
Human Development Index	0.518		0.409		0.433	

Source: Census of India 2011 data

3.3 Project Impact Area

The majority of the potentially affected / benefited persons living in the project influence zone frequently travel down the existing roads or proposed alignment of the project. Their purpose of visit brings them generally to the prominent market places by the roadside or transport boarding points alongside the road. Other beneficiaries also pass through the important junctions of the feeder roads connecting the project roads / proposed alignment. There are administrative offices, places of worship, community structures, in the major settlements within the project impact zone.

For the purpose of Social Analysis, habitations within the corridor of impact has been considered as directly impacted. Habitations within 1 km of the project road has been considered as indirectly impacted habitations.

3.3.1 Socio-Economic Profiling

District wise list of major project impacted habitations/ settlements is presented in Table 3.2 below:

Table 3-2: Major Project Affected Villages Falling within CoI along NH-707

Name of the Road Station (project Road)	Districts Covered	Chainage/ Length (km)	Major Project affected villages
Paonta Sahib-Gumma NH-707	Sirmor	0.000-89.500	Paonta Sahib, Nariwala, Badripur, Jwalapur, Taruwala, Gondpur, Amarkot, Nihalgarh, Rajvan, Sataun, Tilordhar, Kafota, Shillai, Timbi, Shillai
	Shimla	89.500-97.000	Rohana, Meenus, Jamli, Gumma

Source: CEG Soci--economic Survey, 2019

Table 3.3 below shows the Socio-Economic Statistics of project-affected villages.

Table 3-3: Socio-Economic Statistics of project-affected villages

Villages	No of House holds	Total Population	Male	Female	Population 0-6	SC Population	ST Population	Literates Population	Literates Male	Literates Female	Illiterate Population	Total Workers	Main Workers	Main Cultivators	Main Agri. laborers	Marginal Worker Population	Non Working Population
Paonta Sahib	31460	169682	89150	80532	22127	36757	4123	109748	64466	45282	59934	74760	48772	19074	1614	25988	94922
Taruwala	215	1018	511	507	125	161	3	790	428	362	228	300	289	49	0	11	718
Gondpur	225	1024	555	469	127	104	0	716	422	294	308	459	397	101	2	62	565
Nihal Garh	273	1297	714	583	155	418	2	901	536	365	396	511	502	134	4	9	786
Jawalpur	141	703	376	327	89	231	1	478	292	186	225	254	253	100	1	1	449
Kishan Kot	162	799	414	385	109	97	0	543	320	223	256	206	192	49	0	14	593
Rajban	444	1877	999	878	207	288	43	1349	777	572	528	582	549	42	5	33	1295
Sirmauri Tal	83	464	230	234	72	392	6	299	178	121	165	135	135	49	0	0	329
Sataun	607	2963	1560	1403	351	693	9	2121	1193	928	842	993	920	167	26	73	1970
Barwas	159	1027	536	491	120	205	0	599	353	246	428	582	309	131	6	273	445
Kamrou	355	2217	1158	1059	223	347	8	1448	845	603	769	1161	684	256	4	477	1056
Kandon Dugana	379	2678	1374	1304	294	973	4	1545	902	643	1133	1528	821	512	102	707	1150

Villages	No of House holds	Total Population	Male	Female	Population 0-6	SC Population	ST Population	Literates Population	Literates Male	Literates Female	Illiterate Population	Total Workers	Main Workers	Main Cultivators	Main Agri. laborers	Marginal Worker Population	Non Working Population
Shilla	195	1447	786	661	171	353	1	824	515	309	623	874	374	241	3	500	573
Borar	184	1438	755	683	253	515	0	770	448	322	668	1147	580	539	0	567	291
Chareu	53	467	241	226	80	252	0	277	174	103	190	123	24	1	0	99	344
Ashyari	243	1730	881	849	285	580	0	976	531	445	754	1079	422	338	5	657	651
Gangtoli	50	371	194	177	62	77	0	215	114	101	156	165	78	45	0	87	206
Tikar	73	487	261	226	71	181	0	294	183	111	193	300	280	244	13	20	187
Dhakoli	47	253	127	126	30	196	0	165	89	76	88	215	65	46	1	150	38
Shillai	8173	60229	31841	28388	9357	18644	30	34926	20534	14392	25303	37545	21961	18214	325	15584	22684
Bandli	188	1425	729	696	205	297	0	815	470	345	610	932	533	362	0	399	493
Kando Bhatnaul	247	2236	1203	1033	308	692	0	1227	735	492	1009	1194	828	776	1	366	1042
Shiri Kyari	175	1454	772	682	233	361	0	877	509	368	577	999	428	345	0	571	455
Syarla Barshol	193	797	407	390	93	312	14	612	345	267	185	320	314	194	16	6	477
Jhakandon	244	1990	1053	937	322	772	0	1114	645	469	876	750	594	458	1	156	1240

Villages	No of House holds	Total Population	Male	Female	Population 0-6	SC Population	ST Population	Literates Population	Literates Male	Literates Female	Illiterate Population	Total Workers	Main Workers	Main Cultivators	Main Agri. laborers	Marginal Worker Population	Non Working Population
Rohana	19	94	49	45	15	0	0	71	40	31	23	73	38	34	1	35	21
Gumma	108	559	274	285	63	196	0	398	221	177	161	352	163	87	13	189	207
	44695	260726	137150	123576	35547	64094	4244	164098	96265	67833	96628	127539	80505	42588	2143	47034	133187

Source: Census of India-2011 data

3.3.2 Demographic details

In the affected villages' total number of household are 44,695 and population of 2.61 lacs. There are 1,37,150 males and 1,23,576 females in the affected villages. Hence the sex ratio, which comes out to be 901 females per 1000 males, is very poor. The village wise population details is given in **Table 3.3 above**.

3.3.3 Literacy Status

As per 2011, Census in the affected villages male literacy is about 71% and female literacy rate is 55%. Male literacy rate is higher in comparison to female literacy rate, but is still poor. Out of the total population about 37% population is still illiterate.

3.3.4 Working and Non- Working Population.

Percentage of workers engaged in different activities indicates the nature of employment available in the area. The total working population in the project stretch is 48.5%. Out of them, main workers are 63% and marginal workers are 37%. Non workers constitutes of 51.5% of the total population which indicates high dependency ratio. Most of the non workers in the affected villages are females.

3.3.5 Existing Public Amenities

Public amenities are those basic services utilized away from the individual residential dwelling unit within the public environment. Presence of basic infrastructure facilities is found only, in the project districts. They satisfy specific individual or community needs including communication, recreation, education, health and public administration. Public amenities are generally the responsibility of government or the local authorities of the area. Accessibility of basics infrastructure is an important factor from the social development context. List of public amenities in the districts of the project road is presented in **Table 3-4**. Improvement of project road will increase access to public facilities like higher level schools, colleges, health services (CHCs, PHCs), government offices, etc.

Table 3-4: Public Amenities in both the Districts

Amenities	Sirmaur	Shimla
Education		
Primary School	987	1616
Secondary School	202	355
Higher/ Sr. Secondary School	152	307
Colleges	6	4
Engg. College/ Medical College	3	1
I.T.I.	7	-

Amenities	Sirmaur	Shimla
University	-	1
Health Centres		
Hospitals	5	46
PHCs/CHCs/ Sub Centres	184	313
Subsidiary Health Centres	-	30
ESI Dispensaries	3	30
Ayurvedic Hospitals	1	2
Ayurvedic Dispensaries	79	147
Homeopathis Dispensaries	1	-
Others		
Electrified Villages	966	100%
Nationalized Bank Branches/ Cooperative Bank Branches	82	164
Post Offices	169	348

**Sources- district website of Shimla and Sirmaur*

CHAPTER 4: R&R PRINCIPLES, POLICY FRAMEWORK & ENTITLEMENT MATRIX

4.1 Introduction

This chapter of the report discusses about the existing law and regulations of the country and state those are applicable to the proposed project. It is imperative to analyze the Acts and bylaws to understand the legalities and procedures in implementing project and identifying the gaps and area where there is a need for strengthening to comply with the World Bank policy on resettlement and rehabilitation of project affected persons.

The aim of the project is to establish and provide better connectivity of various existing National Highways in the country. Most of the infrastructure work planned for this Green National Highway Corridor project will take place within the existing Right of Way (RoW) except at some of the congested villages/settlements where Curve improvements proposed and at locations where minor improvements are required for accommodating road safety measures.

4.2 Applicable Legal and Policy Framework

Applicable acts, notifications and policies relevant in the context of this project are discussed in tabular form is given below :

The Project Authority (MoRTH) will ensure that project activities implemented are consistent with the national, state, local regulatory/legal framework.

Table 4-1: Applicable Legal and Policy Framework

S. No.	Acts, Notifications and policies	Relevance to this Project	Applicability
1.	RTFCTLARR Act, 2013	Land required, R&R for the project shall be acquired and provided as per the provision of this Act.	Applicable via Himachal Pradesh Relevant Rules
2	The Provisions of the Panchayat (Extension to the scheduled Areas) Act, 1996	One of the important provisions of this act states “the Gram Sabha or Panchayat” at the appropriate level shall be consulted before making the acquisition of land.	Applicable
3	World Bank	The project entails land acquisition	Applicable

S. No.	Acts, Notifications and policies	Relevance to this Project	Applicability
	OP 4.12- Involuntary Resettlement	though, at a low scale for widening, curve improvements, junction improvements etc. It would also adversely affect structures used for various purposes, livelihood of people) mainly earning their livelihood by means of petty shops, and providing various services). Many of them have been operating from the government land. Thus, both title holders and non-title holders alike would be affected as a consequence of the project.	
4	National Highways Act, 1956	Land acquired for the project shall be acquired as per the provision of this act.	Applicable
5	The 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.	Applicable

4.3 Comparative analysis of applicable policy

For the purpose of development, maintenance and management of national highways, a special law, the National Highways Act (NH Act), 1956 has been promulgated in India. This act provides for acquiring land through a “competent authority”, which means any person or authority authorized by the Central Government by notification in the official Gazette to perform functions of the competent authority for such areas as may be specified in the notifications.

National Policy specifies that the compensation award shall be declared well in time before displacement of the affected families. Full payment of compensation (section 3H under NH Act) as well as adequate progress in resettlement shall be ensured in advance of the actual displacement of the affected families. National and State policy also requires that the compensation and assistance to PAPs (other than capacity building support for livelihood restoration) be provided prior to any displacement or start of civil works.

Both the National Policy and the Himachal Pradesh Land Acquisition Act on rehabilitation and resettlement aim to see that involuntary resettlement should be avoided or minimized, wherever feasible, exploring all viable alternative project designs, and where displacement is unavoidable, people losing assets, livelihood or other resources shall be assisted in improving or at a minimum regaining their former status of living at no cost to themselves.

Also Central and State policy requires consultation with PAPs during planning and implementation of resettlement action plan and public disclosure of drafts. Once the draft is prepared it is to be made available at a place accessible to, and in a form, manner and language understandable to the displaced or affected people and local NGOs. RTFCTLARR Act, 2013, also requires disclosure of draft SIA, RAP and other project reports followed by Public Hearing as per project requirement. Based on the detailed comparative analysis of the above discussed applicable legal and policy framework, key differences identified between these policies has been addressed under the Resettlement Policy Framework (RPF) is listed below:

1. Recognition of non-titleholders who have no recognizable legal right to the land they are occupying and extending R&R benefits under the project;
2. Establishment of cut-off date to identify the non-titleholders in the project;
3. Compensation for the entire replacement of the lost and other assets fully or partially;
4. Need for preparation and public disclosure of Social Impact Assessment (SIA) and Resettlement Action Plan (RAP) as per project requirements.

A brief note on RPF along with relevant definitions is attached as **Annexure-7**.

4.4 Resettlement principles and Eligibility Criteria

Based on the above analysis of government provisions and requirements as per World Bank IR policy the broad resettlement principle for this project shall be the following:

- Proposed highway improvement and strengthening work will take place mostly on the existing alignment and within the available RoW or at locations

where curve improvement is necessary to incorporate required safety measures;

- The involuntary resettlement and adverse impacts on persons affected by the project would be avoided or minimized as much as possible exploring viable options;
- Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits;
- Efforts should be made to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher;
- Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs;
- Replacement land shall be an option for compensation in the case of loss of land. In case of unavailability of replacement land, cash-for-land with compensation on replacement cost option will be made available to the PAPs;
- Compensation for loss of land, structures and other assets will be based on full replacement cost and will be paid before physical displacement of PAPs including transaction costs;
- In the event of necessary relocation, PAPs shall be assisted to integrate into host communities;
- All land acquisition for the project would be done as per the National Highways Act, 1956. Additional assistance would be provided to the PAPs for meeting the replacement cost of the property;
- The un-economic residual land remaining after land acquisition will be acquired by the project. The owner of such land/property will have the option to seek acquisition of his entire contiguous holding/ property provided the residual land is less than the average land holding of the district;
- Any structure/asset rendered unviable/unsafe because of the project shall also be considered as affected and entitlements shall be extended accordingly;
- The affected persons who does not own land or other properties, but have economic interests or lose their livelihoods will be assisted as per the policy principles described in this document;
- Cut-off date for titleholders will be the date of publication of notification under Section 3A of the National Highways Act, 1956. For non-titleholders who has not any legal holding of the occupied land such as squatters and

encroachers the date of project **census survey** or a similar designated date declared by the executing agency will be considered as **cut-off date**;

- An entitlement matrix for different categories of people affected by the project has been prepared and provisions will be kept in the budget for those who were not present at the time of census survey. However, people moving in the project area after the cut-off date will not be entitled to any compensation or assistance;
- Vulnerable groups (PAPs below poverty line (BPL), the landless, disabled, elderly persons, women and children, indigenous peoples) will be identified and given additional support and assistance under the project;
- All common property resources (CPR) lost due to the project will be reconstructed or compensated by the project;
- Information related to the preparation and implementation of resettlement plan will be disclosed to all stakeholders and people's participation will be ensured in planning and implementation;
- Appropriate grievance Redressal mechanism will be established at sub-project, state and central levels to ensure speedy resolution of disputes;
- An effective monitoring and evaluation mechanism will be established to ensure consistent implementation of resettlement activities planned under the project including third party monitoring.

4.5 Entitlement Matrix

This entitlement matrix has been developed in accordance with the basic principles adopted in the RPF and analysis of initial identification of project impacts.

In case where a State Government through any Act or Gazette Notification or as approved by any authority of State Government (duly authorized for the purpose) as per their approved procedure has fixed a rate for compensation of land and is higher than the provisions under the project, the same may be adopted by the Competent Authority in determining the compensation for land.

Similarly, in case where a State Government through any Act or Gazette Notification or as approved by any authority of State Government (duly authorized for the purpose) as per their approved procedure has fixed a rate for resettlement and rehabilitation assistance and is higher than the provisions under the project, the same may be adopted by the Executing Authority.

Table 4-2: Entitlement Matrix

S. No.	Impact	Entitled Unit	Entitlement Details
A. Loss of Private Agricultural, Home-Stead & Commercial Land			
1	Loss of Land (agricultural, homestead, commercial or otherwise) within the Corridor of Impact (COI)	Titleholder/owner/families with traditional land right/occupiers	<p>For all land acquired under NH Act; Compensation/lease amount shall be calculated and payable in accordance with Sections 26 to 30 and Schedule I of RFCTLARR Act 2013</p> <p>i. Partial Impact on Land: In case only part of any land plot is affected, and its owner desires the whole plot be acquired on grounds that the plot has become uneconomic or has been severed due to LA (under Section 94 and Note C), the competent authority can award compensation for remaining part of the plot or award 25% of actual value upto of the remaining land holding as additional compensation, allowing the owner to retain the remaining land plot, if agreeable.</p> <p>For all land acquired under NH Act; or direct purchase or acquisition of missing land parcels/plot (MoRT&H circular date 28th December, 2017), Rehabilitation and Resettlement Assistance shall be as follows (Schedule II of Act 2013):</p> <p>ii. If as a result of land acquisition, the land owner becomes landless or is reduced to the status of a “small” or “marginal” farmer, assistance amount of Rs. 6 lakhs</p> <p style="text-align: center;">OR</p> <p>annuity policies that shall pay not less than two thousand rupees per month for each affected land owner for twenty years with appropriate indexation to the Consumer Price Index for Agricultural Labourers.</p> <p>iii. Each land owner shall be given a one-time "Resettlement Allowance" of Rs. 60,000/- only.</p> <p>iv. Refund of stamp duty and registration charges incurred for replacement land to be paid by the project; replacement land must be bought within a year from the date of payment of compensation to project affected persons</p>
B. Loss of Private Structures (Residential/Commercial)			
2	Structure within the	Title Holder/Owner	i. Compensation in accordance with Sections 26 to 30 and Schedule I of RFCTLARR Act 2013

S. No.	Impact	Entitled Unit	Entitlement Details
	Corridor of Impact (CoI)		<ul style="list-style-type: none"> ii. Right to salvage material from affected structures iii. Three months advance notice to vacate structure iv. For those losing cattle shed, a one-time assistance of Rs. 28,000/- would be payable v. For each affected family of an artisan or self-employed or own non-agricultural land, that is displaced and must relocate, a one-time assistance of Rs. 28,000/- would be payable; and vi. One-time subsistence grant of Rs. 40,000/- for each displaced family who are displaced and require to relocate; vii. One-time financial assistance of Rs. 60,000/- for each affected family towards shifting/transportation cost for shifting of the family, building materials, belongings and cattle viii. Refund of stamp duty and registration charges for purchase of new alternative houses/shops at prevailing rates on the market value as determined. Alternative houses/shops must be bought within a year from the date of payment of compensation ix. For a house lost, a constructed house shall be provided as per the Indira Awas Yojana Specifications or equivalent cost of the constructed house in lieu, shall be payable. x. <u>In case of partial impact</u>, 25% additional award to be paid on compensation award for the affected part of the structure to enable damage repair where the owner/occupier of his/her own will, interested to retain the remaining part of the structure, provided the unimpaired continuous use of the such structure is possible without hazards
3	Structure within the Corridor of Impact (CoI)	Tenants/ Lease Holders	<ul style="list-style-type: none"> i. Registered lessees will be entitled to an apportionment of the compensation payable to structure owner as per applicable local laws. ii. One-time financial assistance of Rs. 60,000/- as transportation. iii. Three months notice to vacate structures.

S. No.	Impact	Entitled Unit	Entitlement Details
C. Loss of Trees and Crops			
4	Standing Trees, Crops within the Corridor of Impact (CoI)	Owners and beneficiaries (Registered/ Un-registered tenants, contract cultivators, leaseholders & sharecroppers)	<p>i. Cash compensation as estimated under Section 29(3) of Act to be paid at the rate estimated by:</p> <ul style="list-style-type: none"> • The Forest Department for timber trees • The State Agriculture Extension Department for crops • The Horticulture Department for fruit/flower bearing trees. <p>ii. Three months advance notice to project affected persons to harvest fruits, standing crops and removal of trees, or compensation in lieu as determined above.</p> <p>Registered tenants, contract cultivators & leaseholders & sharecroppers will be eligible for compensation for trees and crops as per the agreement document between the owner and the beneficiaries.</p> <p>Un-registered tenants, contract cultivators, leaseholders & sharecroppers will be eligible for compensation for trees and crops as per mutual understanding between the owner and the beneficiaries</p>
D. Loss of Residential/ Commercial Structures to Non-Title Holders			
5	Structures within the Corridor of Impact (CoI) or Govt. land	Owners of Structures or Occupants of structures (Encroachers, Squatters) identified as per Project Census Survey	<p>For loss of House</p> <p>i. Compensation at PWD BSR without depreciation for structure</p> <p>ii. One-time resettlement cost of Rs. 28,000 /-</p> <p>iii. Shifting/transportation assistance of Rs. 60,000/-</p> <p>iv. Encroachers shall be given three months' notice to vacate occupied land or cash assistance at replacement cost for loss of structures.</p> <p>v. Right to salvage the affected materials</p> <p>For loss of shop</p> <p>i. Compensation at PWD BSR without depreciation for structure</p> <p>ii. One-time subsistence grant of Rs. 40, 000/-</p> <p>iii. Onetime rehabilitation grant of Rs. 28,000/-</p> <p>iv. Shifting/transportation assistance of Rs. 60,000/-</p> <p>v. Encroachers shall be given three months' notice to vacate occupied land or cash assistance at replacement</p>

S. No.	Impact	Entitled Unit	Entitlement Details
			cost for loss of structures. vi. Right to salvage the affected materials
6	Loss of employment in non-agricultural activities or daily agricultural wages or other wage workers	Livelihood loser	Subsistence allowance equivalent to Minimum Wages/Minimum Agricultural Wages ¹ for 3 months Only agricultural labourers who are in fulltime / permanent employment of the land owner, or those affected full time employees of the business, will be eligible for this assistance. <i>Seasonal agricultural labourers will not be entitled for this assistance.</i>
F. Additional Support to Vulnerable Group			
7	Families within the Corridor of Impact (CoI)	Vulnerable affected families	i. One-time Resettlement Allowance of Rs. 60,000/- ii. Training for skill development. This assistance includes cost of training and financial assistance for travel/conveyance and food. iii. Additional Subsistence Grant of Rs. 60,000/- for displaced families belonging to Scheduled Caste and tribe Category iv. Displaced vulnerable households will be linked to the government welfare schemes, if found eligible and not having availed the scheme benefit till date.
G. Loss of Community Infrastructure/Common Property Resources			
8	Structures & other resources (e.g. land, water, access to structures etc.) within the Corridor of Impact (CoI)	Affected communities and groups	Reconstruction of community structure and common property resources, will be done in consultation with community

¹ As per rates issued by Department of Labor, Government of project state for different skills and trades

S. No.	Impact	Entitled Unit	Entitlement Details
H. Temporary Impact During Construction			
9	Land and assets temporarily impacted during construction	Owners of land and assets	<ul style="list-style-type: none"> i. Compensation for temporary impact during conversion e.g. diversion of normal traffic, damage to adjacent parcel of land/assets (crops, trees, structures, etc.) due to movement of heavy machinery and plant site ii. Contractor shall bear the cost of compensation of any impact on structure or land due to movement of machinery during construction or establishment of construction plant. iii. All temporary use of land outside ROW, would be done based on written approval/ prior approval landowner and contractor

CHAPTER 5: STAKEHOLDER'S CONSULTATIONS AND DISCLOSURE

5.1 Introduction

Till very recent, the highway sector involving road projects was being looked at as a field of engineering only. Due to the problems faced in implementation in the development projects in general, and highway sector in particular, over the years, public consultations have acquired a very important role in the planning process for development projects. The practice of involving the communities in the planning process has been recognized as an effective tool for mitigating the negative impacts due to the project and ensuring timely completion of the projects.

In context of the highway projects, which are primarily linear in nature, the issue of involving people in the planning and designing process has a much more significance, as the nature and extent of impact on the social, economic and cultural fabric of the society spread across a larger and a highly varied group of the society.

The project will therefore ensure that the affected population and other stakeholders are informed, consulted, and allowed to participate actively in the development process. Stakeholder's consultation will be done throughout the project cycle, i.e. during preparation, implementation, and monitoring stages.

During implementation and monitoring stages, information will be disseminated to project affected persons and other key stakeholders in appropriate ways. This information will be disclosed in Hindi and other local languages, as required, describing the main project features, project interventions, entitlements for the affected families, implementation schedule etc.

The stakeholder's consultations for the project road were initiated in the year 2012, when DPR preparation was initiated by MoRTH under its NHIIP, which is also World Bank funded project. The DPR was finalized under NHIIP and submitted to MoRTH in June 2014, which was later approved in 2017. Further in December 2018, it was communicated by PWD/RO MORTH to modify DPR as per latest World Bank Guidelines and requirements after World Bank site visits and various meetings between CE (NH), World Bank, and MORTH. To modify DPR as per latest guidelines and to update the project as per revised proposal under GNHCP (Green National Highway Corridor Project) scheme, the census survey data was revised and another round of stakeholder's consultations were conducted to further update the SIA and RAP. The details of stakeholder consultations conducted in 2012 is also included in the report.

5.2 Methodological framework for Public Consultation

Stakeholder's Consultations were carried out in appropriate ways taking into consideration the culture, type of groups consulted and any other factors that might need special consideration. Public consultations in the project area were held at village and Panchayat level.

The different techniques of consultation with stakeholders were used during project preparation, viz., public meetings, group discussions, interactions with affected households, media interactions etc. The consultations have also been carried out with special emphasis on the vulnerable and women groups. The key informants during the project preparation phase included both individuals and groups namely:

- Project affected persons;
- Village Panchayat, Sarpanch and ward members;
- Local voluntary organizations and NGOs;
- Government agencies and departments;
- Other project stakeholders with special focus on women and PAPs belonging to the vulnerable group.

Stakeholder's consultations were conducted at District level as well as at Village Panchayat level as explained below:

A. District Level consultations

District Level consultations were conducted to solicit public and PAPs inputs. Participants in District level consultations included District Magistrate, representatives of District level officials of Revenue departments, NGOs, PAPs and PAP representatives apart from MoRT&H /PIU staff and consultants.

The objectives of district level consultations were:

- To inform public about the project;
- To take suggestions from the local people and also to note their concerns;
- To explain procedures to be followed for land acquisition and payment of compensation and assistance to project affected persons losing their assets due to project interventions.
- To inform people about the census surveys, asset verification, Photography/Videography, and village level consultations to be conducted as part of SIA and RAP preparation.

B. Local level Consultations

At local level, consultations were conducted in all the affected village panchayats. As per the census data, 31 villages falling under 25 panchayats, will be impacted due to road widening. To initiate the process, Block Development Officers (BDOs) were contacted before conducting public consultations. Respective BDOs further communicated/circulated the information to all village panchayat pradhans/secretaries. Accordingly dates for public consultations in affected villages were scheduled.

As per dates scheduled, the village panchayat Pradhans sent their representatives to inform (“Munaadi” in local language) villagers about schedule dates for public consultation. The public consultations were held at Panchayat Bhavans of respective villages.

During public consultation, people were informed about the project by Consultants, PWD officials, Gram Pradhan/Secretary and ward members. Suggestions from the people were recorded in minutes of meeting. The photographs and attendance sheet for district level consultations and attendance sheet of village level consultations are attached as **Annexure 8**. Minutes of meeting of district level consultations are given in table 5.2 below. Minutes of meeting and photographs of village level consultations is given in table 5.3. Major information shared with the community included:

- Improvement Proposal of the project road and its need
- Type of likely impact in each affected village
- Project Facilities & Safety Features
- Information about measures to be adopted to minimize or compensate the impact.

The various levels at which the consultation were held is shown in **Figure 5-1**.

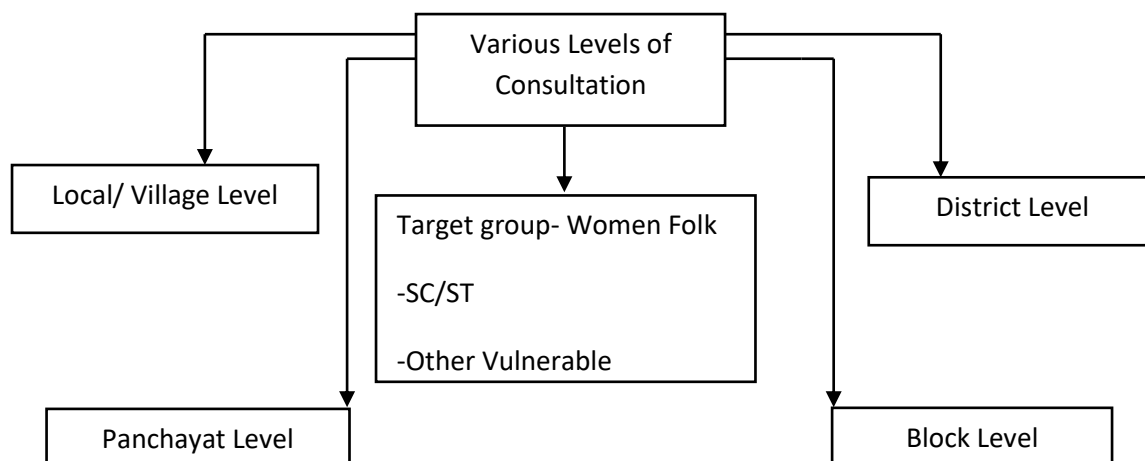


Figure 5-1: Various Level of Consultation

The consultation methods/ types followed to elicit required information (their views & opinions) are detailed below in Table 5.1.

Table 5-1: Methods of Public Consultations

Stakeholders	Consultation Method
PAPs	Interactions during census & Socio-economic Survey
Village Pradhan/representative of PAPs	Focus Group Discussions
Local communities	Focus Group Discussions
Women's groups	Focus Group Discussions
Vulnerable groups (SC, ST, BPL)	Focus Group Discussions
Road Construction Department/PWD	Individual interaction, discussion, joint field visit
Line Departments- Forest department, Electricity department, Municipal body, PHED, Telecom Department etc.	Individual meeting/interactions, discussions

5.3 Details of Stakeholder's Consultation

5.3.1 District level Consultations

District Level Public Consultations was organized at six major congested areas, namely,

1. Poanta Sahib BDO office meeting hall,
2. Sataun Panchayat Bhawan,
3. Shillai BDO office meeting hall,
4. Nahan DC office-Sirmaur
5. Gumma Near Panchayat Ghar.
6. Panchayat bhavan, Kafota with Mahila mandal & NGO

Out of the 6 consultation meetings, 4 were organized in 2012 and 2 more meetings were conducted recently (one each in 2018 and 2019) when the project data was further revised based on modified design under GNHCP. In these consultations apart from the PAPs, representative of Block development Officer, Circle Officers, officials of revenue department, Mahila mandal members, NGOs and project authorities etc were present.

The details of discussion and the suggestions received during district level consultations is given below in **Table No. 5.2.**

Table 5-2: Minutes of District Level Consultations in Project Area

S. No.	District	Location, Date and No. of participants	Type of stakeholders	Issues Raised/Discussed	Remarks
1	Sirmaur	Nahan DC office, Oct.- 2018 No. of participants- about 35	- Commissioner, PWD, DFO's, HRTC, Education Dept., Chamber of Commerce & Industries, Welfare officer, Consultants etc. - Affected persons	<ul style="list-style-type: none"> • To avoid any delay in project implementation, District Collector requested the forest department to expedite the process of Forest diversion. Local people requested for developing the dumping sites as parking/ rest/ recreational area by leveling and developing the site. • President, HPCCI emphasized the Project road to be designed to 4 Lane configuration after 1.5 Km upto Rajban, due to DRDO project near Rajban. • The stakeholders expressed satisfaction regarding the project as it will improve commercial connectivity and promote tourism. • It was also informed by Ex. Eng. Nahan that 4000 Trees will be planted in lieu of trees to be fell. 	<ol style="list-style-type: none"> 1. The concerned DFO assured that within next seven days, the forest case for the diversification of the land shall be forwarded to the principle Chief Conservator Forest Shimla. 2. Ex. Eng. Nahan, explained that around 45 lacs cubic meter excavated material will be recovered from site, out of which nearly 15 lacs Cum. will be reused and balance quantity will be dumped in proposed nine dumping sites which will be developed and improved for various purposes e.g. playground, parks, rest areas etc. 3. The Assistant commissioner, Nahan directed to HPSEBL and IPH department to submit the revised estimates at earliest possible to NH wing of the HPPWD.

S. No.	District	Location, Date and No. of participants	Type of stakeholders	Issues Raised/Discussed	Remarks
2	Sirmaur	<p>Poanta Sahib, BDO office Meeting Hall, May, 2012</p> <p>No. of participants- about 150 (attendance sheet signed by 72 only)</p>	Local Residents, Villagers and Public Representatives' of Tehsil, Gram Pradhan.	<ol style="list-style-type: none"> 1. Affected people showed their concern regarding the rate of Compensation for land and Enquired whether the compensation would be paid at market rate. market value? (Gram Pradhan) 2. People enquired about the widening options, whether the widening would be at both sides of the road stretch 3. It was suggested by the people that in the design of the road stretch rain water disposal and drainage system should be considered. It was enquired by the people that NH –Boundary will be marked before finalization of design. 	<ol style="list-style-type: none"> 1 It was informed to the participants that Government will give compensation as per R &R Policy of World Bank and Himachal Government Policy. 2. NH-SDO (Dhaura Kuan) Shri N.K. Verma replied widening is based with regards to design & safety. 3. JEN Dhaura Kuan Shri Suryakant Replied – The consultant has investigated the water drainage system, pipe, culverts and bridges as per design. 4. JEN Dhaura Shri Suryakant replied- At present State PWD has marked it. When NH will acquire the land then NH will mark the boundary.
3	Sirmaur	Sataun, Gram Panchayat Pariser, May, 2012	Local Residents, Villagers and Public Representatives' of Tehsil, Gram Pradhan.	<ol style="list-style-type: none"> 1. People enquired about entitlement of tenants for compensation to tenants entitled for compensation. 2. People inquired about the criteria 	<ol style="list-style-type: none"> 1 From consultant side –Government will give compensation as per R &R Policy of World Bank and Himachal Government Policy.

S. No.	District	Location, Date and No. of participants	Type of stakeholders	Issues Raised/Discussed	Remarks
		No. of participants- about 225 (attendance sheet signed by 86 only)		<p>for compensation to eligible tenants.</p> <p>3. People enquired about scheme of widening</p> <p>4. Authority for land Acquisition process was enquired by people, if it will be done by NHAI.</p>	<p>2. JEN, Dhaula Kuan, Shri Suryakant Replied – Widening will be done as per road geometry & position by feasibility and curves.</p> <p>3. From consultants’ side LA assistant replied- Land Acquisition will be done with the assistance of Patwari (Government land assessor). As per Land acquisition plan. The acquired land will be marked.</p>
4	Sirmaur	<p>Shillai BDO office Meeting Hall, May, 2012</p> <p>No. of participants- about 350 (attendance sheet signed by 143 only)</p>	Local Residents, Villagers and Public Representatives’ of Tehsil, Gram Pradhan.	<p>1. People enquired about the boundary marking and when the stretch will be finalized by PWD.</p> <p>2. People enquired about the time period over which the land will be acquired by National Highway and whether has marked the boundary line for land acquisition. They also wanted to know whether the widening would be carried out at both the sides of the existing road equally.</p> <p>3. People enquired about the amount</p>	<p>1.NH-SDO (Dhaulta Kuan) Shri N.k. Verma replied-State PWD acquires the land then related department marks and fixed the boundary stones. PWD has already marked and fixed by them but due to heavy rainfall the marked stones were either broken or hidden below the silt.</p> <p>2.NH-SDO (Dhaulta Kuan) Shri N.K. Verma replied- The roads’ condition will be investigated such as its curves position, then the land acquisition will be done.</p>

S. No.	District	Location, Date and No. of participants	Type of stakeholders	Issues Raised/Discussed	Remarks
				and rate of compensation to be given for the acquired land.	3. From consultant side- Land value will be determined as per present market value. R &R Policy will be based on World Bank and Himachal Government Policy.
5	Shimla	Gumma –Tehsil Chopal Outside Patwar Khana, May, 2012 No. of participants- about 250 (attendance sheet signed by 82 only)	Local Residents, Villagers and Public Representatives’ of Tehsil, Gram Pradhan	1. At present, the road width is equal from both the sides. People asked that how much more of land is still required for widening of NH? 2. People enquired that how much compensation will be given from the governments’ side? (Gram Pradhan) 3. State government PWD has acquired land for road widening but marking is at another place or side. People requested to look into the matter.	1 NH-JEN (Dhaura Kuan) Shri Suryakant replied- For widening road width, curves and diversion is considered. The road width is different on both the sides. 2 Consultant informed that Land value will be determined as per present market value. R &R Policy will be based on World Bank and Himachal Government Policy. 3. NH-JEN (Dhaura Kuan) Shri Suryakant replied- Acquired land has been identified through Khasra numbers by PWD from where the road is passing. Acquired land will be compensated by the Government policies.

S. No.	District	Location, Date and No. of participants	Type of stakeholders	Issues Raised/Discussed	Remarks
6	Sirmaur	SARDHA-NGO, Kafota, Oct., 2018 No. of participants- about 150 (attendance sheet signed by 87 only)	NGO SARDHA, Officials from local Gram Panchayats, Local Govt. bodies, Beopar Mandal officials, ASHA workers, College students etc.	<ol style="list-style-type: none"> 1. Students informed that outsider labours may involve in eve teasing and girls and ladies of local area may feel unsafe while morning and especially in night hours. (Student) 2. There are no street lights in habitats and girls feel unsafe while back to their homes from work places during evening/night hours. (Presidnet of Teacher association) 3. Mahila mandal representative requested that payment of compensation to be disbursed may be deposited in individual accounts of ladies instead of joint accounts. (Representative of Mahila Mandal, Kafota) 4. Local people may be preferred for employment in project work during execution. (President, Mahila Mandal Khajuri) 	<ol style="list-style-type: none"> 1. Executive Engineer assured that proper check will be maintained on all outsiders and every due consideration will be given that no such unwanted incident occurs. 2. The Executive Engineer NH told to all present that Solar lights have been taken into account for all habitats coming in project stretches and CCTV cameras will also be installed at various locations. 3. Executive Engineer NHHPPWD Nahan assured that proper care has been taken and no such dangers are expected.

S. No.	District	Location, Date and No. of participants	Type of stakeholders	Issues Raised/Discussed	Remarks
				<p>5. Expressed thanks to MoRTH and world Bank for considering this road which will fulfil the needs of local people in much more better ways in coming future since people are facing lot of difficulties in present day to day scenario. (President youth Sports club)</p> <p>6. Expressed thanks and assured full cooperation from all local bodies when project starts. He desired that labour coming from outside must be provided basic facilities of sanitation. (President Beopar Mandal)</p> <p>7. People assured that all outsiders coming in area related to this project will be fully co-operated by local people. People expressed some fear for villagers since same is located on hill top and heavy excavations and cutting may attribute to sliding of their lands.</p>	



5.3.2 Local Level Consultations



The objectives of local level consultations were to inform the affected persons about the project, R&R policy of GOI/WB, to incorporate their views in the design and mitigation measures as suggested by them. For organizing the local level consultations, Consultation team was framed-up which included one Socio-Economic Analyst specialized in qualitative data collection, two women community organizers, two investigators and one moderator. Group discussions were carried out based on semi-structured guidelines. Efforts were made to cover all those villages having major problems viz., relocation of religious structures or big market or residential area getting affected, etc. Both small and big habitations were covered in order to get representation of all the segments of affected population.



When the project was conceptualized in the year 2012, the local level public consultations were held at few locations during social screening stage. These locations were Badri Chowk in Poanta Sahib, Sataun, Kamrau, Tilordhar, Kafota and Shillai in Sirmour district and Gumma in Shimla district. Further to this, when the design was to be revised in 2019, census survey was again conducted in September-October 2019 and another round of consultations were carried out with the community to inform them about the proposed and revised design and obtain their suggestions. The latest Local Level public consultations in September 2019 were carried out at almost all affected village panchayats viz. Gondpur, Ajouli, Sataun, Taal sirmour, Muglawala kartarpura, Badwas, Kamrau, Dugana, Bokala pav, Shilla, Ashyadi, Koti Utarau, Pab Manal, Shillai, Bela, Bandli, Bhatnol, Siri kiyari, Drabil, Dharowa, Jhakando, Bohar and Gumma.

These public consultations were majorly attended by private land holders losing their land due to the project. They raised their concerns for adequate compensation and assistance. The details of discussion and the suggestions received during these consultations is given below in **Table No. 5.3**.


Table 5-3: Some Selected Photographs and Minutes of Meeting (Summarized) of the Public Consultations held in Sep., 2019

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
1	Gondpur, 18/09/2019, 35 no. of Persons	<ol style="list-style-type: none"> 1. People welcomed the road development with suggestion to provide safety provisions to avoid accidents and better riding quality of road. 2. Existing roads are in bad condition. Good road should be constructed with good thickness of material for long durability. 3. They expressed their problem in commuting to school due to bad condition of the road. 4. Link roads should be widened as well. 	
2	Ajouli, 18/09/2019, 20 no. of Persons	<ol style="list-style-type: none"> 1. People welcomed road development and appreciated for better road provision deliberated in public consultation meeting. 2. They supported the project and requested that road should be designed taking into consideration the safety of the local people during construction stage and business business/employment opportunities should be provided to the local people during project implementation. 3. They anticipate that with the better road condition will boost the tourism industry in the area. 	



S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
3	<p>Sataun, 18/09/2019, 30 no. of Persons</p>	<p>1. Project road is welcomed by people. They suggested that the road widening should be done with provision of road side drains.</p>	
4	<p>Taal sirmour, Muglawala kartarpura, 18/09/2019, 25 no. of Persons</p>	<p>1. People welcomed the road project as better road connectivity will be beneficial for local people and will provide improved business opportunities.</p>	

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
5	<p>Badwas, 19/09/2019, 45 no. of Persons</p>	<ol style="list-style-type: none"> 1. People welcomed the road project as road construction will improve the lifestyle of the people. 2. Road construction should be done with World Bank guidelines. 3. Proper lighting and provision of culverts should be included in the design. 4. Hill Cutting should be minimized. 5. Provision of Retaining structures and crash barriers should be provided for road safety. 6. Toilet facilities should be provided at the proposed bus stop/shelter. A passenger shed is required at zero point of the village. 	
6	<p>Kamrau, 19/09/2019, 38 no. of Persons</p>	<ol style="list-style-type: none"> 1. Agriculture land holders demanded that reasonable compensation must be provided. 2. Road safety should be taken care and provisions for Street lights and crash barriers should be included in the design. 3. Speed breakers must be provided near schools and hospitals. Proper signboards to be given near such sites. 4. Project should be environment friendly. Park should be provided. Plantation should be provided. 5. Proper Dump yard must be provided. 6. Toilet and parking facilities should be provided. 7. Provision of Retaining structures and crash barriers should be given to save houses in valley side. 8. Facility for drinking water and passenger shed is required. 	


S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
7	Dugana, 19/09/2019, 40 no. of Persons	<ol style="list-style-type: none"> 1. Proper gradient should be provided on project road to avoid water logging. 2. Crash barriers should be provided. 3. Construction of project road will be beneficial for people. 4. Road should be beneficial for farmers. 5. Road will provide better facility for transport of agriculture produces and vegetables. 6. Private land holders and structure owners demanded for adequate compensation. 	
8	Bokala pav, 19/09/2019, 35 no. of Persons	<ol style="list-style-type: none"> 1. People appreciated the Project road as it will be beneficial for commuting to school for students. 2. Project road will solve many of their problems like conveyance, paved road, lighting etc. 	

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
9	Shilla,, 20/09/2019, 40 no. of Persons	<ol style="list-style-type: none"> 1. People appreciated the road project as Construction of project road will be beneficial for people. 2. Road safety should be taken care and provision of Solar lights and crash barriers should be included in the design. Sign boards must be provided near schools and hospitals. 3. School playground should be provided. 4. Toilet facilities should be provided along the road. 5. Provision of Retaining structures for safety of villagers. 6. Paved Village roads should be constructed. 7. Cutting of hills should be compensated with retaining structures (breast wall with total height of 9m with each step of 3m height & width) 8. Private land which are not of much use should be acquired for dumping yard. 9. Breast wall is required at school building, patwar building, and ayurvedic hospital. 10. Villagers demanded for adequate compensation to residential, commercial and private land owners. 	


S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
10	Ashyadi, 20/09/2019, 50 no. of Persons	1. Project road is required urgently. People demanded for adequate compensation for the loss of their houses and shops.	
11	Koti Utarau, 20/09/2019, 35 no. of Persons	<ol style="list-style-type: none"> 1. Construction of project road will be convenient and beneficial for people. Reasonable compensation must be provided to families losing their land and house. 2. Project work should be started as soon as possible. 3. Houses built along the road should be kept safe while construction. 4. Double lane road construction will be beneficial for people. 5. Road construction will reduce travel time of passengers. 	

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
12	Pab Manal, 20/09/2019, 55 no. of Persons	<ol style="list-style-type: none"> 1. Cutting should be done with hands instead of machines to avoid any landslide. Retaining structures should be built with crash barriers. 2. Road should be constructed but with less damage. 3. People should be informed before construction of the road because we have land on road. 	
13	Shillai, 21/09/2019, 30 no. of Persons	<ol style="list-style-type: none"> 1. Local people should be consulted and adequate measures should be taken to minimize dust and noise pollution. 2. Safety measures should be taken during the construction stage to avoid any accidents. 	

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
14	<p>Bela, 21/09/2019, 20 no. of Persons</p>	<ol style="list-style-type: none"> 1. Project road is very necessary. 2. Provision of drain and culvert should be made in the design. 	
15	<p>Bandli, 21/09/2019, 40 no. of Persons</p>	<ol style="list-style-type: none"> 1. Safety features in valley side must be provided. 2. Village people demanded for adequate compensation for their structure and Land. 	

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
16	<p>Bhatnol, 21/09/2019, 20 no. of Persons</p>	<ol style="list-style-type: none"> 1. Two lane road should be constructed. 2. Adequate compensation must be provided. 3. Safety features in valley side must be provided. 	
17	<p>Siri Kyari, 21/09/2019, 40 no. of Persons</p>	<ol style="list-style-type: none"> 1. Project road should be constructed as soon as possible. Good quality of material should be used in construction. 2. Cut material should not be dumped in private land. It should be dumped in dumping site to avoid damage. 3. Safety features in valley side must be provided to avoid erosion. 4. Adequate compensation must be provided to structure and land losers. 5. Provision of street light must be given 	

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
18	<p>Drabil, 21/09/2019, 35 no. of Persons</p>	<ol style="list-style-type: none"> 1. Two lane road is very necessary. 2. Adequate compensation must be provided. 	
19	<p>Dharowa, Jhakando, 21/09/2019, 20 no. of Persons</p>	<ol style="list-style-type: none"> 1. Project road is welcomed. 2. Land holders demanded for adequate compensation. 	

S. No.	Village Name, Date and number of participants	Common Issues and Suggestions by Villagers	Photos of Public Consultation
20	Bohar, Gumma, 21/09/2019, 45 no. of Persons	<p>National highway should be upgraded as existing condition of the road is bad. Two lane road construction is necessary because during apple season the vehicle movement in the area increase many folds and thus creating problem for the local people.</p> <p>Adequate compensation must be provided.</p> <p>Street lights should be provided. Speed breakers must be provided near schools.</p> <p>Paved road and toilet should be provided in market area.</p> <p>Provision of water storage facilities for irrigation purpose should be given.</p> <p>Proper drainage should be provided.</p> <p>Reputed contractor must be hired for construction of road to avoid bad quality of construction.</p> <p>In Gumma market, road level should be 1 m down from shop level (ground level) to avoid water entering in shops.</p>	

Note: During public consultations most of the people were not willing to sign the attendance sheet. However, tentative Nos. of persons attended the meetings is mentioned in the above table.

5.3.3 Information Disclosure through Media

Public consultations were also covered by print media and details of discussions have been reported in local newspapers. Local newspapers have covered the consultations conducted in 2012 (NHIIP) as well as additional consultations in 2018 and 2019. Electronic media coverage was also telecasted in local news channel which reported the details of the project and its importance in developing better road connectivity in the area which will further promote tourism and business opportunities.

These media coverage helped in information dissemination among the local and affected people about the project interventions and impacts. The copy of newspapers has been attached as **Annexure-9** and media coverage has been attached as CD with this report.

5.4 Summary of findings of all type of consultations

- Majority of PAPs agreed that given the road condition and traffic volume, widening and strengthening is necessary. They agreed that better connectivity enhance economic opportunities.
- Compensation was the major issue in every discussion. Most of the PAPs feared payment of low compensation because of past experience. However, consultants informed them about the procedure of calculating compensation and were also informed about R&R assistance to meet the replacement value. Cash compensation is more preferred by the PAPs. Requests were made by the affected people for providing facilities and amenities like bus stop/rain shelters along the road and safer accessibility at points of congestion and intersections;
- Affected People are hopeful about employment opportunities to be provided to local people during road construction and later phases of the project
- People suggested that adequate safety measures should be provided such as speed breakers, signages, Crash barriers, retaining walls etc. near inhabited areas, school and hospitals. Safety was the paramount concern among the local population staying along the highway.
- It was suggested by the people that in the design of the road stretch rain water collection/harvesting and proper drainage system should be considered.
- Participants were informed that road safety provisions, extra wide road, footpath and drains will be provided in the urban areas.

5.5 Women's participation in consultations and out comes

A public consultation was held with Local People, Various Mahila Mandals, Govt. Bodies, Vyapar Mandal and College Students at Kafota on March 2019 emphasizing issues on Women safety and Women empowerment (photos enclosed in above section & Attendance sheet is attached as **Annexure-8** with this report)

The meeting was called vide Executive Engineer NH Division HPPWD Nahan office letter No. 14582-98 dated 07-03-2019 at Kafota (RD 40/0) on NH 707.

Wide publicity was made and all local people, various Mahila Mandals working in the area for welfare of females, a well prominent NGO SARDHA (Social Action for Rural Development of Hill Area) Reg. under Act. 1860 (XXI), Officials from local Gram Panchayats, Local Govt. bodies, Beopar Mandal officials, ASHA workers, college students etc. participated in the meeting with full enthusiasm. The participants were requested to express their views and any other suggestions for this road project. Questionnaire used in the public consultation regarding Women safety & Empowerment and Answers by female participants has been given in **Chapter-VII** of this report. The details of discussion and suggestions put forward during this meeting are summarized below:

1. Only primary health centers (PHCs) are located in villages and the quality of treatment and medical facilities are less than satisfactory. In emergency they have to reach hospitals at district headquarters only.
2. The major part of the stretch depends on the hand-pumps for its water needs; the issue of replacement of hand-pumps attains a very special significance in context of the women.
3. The women feel that their mobility will increase as market & relative's places will be easily accessible for them as better road condition will induce more transport vehicles to operate. More shops, markets will open within the village approach area and as a result they will get quality leisure time at their disposal
4. The girl students will be able to attain higher education at colleges, since journey time and cost will be greatly reduced and the girls can commute from home all by themselves free of hazard.
5. Women from poor families will get job opportunity during construction work as casual labour or at office. Besides, women can operate individual / family enterprise by opening small tea stalls, Shops/eateries to provide meals to the construction labourers. This will enhance their family income as well as their entrepreneurial skill, which may be useful in future.

6. Women labourers feel that improved road network will provide them with better job opportunity as they will be able to travel further and even can commute from home. Moreover, travel by public transport system, like Govt. bus service, will become cheaper and money saved on transport can be better utilized for household needs.

5.6 Disclosure

The SIA and Resettlement Action Plan (RAP) would be disclosed on MoRTH website as well at the World Bank Info-shop/ Public Information Centre. Feedback if any would be incorporated into the final RAP document, following which the final RAP will be re-disclosed. Further to enhance transparency in implementation, the list of PAPs for disbursement of benefits shall be separately disclosed at the concerned Panchayat Offices/ Urban Local Bodies, District Collector Offices, Block development Offices, District Public Relations Offices (at the state and district levels), Project office, and any other relevant offices, etc. The Resettlement Policy Framework, Executive Summary of the SIA and RAP will be placed in vernacular language in the District Collector's Office.

5.7 Framework for continued consultation

Information dissemination and consultation will be held during RAP implementation, monitoring and evaluation stages. Consultation will be carried out by the Project Authority through NGO with active involvement of R&R officer at project level. Besides, the Social officer at state level will also carry out consultations with PAPs, local community and other government department officials at suitable time intervals directly with support from NGO and R&R Officer at site.

The information dissemination and consultation will start after the mobilization of NGO at site. It will be carried out by organizing public meetings at suitable locations involving PAPs, local communities, local authorities, NGOs, and other institutions available in the area. Leaflets containing brief information about the project, policy provisions, entitlements, GRC, etc shall be given to PAPs and local authorities as prior information. A month wise work plan for holding consultations will be prepared by the NGO and submitted to R&R Officer. The date, time and venue for holding consultations will be intimated to PAPs, local community and local authorities at least 7 days in advance. The timing of consultation shall be fixed as per the suitability of villagers giving due consideration to peak working time. The intimation for the consultation shall be done by way of drum beating, announcement by loud speaker and by putting up information on the notice board of concerned village/town, and other such public places.

The team of NGO must have women and tribal members while carrying out consultations. Separate/additional consultations/interactions with the women, tribal and other vulnerable groups shall be organized.

After verification of PAPs, list of PAPs will be displayed in the concerned village/town. In the consultation meetings various aspects covered in the RPF will be explained for better understanding of the people in general and PAPs in particular. It is expected that people would have several questions and doubts which require clarifications. The forum will provide a platform to discuss those questions and clear doubts. Consultations with people at frequent intervals would improve their understanding about the project, importance of their participation and also the likely benefits associated with the project. Further, one to one consultations with PAPs will also be carried out by the RAP implementation agency to inform the extent of impact, explain the entitlement, importance of identity card, opening of joint account, mechanisms for grievance redress, and also providing suggestions and complaints. Micro plan approved by the project authority will be placed in concerned villages with panchayat office for review and to minimize grievances. Every item contained in the micro plan shall be explained to the satisfaction of PAPs so that there is no scope of any grievance at a later stage. Further, consultations at household level will be undertaken for skill improvement training purpose, use of compensation amount and livelihood restoration.

In the first three months of the RAP implementation, at least 3 rounds of consultations will be carried out at those locations where project is likely to cause adverse impacts.

In addition to the above, the Social Officer (at State Level) shall separately organize information dissemination and consultation meetings every quarterly in the project stretch. In the consultation meetings various aspects of the project would be explained and also the status of the project (technical, social & environmental) would be revealed. PAPs, local community and others would be given opportunity to discuss issues and seek clarifications in context of the project. It is expected that regular interactions with PAPs and local community directly and through NGO would help build good rapport with them. Printed leaflets/ information booklets would be prepared by the Social Officer for distribution in the project area. The Social Officer will play lead role to explain various aspects of the project, importance of consultations and also seek their participation and co-operation in the project. The RAP implementation agency will help and assist the Social Officer (Project Authority) organizing information dissemination and consultation meetings without any additional financial implications. For wider publicity of the consultation meetings similar procedure shall be followed. In addition, government officials in the surrounding areas shall be officially invited to participate in the meetings.

A Minutes of Meeting would be prepared and read out to people present in the meeting. The Minutes of Meeting would be signed by the officials and some of the participants present and will be kept in project file documentation purpose.

5.8 Suggestion and Complaint Handling Mechanism (SCHM)

The MoRTH recognizes the importance of this and hence intends to establish a SCHM for the NHIP. The communication channels to report project related complaints/concerns will be disclosed at all levels of institutions—MoRTH, State, Project/site level.

Though the Right to Information Act, 2005 an Act of the Parliament of India provides for setting out the practical regime of right to information for citizens. The Act applies to all States and Union Territories of India except the State of Jammu and Kashmir. Under the provisions of the Act, any citizen may request information from a "public authority" (a body of Government or "instrumentality of State") which is required to reply expeditiously or within thirty days. The Act also requires every public authority to computerize their records for wide dissemination and to pro-actively publish certain categories of information so that the citizens need minimum recourse to request for information formally. In other words under the act, citizens have right to seek information from concerned agencies by following the set procedures. However, it is quite likely that many people may not use the provisions of this Act, only in limited cases covering serious concerns. Being an inter-state project involving several states and large scale of civil works along with R&R and environment issues, the project is likely to receive many suggestions, complaints, inquiries, etc through the project implementation period. Therefore, MoRTH has agreed to establish SCHM as a good practice to address public concerns pertaining to various issues. SCHM will report all project related LA and R&R of the PAPs for redressal through the concerned PIU or GRC as appropriate. Several communication channels viz., toll free phone number, dedicated email, mechanism for on line submission of suggestions/complaints/inquiries, provision of suggestion/complaint box (at site and project office), post and other suitable means shall be set up for suggestion and complaint handling.

From the initial stage of the RAP implementation, the RAP IA will also disseminate information regarding SCHM to local people and road users by organizing consultations, distributing fliers, announcement by loud speakers, hoardings, etc. During consultations the RAP IA personnel will explain the process of SCHM in detail.

CHAPTER 6: ANALYSIS OF ALTERNATIVES AND MINIMIZATION OF IMPACTS

6.1 General

The mandate of the current project is to widen the existing road to 2 lanes with provision of paved shoulder in the built-up sections and hence there no alternative site is involved. However, the chapter discusses on the “With” and “Without” project scenarios. The methodology that has been adopted for the evaluation of the alternate alignment route for construction of Project Road and the selection is based on engineering, economic, environmental and social considerations have been highlighted. The minimization of social impacts by considering design alternatives determines the extent of mainstreaming of the social component. This chapter looks at the decisions made during the project when alternatives were available and describes the rationale behind each decision..

6.2 “With” and “Without” Project Scenario

Keeping in view the site conditions and the scope of development of the area, the ‘with’ and ‘without’ project scenarios have been compared as given in Table 6.1.

By looking at the table 6.1, it can be concluded that “With” project scenario positive/beneficial impacts will enhance social and economic development of the region compared to the “Without” project scenario, which will further deteriorate the present environmental setup and quality of life. Hence the “With” project scenario with minor reversible impacts is an acceptable option than the “Without” project scenario. The implementation of the project therefore will be definitely advantageous to achieve the overall development of the economy and progress of the region.

The project will have multiple benefits. The project will increase the potential of the area and fast connectivity between Himachal Pradesh, Uttarakhand and Haryana. Being improved limestone linkage from Sataun, there is further scope of installation of 17 Nos. new factories at Gumma, which is under active consideration of Government of Himachal Pradesh.

Table 6-1: ‘With’ and ‘Without’ Project Scenario

Component	Without’ Project Scenario	With’ Project Scenario
Connectivity and Development	<ul style="list-style-type: none"> • The connectivity between the other National and State Highways is not good. • Existing connectivity with Delhi, Haryana and Uttarakhand 	<ul style="list-style-type: none"> • It will improve inter-connectivity between other National Highways (NH-707, NH-124 and various PMGSY roads).

Component	Without' Project Scenario	With' Project Scenario
	<p>need to be improved, for the economic beneficial transportation of horticulture produces and apples.</p> <ul style="list-style-type: none"> • Pavement conditions are in poor condition resulting in high travel time, bad vehicle conditions, and more pollution. • Poor pavement conditions restricting people's access to local market, Medical facilities, education centers, work zones etc. 	<ul style="list-style-type: none"> • Connectivity with Haryana, Delhi and Uttarakhand will improve. • Travel time will be reduced due to improved pavement conditions and road geometry and hence Pollution levels will be reduced as well. • Trade of local produce like dairy products, agriculture products, and smallscale industrial product will also be increased.
Social and Cultural Environment	<ul style="list-style-type: none"> • There will not be any impact on existing social and cultural environment. 	<ul style="list-style-type: none"> • 290 structures including 16 common property resources will be affected due to proposed widening. • Necessary R&R plan has been developed to address the socio economic impact due to the proposed project. • Total private land acquisition will be 23.1894. ha.
Carriageway	<ul style="list-style-type: none"> • 2 lane/ intermediate / earthen shoulder 	<ul style="list-style-type: none"> • 4 lane, 2 lane with paved shoulder and intermediate lane at various chainages has been proposed to improve the road condition.
Drainage/ Water logging	<ul style="list-style-type: none"> • Water logging issues are observed along the road side specially settlement area due to absence/non-functional drains. 	<ul style="list-style-type: none"> • Water logging conditions will be improved by reconstruction of culverts/ bridges with adequate hydraulic (details are provided in Chapter-2 Project Description) • New cross drainage structures and drains are also provided to address the

Component	Without' Project Scenario	With' Project Scenario
		flooding and water logging issues.
Financial Implications	<ul style="list-style-type: none"> Without project scenario does not involve any capital cost, but there will be recurring maintenance cost to maintain the smooth flow of traffic. 	<ul style="list-style-type: none"> The total R&R cost will be about 91.62 crores.

The potential benefits of the proposed road improvements are substantial and far-reaching both in terms of the geographical spread and time.

Further, there is vast scope for many pharmaceutical industries and limestone industries after up-gradation of NH-707. This project will also reduce the travel time substantially. In addition this project road will provide further other benefits like:

- ❖ Fast and safe connectivity resulting in saving in fuel and Total Transportation cost to the society;
- ❖ Employment opportunities to local people during road construction;
- ❖ Development of local industries, agriculture and handicrafts;
- ❖ Development of tourism and pilgrimage;
- ❖ Transporting, processing and marketing of agricultural products;
- ❖ Reduction in accidents;
- ❖ Reduction in pollution;
- ❖ Opening of opportunities for new occupations;
- ❖ Better approach to medical & educational services and quick transportation of perishable goods like fruits, vegetables and dairy products; and
- ❖ Improved quality of life for people and so on

However, there would be an increase in the vehicular pollution-air and noise, in the vicinity of the highway. This road construction will result in loss of private properties and loss of living. But at the same time, if the project is not implemented, there is likelihood that with the further deterioration of the project road, the economic development and business opportunities in the area will be hampered. Hence, it is clear that the implementation of the project will be a definite advantage to State of Himachal Pradesh in order to achieve all-round development of its economy and progress of its people.

6.3 Safety Aspects

While assessing the impacts, safety of the road users and the roadside communities has been found to be a major concern. A number of measures have been proposed to reduce the risk of traffic accidents. In some places, these safety measures are co-terminus with the project's impact minimization measures. Horizontal profile correction and intersection improvement has been suggested for betterment of the project corridor. Other safety measures taken are:

- ❖ Improvement of existing curves in road design,
- ❖ Improvement of existing Curve at bridge approaches.
- ❖ Provision of adequate traffic signage,
- ❖ Widening of bridge with footpath in built-up location,
- ❖ Embankment protection in approaches to bridge,
- ❖ Foot path and pedestrian guard rails in built up zone,
- ❖ Improvement of existing highway junction,
- ❖ Retro-reflective painting on roadside plantations.
- ❖ Provision of retaining walls, breast walls, gabion walls, other engineering and bio-engineering measures of slope protection to avoid landslides.

6.4 Why alternative for realignment and bypasses are not applicable for this road

The project road having a total length of 97 Km is majorly passing through mountainous and steep terrain (in about 85 Km length). The existing alignment is deficient in geometry with around 1,800 nos. of horizontal curves and vertical gradient up to 18% at some places which is proposed to be improved. Hence, due to presence of steep terrain, availability of limited land and involvement of huge amount of cutting of rocks provision of any further realignment and bypass is not feasible. Also, Provision of this will lead to heavy amount of land acquisition and increased project cost.

6.5 Minimization of land uptake by providing intermediate carriageway

By keeping in view the traffic projections and widening requirements, intermediate lane configuration (5.5 m) has been proposed in last 24.900 Km stretch. This will further reduce the impact on land acquisition that would have occurred by provision of two lane carriageway. For intermediate carriageway corridor of impact varies from 11 m to 14 m as compared to 14 m to 18 m for two lane carriageway.

6.6 Minimization of land uptake by eliminating paved shoulders

Four lane configuration has been proposed in the initial 1.500 km section due to presence of built-up area of Paonta Sahib. Beyond this, two lane configuration with paved shoulder has been proposed in a length of 16.300 km due to presence of industrial area and heavy truck movement upto Sataun which is also a major stockyard of lime. Beyond this point, two lane and intermediate carriageway has been provided in a length of 52.800 km and 24.900 km without the provision of paved shoulder which will also reduce the corridor of impact and minimization of land use.

CHAPTER 7: SOCIAL IMPACTS OF THE PROJECT

7.1 Introduction

The proposed project can be viewed as boosting economic growth and poverty reduction which will bring substantial social and economic development in the region. The social benefits arising due to the project will be triggered off by the improved accessibility to various services such as easy access to markets, health facilities, schools, workplace etc. It will in turn increase the income of the local people and elevate their standard of living. The possible direct and indirect positive impacts are listed below:

- The immediate benefit of road construction and improvement is that it brings direct employment opportunities for the roadside habitations. Especially for those who work as daily wage laborers etc.
- Improved road networks provide better links between villages, communities and urban areas. It provides wider access to market facilities, health centers, education etc.
- Improved road networks encourage urban entrepreneurs to invest in far and remote areas in commercial farming and industrial activities.
- Improved roads also help people building strong institutional network with outside agencies.
- Road network not only link people to better markets but also introduce them to newer work opportunities at distant places. People can shuttle to distant places for work such as engage in construction, factories, business as well as domestic works.

Due to the proposed project, a number of adverse effects are also likely to be encountered by the people. The losses likely to be experienced by the people are loss of residential structure, loss of commercial structure, loss of agricultural land, loss of fruit bearing and non-fruit bearing trees, loss of common property etc.

In this particular stretch, the impact of land is due to curve improvements at few locations. In context of the existing RoW and the encroachments in the RoW, the project-affected structures are owned by both titleholder and non-titleholders.

To assess the impacts likely to arise from land acquisition, the detailed Census Survey was conducted in the month of September-October, 2019 for each affected structure household. During the Census survey, Socio-economic data was also collected as much as possible. However, some of the families were not willing to share complete information mainly related to family details, income level, assets owned etc. In such cases, their data has not been included in the analysis and have been separately

mentioned under each section. Collected data and information regarding project impacts and socio-economic data is presented in subsequent sections in this chapter.

The proposed project has been divided in 4 packages and details of these packages has been alienated in Table below-

Table 7-1:Package-wise distribution of the project

Package No.	Place		Existing Chainage		Design Chainage		Length (km)
	From	To	From	To	From	To	
I	Paonta Sahib	Hewna	0.000	25.345	0.000	25.000	25.000
II	Hewna	Ashyari	25.345	50.700	25.000	50.000	25.000
III	Ashyari	Shri Kyari	50.700	76.010	50.000	75.000	25.000
IV	Shri Kyari	Gumma	76.010	95.922	75.000	94.900	19.900
Total Length							94.900

7.2 Land Availability

The project road is Intermediate/Two Lane from Chainage Km 0 to Km 11.500 and is Single/ Intermediate Lane from Chainage Km 11.500 to Km 97.000. Based on detailed field verification with the help of revenue maps, it has been found that the land width in project section is varying between 8 to 32.5 m. The chainage wise existing ROW details collected from Revenue and PWD department is attached as **Annexure-2**.

7.3 Land requirement for the project

Land is to be acquired for junction improvement, curve improvements, widening and for dumping purposes. In total, about 29 villages will be affected due to land acquisition. District-wise Land Acquisition details of the affected villages is given in Table 7.2 below.

Table 7-2: Land Acquisition by District

District	No. of Village (Land to be Acquired)	Land Required (Area in Ha)
Sirmaur	27	23.23
Shimla	2	2.26
Total	29	25.49

Source: As per LA Plan (Approved 3D), Apr 2020-May 2021²

The additional land required as per final design, which is 25.49 ha, includes both government and private land. Out of 25.49 Ha, 23.19 ha is private land which will be acquired for the project. **Table 7-3** shows the Land type required for the project road.

Table 7-3: Details of Land Acquisition Required

Package	Length (in KM)	Land to be Acquired (Ha.)		Total Land Required (in ha)
		Private	Government	
I	25	0.0048	0	0.0048
II	25	5.5107	0.0084	5.5191
III	25	15.4951	0.0843	15.5794
IV	19.9	2.1788	2.2071	4.3859
Total	94.9	23.1894	2.2998	25.4892

Source: As per LA Plan (Approved 3D), Apr 2020-May 2021³

The 3(D) Gazette Notifications of Sirmaur and Shimla districts of Paonta-Gumma Road (NH-707) is attached as **Annexure-10**.

7.4 Impact on land

7.4.1 Land Requirement

The project requires acquisition of 23.19 Ha of private land and the acquisition will be done as per the provisions of the National Highway Act 1956. Out of total 23.19 ha. Private land, area requirement for road widening/curve improvement will be 62.73%, for dumping sites 34.43% and for other facilities will be 2.85%. The activity wise requirement for land acquisition is given below:

Table 7-4 Activity-wise Land Requirement

Sr. No.	Particulars	Land Area (ha.)	Percentage
1	Road widening/ curve improvements	14.5461	62.73
2	Dumping Sites	7.9833	34.43
3	Truck lay-by	0.66	2.85
Total		23.1894	100

There will be private land acquisition of 23.19 hectare which includes 2.49 hectare of

² Published on 23.04.2020, 15.05.2020, 08.09.2020, 15.09.2020, 27.11.2020, 07.04.2021, 07.05.2021

³ Published on 23.04.2020, 15.05.2020, 08.09.2020, 15.09.2020, 27.11.2020, 07.04.2021, 07.05.2021

agricultural land, 22.55 hectare of barren, 0.5 hectare of residential and commercial land.

Table 7-5: Categorization of the land (Ha.)

Package	Agricultural	Barren	Residential and Commercial Plots	Total	Percentage
I	0.0048	0	0	0.0048	0.02
II	1.4031	3.8421	0.2739	5.5191	21.65
III	1.0792	14.3191	0.1811	15.5794	61.12
IV	0	4.3859	0	4.3859	17.21
Total	2.4871	22.5471	0.455	25.4892	100

Source: As per LA Plan (Approved 3D), Apr 2020-May 2021⁴

7.4.2 Affected Households and Population

According to census survey and updated 3D, a total of 1455 plots are getting affected which also includes 274 Structure (with & without Land titles). During study, only structure holders were surveyed because either land owners were unavailable or living outside the state, hence no information could be collected. In addition, relevant information from 3D notification (published on 23.04.2020, 15.05.2020, 08.09.2020, 15.09.2020, 27.11.2020, 07.04.2021, 07.05.2021) was also reviewed and accordingly the level of impact on the affected landholders were studied. A brief analysis of the same is reflected in below sections.

Out of 1455 affected households, 1181 Titleholders (THs) are losing land only and 99 Titleholders (THs) are losing both land and structure. Other than that, 175 are Non-titleholders (NTHs) which are mostly Kiosks/temporary shop owners. Package-wise affected Households and population is given in below table.

Table 7-6: Project Affected Households and Population

Type of PAPs	Package I		Package II		Package III		Package IV		Total	
	Affected HHs	Affected population	Affected HHs	Affected population	Affected HHs	Affected population	Affected HHs	Affected population	Affected HHs	Affected population
Title Holder (land)	4	18	669	2542	496	1935	12	42	1181	4537
Title Holder (land & structure)	6	48	40	190	42	201	7	38	99	477
Non-title holders (structure)	69	172	44	116	45	118	17	55	175	461

⁴ Published on 23.04.2020, 15.05.2020, 08.09.2020, 15.09.2020, 27.11.2020, 07.04.2021, 07.05.2021

Type of PAPs	Package I		Package II		Package III		Package IV		Total	
	Affect ed HHs	Affecte d populat ion	Affect ed HHs	Affecte d populat ion	Affect ed HHs	Affecte d populat ion	Affect ed HHs	Affecte d populat ion	Affect ed HHs	Affecte d populat ion
re)										
Total	79	238	753	2848	583	2254	36	135	1455	5475

Source: As per LA Plan (Approved 3D), Apr 2020-May 2021 and Census Survey (Sept.-Oct., 2019)

7.4.3 Level of Impact on Landholders

The Private Land acquisition area (about 23.19 ha.) has been kept minimum by confining the RoW for 1455 affected private landholders, so that the impact on landholders and their livelihood could be minimum. There are 49 nos. of agriculture land holders out of total **1455** private lands. However, as per Corridor of Impact superimposed on revenue maps and as per ground survey, it was found that the affected agriculture land parcels are slightly/partially crossed (5%-10%) by the proposed alignment for curve improvements, which will not hamper their agriculture activities/livelihood. Out of 49 agriculture landholders, only 7 agriculture landholders will be losing 35% or more land due to Land acquisition. There plots will still be viable for agriculture on the remaining land. Out of other (Non-agriculture) landholders, only 16 land holders will lose >35% land.

Type of Land	Nos.	Plots with Affected Area >35%
Agriculture	49	7
Non Agriculture	1406	16
	1455	23

Bifurcation of these 23 plots affected >35% is given package-wise in table below.

Affected Area	Package I	Package II	Package III	Package IV	Total
Plot Area affected > 35%	3	14	3	3	23

Source: Census Survey, CEG (Sept.-Oct., 2019)

The affected private landholders were also a part of stakeholders consultation held at

various locations as detailed in Chapter 5. Most of them are not affected significantly as above and thus, desired to get adequate compensation and assistance, so that they can make their own arrangements.

7.5 Impact on structures

The project between Chainage km 0 to km 11.500 has built-up areas with commercial establishments and the road is mostly Barren Hilly land with patches of forest and Habitations between Chainage km 11.500 to km 97.000. During the Census survey in the month of Sep.-Oct., 2019, it was found that there are encroachments within the existing ROW. Among the Non-titleholders, majority of the affected households are encroachers. The nature of activities of Non-titleholders varied from small shops, tea stalls, grocery, general stores, cigarette/ pan stalls, shoe repair, auto repair shops etc. As per the Census survey, a total of 290 structures will be impacted due to project activities which includes 274 private structures and 16 Community Property resources. Out of 274 private structures 99 belongs to Titleholders which includes residential, commercial and Residential cum Commercial, 175 belongs to Non-title holders (Squatters & Encroachers) which are located within PRow. Details of affected structures package-wise is given in below table.

Table 7-7: Details of Affected structures package-wise

Entitlement	Package I	Package II	Package III	Package IV	Total
Title holders	10	40	42	7	99
Non-title holders	69	44	45	17	175
CPRs	4	5	5	2	16
Total	83	89	92	26	290

Source: Census Survey, CEG (Sept.-Oct., 2019)

7.5.1 Impact on structures by usage of structure

As per the census survey, 290 Nos. structures will be affected out of which mostly (154 nos.) are commercial structure. About 66 nos. are resident-cum-commercial structures and 54 are residential structures. It was noted during field visits and consultations that many owners of these structures have extended a portion of their property into the government land to open small shops (made of tin sheds). In majority of the cases, with the road widening they will be losing this commercial establishment only and will not have much impact on the residential part. A total of 16 CPR & Govt. properties will also be impacted due to the proposed project. Table 7.8 Shows the Impact on structures by Usage.

Table 7-8: Impact on Structures by Usage

Impact Category	Properties	Package I	Package II	Package III	Package IV	Total Impact
Private Structure	Residential	16	17	17	4	54
	Commercial	44	47	49	14	154
	Residential + Commercial	19	20	21	6	66
	Total (A)	79	84	87	24	274
Common Property Resources						
All CPRs	Religious Structure	1	0	1	1	3
	Govt. office/Boundary	2	4	2	0	8
	Bus Stop	1	1	1	1	4
	Petrol Pump	0	0	1	0	1
	Total	4	5	5	2	16

Source: Census Survey, CEG (Sept.-Oct., 2019)

7.5.2 Impact on structures by typology of structure

Out of total 290 structures, 56.21% structures are permanent in nature which includes 16 CPRs/Govt. structures. About 31.03% of affected structures are temporary in nature and 12.76% structures are semi-permanent. The **Table 7-9** gives the details of Impact on structures by typology.

Table 7-9: Impact on Structures by Typology

Construction type	Package I	Package II	Package III	Package IV	Total
Permanent	47	50	51	15	163
Semi-Permanent	10	12	12	3	37
Temporary	26	27	29	8	90
Total	83	89	92	26	290

Source: Census Survey, CEG (Sept.-Oct., 2019)

During the census survey, the affected area of the settlements was calculated by taking measurements from existing centerline to COI. Most of the structures are partially affected and very few structures are affected fully. The affected area of Permanent, Temporary & Semi-permanent structures are 4162.36 sq. m., 1074.87 sq. m. and 42.35 sq. m. respectively. Package-wise affected structure area is given in table below.

Table 7-10: Affected Area of Structures

Area of Structure Type (Sq. m.)	Package I	Package II	Package III	Package IV	Total
Area- Permanent	1200.19	1276.8	1302.33	383.039	4162.36
Area- Semi-Permanent	11.45	15.01	12.47	3.43	42.35
Area- Temporary	310.52	322.46	346.35	95.54	1074.87
Total	1522.15	1614.27	1661.15	482.02	5279.58

Source: Census Survey, CEG (Sept.-Oct., 2019)

7.6 **Socio Economic Profile of Project Affected Households**

7.6.1 **Socio-Economic survey of project affected households**

The socio-economic survey of affected households was conducted along with census survey conducted in Sept.-Oct., 2019. A questionnaire was used for both census and socio-economic surveys which is attached in **Annexure-4**. The socio-economic details of the people includes their education status, Social stratification, Income level, Occupation etc.

7.6.2 **Affected Households & Persons**

The socio-economic characteristics of the project affected habitation have been analyzed based on information collected during Socio-economic survey. As per the census survey, details of 274 project affected households (PAHs) and 938 project affected persons (PAPs) is presented in Table 7.11 below. Out of 938 PAPs 55.54% are male and 44.46% are female.

It is found that more of the families are nuclear families i.e, 149 (54.38%) than 125 (48.62%) of the joint families. The nuclear family in the project affected area is growing due to migration, employment etc. Out of the 938 PAFs, 60.95% are General category, 14.96% belong to Other Backward Castes (OBC), and 11.68% are SC households impacted due to the project. There were no ST PAFs found.

The social development of a region is signified by many indices. One of which is literacy status of the population. The literacy rate (read, write and understand) in the affected PAPs is around 83%. Among the literate PAPs, which completed up to primary, upper primary, high school, graduate and post graduate education level are 15.78%, 18.76%, 17.38%, 13.22% and 2.99% respectively. About 6% of the PAPs didn't respond about their educational qualification.

Package wise details are given in table 7.11 below.

Table 7-11: Socio-cultural characteristics of the affected households and PAPs

Item	Description	Package I	Package II	Package III	Package IV	Total	% of Total
Population	Male	122	170	177	52	521	55.54

Item	Description	Package I	Package II	Package III	Package IV	Total	% of Total
(PAPs)	Female	98	136	142	41	417	44.46
	Total	220	306	319	93	938	100
Social Group (PAHs)	Gen	47	55	50	14	167	60.95
	SC	9	8	12	3	32	11.68
	OBC	12	10	16	4	41	14.96
	Not Responded	11	11	9	3	34	12.41
	Total	79	84	87	24	274	100
Type of Family (PAHs)	Nuclear	48	41	43	17	149	54.38
	Joint	31	43	44	7	125	45.62
	Total	79	84	87	24	274	100
Education level (PAPs)	Illiteracy	28	55	59	18	160	17.06
	Primary	40	48	47	13	148	15.78
	Upper primary	45	54	57	20	176	18.76
	High School	42	52	53	16	163	17.38
	Graduate	28	42	43	11	124	13.22
	Technical	1	3	4	2	10	1.07
	Post Graduate	6	10	10	2	28	2.99
	Not Responded	12	18	20	4	54	5.76
	Children (0-6 years)	18	24	26	7	75	8.00
	Total	220	306	319	93	938	100

Source: Census Survey, CEG (Sept.-Oct., 2019)

7.6.3 Economic profile- Occupational Pattern

Occupational pattern of the head of the household and members were recorded during the Census cum Socio-economic survey. Out of 938 PAPs, 617 persons are either housewives, children or elderly persons. They have not been included in the working population and are not included in the below table.

Occupational pattern reflects the dominant economic activity in the area. The affected PAPs are mainly engaged in trade and business (38%). A good percentage of earning members (22.12%) is either servicemen or are in professional jobs. Total 22% persons are engaged in agriculture activities and agriculture labor work. **Table 7-12:** shows the occupational background of the project-affected persons.

Table 7-12: Occupation Patterns of PAPs

Description of Occupation	Package I	Package II	Package III	Package IV	Total	% of Total
Agriculture	0	6	4	0	10	3
Agriculture Laborer	15	22	20	5	62	19
Service\ Professional	22	20	23	6	71	22
Trade\ Business\ Self Employed	35	38	39	11	123	38
Non Agricultural Labourers	16	17	17	5	55	17
Total	88	103	103	27	321	100

Source: Census Survey, CEG (Sept.-Oct., 2019)

7.6.4 Income Profile

Annual Income helps in assessing family's financial condition. During the Census survey incomes of a household through the Questionnaire were recorded. A lot of the household were not willing to share this information, data of 219 households is presented in table below. As per available information collected during survey, the Income Level of the affected households is mostly (89%) above Rs. 1,20,000 per annum. About 11% families earn between 60,000 to 1,20,000 per annum.

Table 7-13: shows the income level of the affected households.

Table 7-13: Income Level of PAPs

Description of Income	Package I	Package II	Package III	Package IV	Total	% of Total
Up to 60,000 per annum	0	0	0	0	0	0
60,000-1,20,000 per annum	6	8	7	4	25	11
1,20,000 & above per annum	62	58	63	15	198	89
Total	68	66	70	19	223	100.00

Source: Census Survey, CEG (Sept.-Oct., 2019)

The proposed road alignment will reduce the distances and improve the road conditions. This will facilitate growth of more economic activities, access to better economic prospect outside the area and hence increase in income generation.

7.7 Vulnerable groups

The information on vulnerable groups were also collected during / Socio-economic survey. Many households belonged to Schedule Caste, Below Poverty Level (BPL) categories and many households were vulnerable in context that the head of the households were either Physically Challenged or Women Headed Households

(WHH). The affected households falling within any of these groups has been considered as vulnerable group. These households need special consideration so that they can be benefitted from the project and do not further get socially and economically marginalized.

As per the socio-economic survey, Women Headed Household and BPLs are least in number among the affected households. None of the affected household belong to ST category. Total affected SCs households are 32 Nos. There are 8 BPL families getting affected. **of the** vulnerability category.

Table 7-14: gives the details of the vulnerability category.

Table 7-14: Vulnerability Category

Category	Package I	Package II	Package III	Package IV	Total	Percentage
BPL	4	2	1	1	8	14.04
WHH	4	1	2	1	8	14.04
SC	9	8	12	3	32	56.14
ST	0	0	0	0	0	0.00
Divyang (Disabled)	4	4	0	1	9	15.79
Total	21	15	15	6	57	100

Source: Census Survey, CEG (Sept.-Oct., 2019)

7.8 Impact on women

Project would impact 8 Women Headed Households. The percentages of such families affected are about 3% from the total affected households. For the purpose of compensation and assistance to be provided to these households, it is better to consider the absolute number of such families in the affected and displaced categories. Chapter 9 provides details on mitigation and other support measures regarding gender issues.

7.9 Conclusion

The census survey analysis of the project affected persons reveals their dependency on the project corridor. This dependency is either in the form of place for residence, for livelihood generation or for transportation. Affected people shall be consulted at every stage of the project planning and implementation. Their worries and suggestions shall be taken into account and the negative impacts shall be mitigated. The social impact management measures shall be implemented during the various stages of the project viz. Pre-construction Stage, Construction Stage and Operational Stage.

CHAPTER 8: REHABILITATION & RESETTLEMENT BUDGET

8.1 R&R Budget

Based on the Entitlement Matrix, the R&R budget for NH 707 has been finalized and is presented in this chapter. The budget is indicative of outlays for the different expenditure categories and may be required to be updated during the project implementation. The R&R budget includes the cost of structure, land cost, R&R assistance to be provided to the affected people, replacement cost of religious and community property etc. It comprises of two broad components namely compensation and assistance. Compensation for land, structures and assistances will be given as per entitlement matrix.

8.2 Compensation cost for land acquisition

The Cost of Land acquisition has been worked out as per DLC rates, 2019 of Himachal Pradesh Revenue department. Summary of the same is given in Table 8.1 below. Calculation of LA Cost and Notifications of Circle rates (DLC rates) considered for land Acquisition has been attached as **Annexure – 11** with this report.

8.3 Cost of structure

The estimated cost of structures has been finalized on the basis of Census survey of the properties likely to be affected. The cost estimates for structures are based on rates from document of CPWD Plinth Area Rates, 2019 and HPPWD SOR 2019. The cost estimation is based on current rates which might get revised at a later stage. The estimated cost of the properties/ structures being affected has been figured out in Table 8.1.

8.4 R&R Assistance

R&R assistance costs are calculated by using Census survey data and applicable Entitlement Matrix of Resettlement Policy Framework (RPF). With the acquisition of land and the demolition of the residential and commercial structure, many families would be adversely affected. RTFCTLARR Act, 2013 has provisions for assistances to be provided to the affected people to restore their livelihood. A tentative cost that would be incurred while providing these assistance to the affected people has been calculated and briefed in Table 8.1..

8.5 Administrative, NGO, Monitoring & Other Expenses

The cost related to NGO recruitment will be about 50 Lac, External monitor will be about 30 Lacs, Administrative expenses of PIU will cost around 5 lac. The total administrative Cost will be 1.00 Cr. as indicated in Table 8.1 below.

8.6 Relocation and enhancement of religious and community structures

The census and socio-economic survey showed that about 3 religious structures (Temples), 4 Bus stops/Shelters, 1 Petrol pump and Boundary wall of 8 govt. buildings is likely to be affected due to the widening of project road. The relocation and enhancement cost of the religious and other community structures has been taken and calculation is indicated in Table 8.1.

8.7 Total LA and R&R budget for the project including land, structures, administrative and assistance costs

The total Land, Structure, Administrative and Assistance budget for complete project works out to be **Rs. 91.72 crore** of which Rs. 57.85 crore is towards compensation for land, cost of Structures is Rs. 9.14 crore, Costs for R&R Assistances is 15.39 crore and Administrative expenses of 1.00 cr. 10% contingency is additional to Land, Structures, R&R Assistance and Administrative expenses. The details of the budget are given in Table 8.1 below.

Table 8-1: Total LA and R&R Budget for the Project

A Compensation for Land Acquisition					
Sl. No.	Particulars		Unit of Entitlement		Cost (in Rs)
1	Basic DLC Land RateVillage wise (In INR)		INR/Hectare		As per Village wise Land Cost
2	Total Private Land (in Hectare.)		in Hectare		23.1894
3	Total Basic value of Land (In INR)		INR		28,92,53,404.00
4	Value of Land after applying multiplication Factor		1		28,92,53,404.00
5	Solatium @100%		100%		57,85,06,808.00
Total Land Cost (Sub-total A)					57,85,06,808.00
B Compensation for Private Structure					
	Particulars	No. of affected structures	Area of total affected structures in meter	Rate per unit (in Rs per Sqm.)	Cost (in Rs)
			(i)	(ii)	(i*ii)
6	Permanent Structure	163	4162.3603	19500	8,11,66,025.85
7	Semi-Permanent Structure	37	42.36	9000	3,81,240.00
8	Temporary Structure	90	1074.87	9000	96,73,830.00
9	Boundary wall	4	20	9000	1,80,000.00
Sub-Total B					9,14,01,095.85

C Resettlement and Rehabilitation for Loss of Land					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
10	One time grant of Rs. 600,000 or annuity	Affected HHs lost more than 1/3rd of its land area	6,00,000	23	1,38,00,000.00
11	One time Resettlement Allowances	Affected Family	60,000	1280	7,68,00,000.00
Sub-total C					9,06,00,000.00
D Resettlement and Rehabilitation of Loss of private structure for Title Holder					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
12	Artisan or Self Employed	Each Artisan or Self Employed	28000	99	2772000.00
13	One time subsistence grant	Each affected Family	40000	99	39,60,000.00
14	One time Transportation allowance	Each affected Family	60000	99	59,40,000.00
15	One time Resettlement Allowances	Each affected Family	60000	99	59,40,000.00
16	Loss of Livelihood	Commercial Structure	28000	99	2772000.00
Sub-Total D					5,684,157.00
E Resettlement and Rehabilitation of Loss of Residential/Commercial Structure to Non-Title Holder					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
17	One time subsistence grant	Each affected Family	40000	175	70,00,000.00
18	One time Shifting/Transportation assistance	Each affected Family	60000	175	1,05,00,000.00
19	One time Resettlement Allowances	Each affected Family	60000	175	1,05,00,000.00
20	Loss of Livelihood	Commercial Structure	28000	123	34,44,000.00
Sub-Total E					3,14,44,000.00
F Additional Support to vulnerable Groups					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
21	Resettlement Allowance	Vulnerable Families inc. SC, WHH, Disabled & BPLs	60000	57	34,20,000.00
22	One time subsistence allowance	SC Category	60000	32	19,20,000.00
Sub-total F					53,40,000.00

G	Religious/Community/Government Assets (Lumpsum)					
	Particulars	Unit	Rate (in Rs)	Qty.	No. of units	Cost (in Rs)
23	Religious Structure	P.Sqm	9000	75	3	6,75,000.00
24	Govt. office/Boundary	P.Sqm	9000	80	8	7,20,000.00
25	Bus Stop	P.Sqm	9000	200	4	18,00,000.00
26	Petrol Pump	Each	9000	50	1	4,50,000.00
Sub-Total G						36,45,000.00
H	Estimated Administrative Costs					
27	NGO Recruitment	LS	5000000	1		50,00,000
28	External Monitor	LS	3000000	1		30,00,000
29	Administrative Expenses PIU	LS	500000	1		5,00,000
30	Disclosure Expenses	LS	5000	10		50,000
31	Training for PIU and PMU Staff	LS	100000	5		5,00,000
32	Grievance Redressal Mechanism	LS	1000000	1		10,00,000
Sub-Total H						1,00,50,000.00
Total (In Rs.)(A+B+C+D+E+F+G+H)						816671060.85
10% contingencies						81667106.085
Grand Total						898338166.935
Total cost in crore						89.83

The total LA and R&R estimated budget is Rs 89.83 Crores (Table 8.1). However, Package-wise Budget is also provided in **Table 8.2, 8.3, 8.4 and 8.5** below.

Table 8-2: Total LA and R&R Budget for Package-I

A	Compensation for Land Acquisition		
S. No.	Particulars	Unit of Entitlement	Cost (in Rs)
1	Basic DLC Land Rate Village wise (In INR)	INR/Hectare	As per Village wise Land Cost
2	Total Private Land (in Hectare.)	in Hectare	0.0048
3	Total Basic value of Land (In INR)	INR	59808
4	Value of Land after applying multiplication Factor	1	59808
5	Solatum @ 100%	100%	119616
Total Land Cost (Sub-total A)			1,19,616.00

B Compensation for Private Structure					
	Particulars	No. of affected structures	Area of total affected structures in meter	Rate per unit (in Rs per Sqm.)	Cost (in Rs)
			(i)	(ii)	(i*ii)
6	Permanent Structure	47	1200.19	19500	2,34,03,705.00
7	Semi-Permanent Structure	10	11.45	9000	1,03,050.00
8	Temporary Structure	26	310.52	9000	27,94,680.00
9	Boundary wall	1	5	9000	45,000.00
Sub-Total B					2,63,46,435.00
C Resettlement and Rehabilitation for Loss of Land					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
10	One time grant of Rs. 600,000 or annuity	Affected HHs losed more than 1/3rd of its land area	6,00,000	3	18,00,000.00
11	One time Resettlement Allowances	Affected Family	60,000	14	8,40,000.00
Sub-total C					26,40,000.00
D Resettlement and Rehabilitation of Loss of private structure for Title Holder					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
12	Artisan or Self Employed	Each Artisan or Self Employed	28000	15	4,20,000.00
13	One time subsistence allowance	Each affected Family	40000	10	4,00,000.00
14	One time Transportation allowance	Each affected Family	60000	10	6,00,000.00
15	One time Resettlement Allowances	Each affected Family	60000	10	6,00,000.00
16	Loss of Livelihood	Commercial Structure	28000	10	2,80,000.00
Sub-Total D					23,00,000.00
E Resettlement and Rehabilitation of Loss of Residential/Commercial Structure to Non- Title Holder					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
17	One time subsistence allowance	Each affected Family	40000	69	27,60,000.00

18	One time Shifting/Transportation assistance	Each affected Family	60000	69	41,40,000.00	
19	One time Resettlement Allowances	Each affected Family	60000	69	41,40,000.00	
20	Loss of Livelihood	Commercial Structure	28000	35	9,80,000.00	
Sub-Total E					1,20,20,000.00	
F	Additional Support to vulnerable Groups					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)	
21	Resettlement Allowance	Vulnerable Families inc. SC, WHH, Disabled & BPLs	60000	21	12,60,000.00	
22	One time subsistence allowance	SC Category	60000	9	5,40,000.00	
Sub-total F					18,00,000.00	
G	Religious/Community/Government Assets (Lumpsum)					
	Particulars	Unit	Rate (in Rs)	Qty.	No. of units	Cost (in Rs)
23	Religious Structure	P.Sqm	9000	25	1	2,25,000.00
24	Govt. office/Boundary	P.Sqm	9000	20	2	1,80,000.00
25	Bus Stop	P.Sqm	9000	50	1	4,50,000.00
26	Petrol Pump	Each	9000	0	0	-
Sub-Total G					8,55,000.00	
H	Estimated Administrative Costs					
27	NGO, External Monitor, Administrative, Disclosure, Training and GRM Expenses			L.S.	25,12,500.00	
Total (In Rs.)(A+B+C+D+E+F+G+H)					4,85,93,551.00	
10% contingencies					48,59,355.10	
Grand Total					5,34,52,906.10	
Total cost in crore					5.35	

Table 8-3: Total LA and R&R Budget for Package-II

A	Compensation for Land Acquisition		
S. No.	Particulars	Unit of Entitlement	Cost (in Rs)
1	Basic DLC Land RateVillage wise (In INR)	INR/Hectare	As per Village wise Land Cost
2	Total Private Land (in Hectare.)	in Hectare	5.5107
3	Total Basic value of Land (In INR)	INR	6,86,63,322.00

4	Value of Land after applying multiplication Factor		1		6,86,63,322.00
5	Solatum @100%		100%		13,73,26,644.00
Total Land Cost (Sub-total A)					13,73,26,644.00
B	Compensation for Private Structure				
	Particulars	No. of affected structures	Area of total affected structures in meter	Rate per unit (in Rs per Sqm.)	Cost (in Rs)
			(i)	(ii)	(i*ii)
6	Permanent Structure	50	1276.798	19500	2,48,97,561.00
7	Semi-Permanent Structure	12	15.01	9000	1,35,090.00
8	Temporary Structure	27	322.46	9000	29,02,140.00
9	Boundary wall	2	10	9000	90,000.00
Sub-Total B					2,80,24,791.00
C	Resettlement and Rehabilitation for Loss of Land				
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
10	One time grant of Rs. 600,000 or annuity	Affected HHs losed more than 1/3rd of its land area	6,00,000	14	84,00,000.00
11	One time Resettlement Allowances	Affected Family	60,000	709	4,25,40,000.00
Sub-total C					5,09,40,000.00
D	Resettlement and Rehabilitation of Loss of private structure for Title Holder				
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
12	Artisan or Self Employed	Each Artisan or Self Employed	28000	60	16,80,000.00
13	One time subsistence allowance	Each affected Family	40000	40	16,00,000.00
14	One time Transportation allowance	Each affected Family	60000	40	24,00,000.00
15	One time Resettlement Allowances	Each affected Family	60000	40	24,00,000.00
16	Loss of Livelihood	Commercial Structure	28000	40	11,20,000.00
Sub-Total D					92,00,000.00

E Resettlement and Rehabilitation of Loss of Residential/Commercial Structure to Non-Title Holder						
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)	
17	One time subsistence allowance	Each affected Family	40000	44	17,60,000.00	
18	One time Shifting/Transportation assistance	Each affected Family	60000	44	26,40,000.00	
19	One time Resettlement Allowances	Each affected Family	60000	44	26,40,000.00	
20	Loss of Livelihood	Commercial Structure	28000	38	10,64,000.00	
Sub-Total E					81,04,000.00	
F Additional Support to vulnerable Groups						
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)	
21	Resettlement Allowance	Vulnerable Families inc. SC, WHH, Disabled & BPLs	60000	15	9,00,000.00	
22	One time subsistence allowance	SC Category	60000	8	4,80,000.00	
Sub-total F					13,80,000.00	
G Religious/Community/Government Assets (Lumpsum)						
	Particulars	Unit	Rate (in Rs)	Qty.	No. of units	Cost (in Rs)
23	Religious Structure	P.Sqm	9000	0	0	-
24	Govt. office/Boundary	P.Sqm	9000	40	4	3,60,000.00
25	Bus Stop	P.Sqm	9000	50	1	4,50,000.00
26	Petrol Pump	Each	9000	0	0	-
Sub-Total G					8,10,000.00	
H Estimated Administrative Costs						
27	NGO, External Monitor, Administrative, Disclosure, Training and GRM Expenses			L.S.	25,12,500.00	
Total (In Rs.)(A+B+C+D+E+F+G+H)					23,82,97,935.00	
10% contingencies					2,38,29,793.50	
Grand Total					26,21,27,728.50	
Total cost in crore					26.21	

Table 8-4: Total LA and R&R Budget for Package-III

A Compensation for Land Acquisition					
S. No.	Particulars	Unit of Entitlement		Cost (in Rs)	
1	Basic DLC Land Rate Village wise (In INR)	INR/Hectare		As per Village wise Land Cost	
2	Total Private Land (in Hectare.)	in Hectare		15.4951	
3	Total Basic value of Land (In INR)	INR		19,30,68,946.00	
4	Value of Land after applying multiplication Factor	1		19,30,68,946.00	
5	Solatum @100%	100%		38,61,37,892.00	
Total Land Cost (Sub-total A)				38,61,37,892.00	
B Compensation for Private Structure					
	Particulars	No. of affected structures	Area of total affected structures in meter	Rate per unit (in Rs per Sqm.)	Cost (in Rs)
			(i)	(ii)	(i*ii)
6	Permanent Structure	51	1302.333	19500	2,53,95,493.50
7	Semi-Permanent Structure	12	12.47	9000	1,12,230.00
8	Temporary Structure	29	346.35	9000	31,17,150.00
9	Boundary wall	1	5	9000	45,000.00
Sub-Total B					2,86,69,873.50
C Resettlement and Rehabilitation for Loss of Land					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
10	One time grant of Rs. 600,000 or annuity	Affected HHs losed more than 1/3rd of its land area	6,00,000	3	18,00,000.00
11	One time Resettlement Allowances	Affected Family	60,000	538	3,22,80,000.00
Sub-total C					3,40,80,000.00
D Resettlement and Rehabilitation of Loss of private structure for Title Holder					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
12	Artisan or Self Employed	Each Artisan or Self Employed	28000	65	18,20,000.00

13	One time subsistence allowance	Each affected Family	40000	42	16,80,000.00	
14	One time Transportation allowance	Each affected Family	60000	42	25,20,000.00	
15	One time Resettlement Allowances	Each affected Family	60000	42	25,20,000.00	
16	Loss of Livelihood	Commercial Structure	28000	42	11,76,000.00	
Sub-Total D					97,16,000.00	
E	Resettlement and Rehabilitation of Loss of Residential/Commercial Structure to Non-Title Holder					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)	
17	One time subsistence allowance	Each affected Family	40000	45	18,00,000.00	
18	One time Shifting/Transportation assistance	Each affected Family	60000	45	27,00,000.00	
19	One time Resettlement Allowances	Each affected Family	60000	45	27,00,000.00	
20	Loss of Livelihood	Commercial Structure	28000	39	10,92,000.00	
Sub-Total E					82,92,000.00	
F	Additional Support to vulnerable Groups					
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)	
21	Resettlement Allowance	Vulnerable Families inc. SC, WHH, Disabled & BPLs	60000	15	9,00,000.00	
22	One time subsistence allowance	SC Category	60000	12	7,20,000.00	
Sub-total F					16,20,000.00	
G	Religious/Community/Government Assets (Lumpsum)					
	Particulars	Unit	Rate (in Rs)	Qty.	No. of units	Cost (in Rs)
23	Religious Structure	P.Sqm	9000	25	1	2,25,000.00

24	Govt. office/Boundary	P.Sqm	9000	20	2	1,80,000.00
25	Bus Stop	P.Sqm	9000	50	1	4,50,000.00
26	Petrol Pump	Each	9000	50	1	4,50,000.00
Sub-Total G						13,05,000.00
H	Estimated Administrative Costs					
27	NGO, External Monitor, Administrative, Disclosure, Training and GRM Expenses				L.S.	25,12,500.00
Total (In Rs.)(A+B+C+D+E+F+G+H)						47,23,33,265.50
10% contingencies						4,72,33,326.55
Grand Total						51,95,66,592.05
Total cost in crore						51.96

Table 8-5: Total LA and R&R Budget for Package-IV

A Compensation for Land Acquisition					
S. No.	Particulars	Unit of Entitlement		Cost (in Rs)	
1	Basic DLC Land RateVillage wise (In INR)	INR/Hectare		As per Village wise Land Cost	
2	Total Private Land (in Hectare.)	in Hectare		2.1788	
3	Total Basic value of Land (In INR)	INR		2,74,61,328.00	
4	Value of Land after applying multiplication Factor	1		2,74,61,328.00	
5	Solatum @100%	100%		5,49,22,656.00	
Total Land Cost (Sub-total A)					5,49,22,656.00
B Compensation for Private Structure					
	Particulars	No. of affected structures	Area of total affected structures in meter	Rate per unit (in Rs per Sqm.)	Cost (in Rs)
			(i)	(ii)	(i*ii)
6	Permanent Structure	15	383.0393	19500	74,69,266.35
7	Semi-Permanent Structure	3	3.43	9000	30,870.00
8	Temporary Structure	8	95.54	9000	8,59,860.00
9	Boundary wall	0	0	9000	-
Sub-Total B					83,59,996.35

C	Resettlement and Rehabilitation for Loss of Land				
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
10	One time grant of Rs. 600,000 or annuity	Affected HHs lost more than 1/3rd of its land area	6,00,000	3	18,00,000.00
11	One time Resettlement Allowances	Affected Family	60,000	19	11,40,000.00
Sub-total C					29,40,000.00
D	Resettlement and Rehabilitation of Loss of private structure for Title Holder				
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
12	Artisan or Self Employed	Each Artisan or Self Employed	28000	12	3,36,000.00
13	One time subsistence allowance	Each affected Family	40000	7	2,80,000.00
14	One time Transportation allowance	Each affected Family	60000	7	4,20,000.00
15	One time Resettlement Allowances	Each affected Family	60000	7	4,20,000.00
16	Loss of Livelihood	Commercial Structure	28000	7	1,96,000.00
Sub-Total D					16,52,000.00
E	Resettlement and Rehabilitation of Loss of Residential/Commercial Structure to Non-Title Holder				
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)
17	One time subsistence allowance	Each affected Family	40000	17	6,80,000.00
18	One time Shifting/Transportation assistance	Each affected Family	60000	17	10,20,000.00
19	One time Resettlement Allowances	Each affected Family	60000	17	10,20,000.00
20	Loss of Livelihood	Commercial Structure	28000	11	3,08,000.00
Sub-Total E					30,28,000.00

F Additional Support to vulnerable Groups						
	Particulars	Unit of Entitlement	Rate/Unit (in Rs)	No. of units	Cost (in Rs)	
21	Resettlement Allowance	Vulnerable Families inc. SC, WHH, Disabled & BPLs	60000	6	3,60,000.00	
22	One time subsistence allowance	SC Category	60000	3	1,80,000.00	
Sub-total F					5,40,000.00	
G Religious/Community/Government Assets (Lumpsum)						
	Particulars	Unit	Rate (in Rs)	Qty.	No. of units	Cost (in Rs)
23	Religious Structure	P.Sqm	9000	25	1	2,25,000.00
24	Govt. office/Boundary	P.Sqm	9000	0	0	-
25	Bus Stop	P.Sqm	9000	50	1	4,50,000.00
26	Petrol Pump	Each	9000	0	0	-
Sub-Total G					6,75,000.00	
H Estimated Administrative Costs						
27	NGO, External Monitor, Administrative, Disclosure, Training and GRM Expenses				L.S.	25,12,500.00
Total (In Rs.)(A+B+C+D+E+F+G+H)					7,46,30,152.35	
10% contingencies					74,63,015.24	
Grand Total					8,20,93,167.59	
Total cost in crore					8.21	

CHAPTER 9: INSTITUTIONAL FRAMEWORK FOR RAP IMPLEMENTATION

9.1 Introduction

Institutional arrangements for the implementation of RAP have been made fixed by making it a part of the RPF. The Institutional Arrangements will be set up at three levels viz., MoRT&H (Central Govt.), State Level and Sub-Project Level on partnership model wherein concerned agencies at different levels supplement and complement each other efforts. The key elements of institutional arrangements are co-operation/ support, collaboration and sharing of responsibilities with clearly defined roles, involvement of key stakeholders and vertical and horizontal linkages amongst different agencies. The institutional arrangement is depicted in **Figure 9-1**.

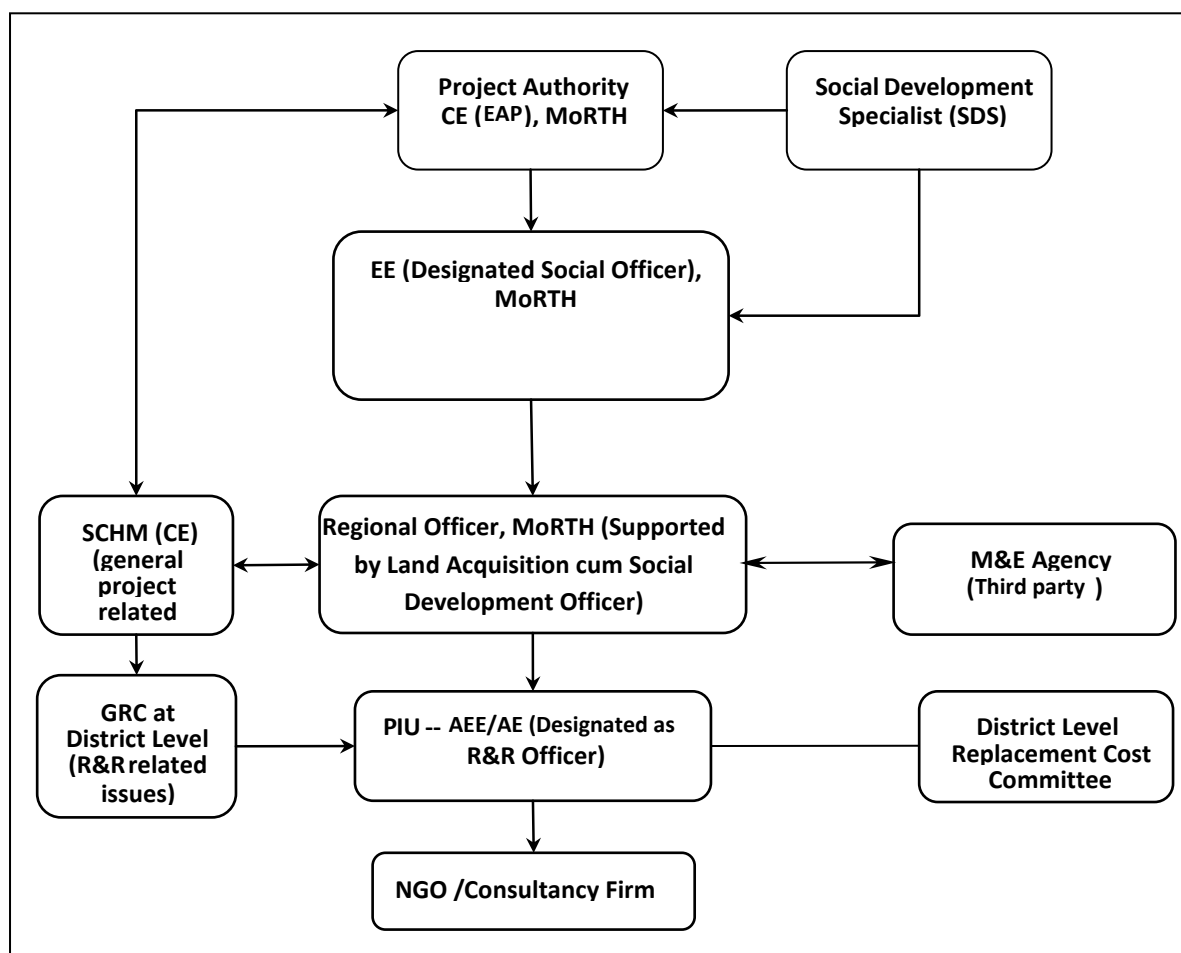


Figure 9-1: Institutional Arrangement for RAP Implementation

The institutional arrangements to manage and implement Resettlement Action Plan & Tribal Development Plan/Vulnerable Communities Development Plan will be set up at three levels viz., Central, State and Sub-Project Level. These are presented below:

9.2 Central Level

At Central Level, the Chief Engineer (EAP), MoRTH, Govt. of India will be overall responsible for the implementation of RPF. CE (EAP) will have all delegated administrative and financial decisions with regard to implementation of the project as well as land acquisition, RAP including TDP/VCDP implementation. It will include further augmenting the capacity of MoRTH with regard to resettlement and rehabilitation and management of other social issues. CE (EAP) will be assisted by a team comprising EE designated as Social Officer and a suitable number of technical and secretarial staff. MORTH also will engage a Social Development Specialist (SDS) either as individual consultant or through Project Management Consultant (PMC), to work with EAP and assist Social Officer. The EAP will be responsible for ensuring training, guidance, and recommendations for handling policy and implementation issues at the state and sub-project levels in compliance with RPF. The Social Development Specialist either individually or with PMC will provide policy and strategic assistance to EAP on social issues including land acquisition and rehabilitation and resettlement. The designated Social Officer will be specifically responsible for implementation of RAP & TDP. The Social Officer will ensure that all social safeguards issues are complied with as per the RPF. The roles and responsibilities of the SDS would broadly include the following:

- (i) Ensure adequate staffing at state and sub-project level to ensure timely implementation of RAP.
- (ii) Guide and supervise in matters related to resettlement and rehabilitation & TDP to state and sub-project level offices.
- (iii) Ensure preparation and disclosure of SIA, RAP including TDP/VCDP and Land Acquisition Plan for sub projects as per RPF.
- (iv) Ensure free, prior and informed consultation with tribal families along the project and also ensure that sufficient supporting documentation is maintained.
- (v) Co-ordinate with state government departments in matters related to implementation of RAP & TDP.
- (vi) Interact with implementation agencies at state and sub-project level on a regular basis.
- (vii) Undertake field visits as and when required.
- (viii) Facilitate necessary help needed at site with regards to LA and R&R issues.

- (ix) Compile data related to resettlement and rehabilitation & TDP activities received from field offices and update Chief Engineer (CE) and suggest suitable measures to be taken.
- (x) Ensure budgetary provision for resettlement and rehabilitation of PAPs and relocation, rehabilitation and reconstruction of common property resources (CPRs) and implementation of & TDP.
- (xi) Ensure timely release of budget for implementation of RAP&TDP.
- (xii) Monitor implementation of RAP including TDP carried out by the agency through RRO at subproject level.
- (xiii) Ensure third party audit of RAP & TDP implementation; and
Perform other roles and responsibilities related to implementation of RAP including TDP as assigned by the CE (EAP) from time to time.

9.3 State Level

At State Level, a Land Acquisition cum Social Development Officer (LA cum SDO) would be appointed in the Project Coordination Unit (PCU) headed by Nodal Officer. Additional sociologist as individual consultant will also be engaged to assist LA cum SDO in states as required, particularly in states with larger share of sub projects such as Andhra Pradesh, Himachal Pradesh, Uttar Pradesh etc. The roles and responsibilities of the LA cum SDO would broadly include the following:

- (i) Facilitate preparation and implementation of land acquisition and RAP including TDP in compliance with RPF;
- (ii) Ensure consultation and stakeholder participation in finalisation of RAP including TDP;
- (iii) Guide and supervise RAP including TDP implementation at sub-project level;
- (iv) Interact with RAP implementation support agencies and undertake field visits for first-hand information;
- (v) Co-ordinate with various government departments in matters related to implementation of RAP & TDP;
- (vi) Check implementation of RAP including TDP/VCDP carried out by the agency from time to time by undertaking site visits and consultations with PAPs;
- (vii) Facilitate and cooperate in third party audit of RAP & TDP implementation;
- (viii) Guide and supervise the RAP implementing agency to roll out HIV prevention activities;

- (ix) Ensure a well -functioning GRM including “confidential” handling of complaints relating to Gender Based Violence;
- (x) Compile data on LA progress and RAP implementation activities received from field offices and update EAP, MoRTH and suggest suitable measures to be taken; and Perform other roles and responsibilities related to implementation of RAP including TDP/VCDP as assigned by the EAP, MoRTH from time to time

9.4 Sub-Project Level

A Project Implementation Unit (PIU) comprising officials of State PWD will be constituted at subproject level and headed by the Superintending Engineer/ Executive Engineer – who will be designated as Project Director. The PIU will be responsible for the project execution including RAP & TDP/VCDP implementation. There will be a designated or appointed Resettlement & Rehabilitation Officer (RRO) at respective PIUs who will be responsible only for the implementation of RAP and TDP at site. Additional sociologist as individual consultant will also be engaged to assist RRO as required. RRO will assist Project Director at PIU in all matters related to resettlement and rehabilitation. The roles and responsibilities of the Resettlement and Rehabilitation Officer are as under:

- (i) Ensure RAP including TDP implementation with assistance from implementation agency as per the time line agreed upon.
- (ii) Interact with RAP implementation agency on a regular basis.
- (iii) Undertake field visits with implementation agency from time to time.
- (iv) Co-ordinate with district administration and other departments in matters related to implementation of R&R.
- (v) Facilitate necessary help needed at site with regard to LA and R&R, HIV issues to implementation agency.
- (vi) Ensure distribution of Resettlement and Rehabilitation Policy and entitlement matrix for the project to PAPs.
- (vii) Ensure preparation and distribution of photo identity cards.
- (viii) Ensure and attend meetings organised by implementation agency on thematic areas related to resettlement and rehabilitation policy and entitlements and awareness generation including aspects relating to GBV.
- (ix) Ensure inclusion of PAPs who could not be enumerated during census but have documentary evidence to be included in the list of PAPs.

- (x) Ensure preparation of identity cards, and approval from the PCU and distribution of the same to PAPs.
- (xi) Ensure timely preparation of micro-plan from RAP implementation agency and approval from PCU.
- (xii) Ensure disbursement of resettlement and rehabilitation assistance in a transparent manner.
- (xiii) Participate in meetings related to resettlement and rehabilitation issues.
- (xiv) Facilitate in opening of joint account of PAPs.
- (xv) Ensure release of compensation and assistance before taking over the possession of land for start of construction work.
- (xvi) Ensure relocation, rehabilitation and reconstruction of CPRs before dismantling through proper mechanism.
- (xvii) Ensure development of resettlement sites, where required.
- (xviii) Attend and participate in Grievance Redress Committee meetings for redressal of grievances of PAPs and other committees involving R&R matters,
- (xix) Liaison with government and other agencies for inclusion of PAPs in employment and income generation programme/scheme.
- (xx) Ensure that tribal families get equal opportunity to participate during implementation and become overall beneficiaries in the project.
- (xxi) Prepare monthly progress report related to physical and financial progress of implementation of RAP including TDP & submit to PCU.
- (xxii) Provide all necessary information and data related to R&R on monthly basis to designated Social Officer at Central Level through Project Director.
- (xxiii) Carry out any other work related to resettlement and rehabilitation that may be entrusted from time to time by the PCU for compliance of R&R.

9.5 RAP Implementing Support Agency at Sub-Project Level

The Project Authority CE(EAP), MoRTH to implement RAP for each of the sub-project, will engage the services of NGOs/Consultancy firms having experience in resettlement and rehabilitation issues. Broad roles and responsibilities of implementation agency would be as:

- (i) The RAP implementation agency will be the main link between the Project Authority and PAPs,

- (ii) Shall be responsible for verification of PAPs as prepared by the DPR consultants,
- (iii) Undertake public information campaign along with RRO at the commencement of the RAP&TDP,
- (iv) Develop rapport with PAPs,
- (v) Distribute pamphlets of R&R Policy including Entitlement Matrix to PAPs, Panchayat Raj Institutions, and concerned Govt. Offices in the project area, etc.
- (vi) Include PAPs who could not be enumerated during census cum socio-economic survey and certification from R&R Officer,
- (vii) Distribute identity cards for PAPs,
- (viii) Prepare and submit micro-plan to RRO for approval from PCU,
- (ix) Organize consultations at regular interval with PAPs with regard to resettlement and rehabilitation,
- (x) Organize training program for skill up gradation of the PAPs,
- (xi) Assist PAPs in all matters related to compensation and R&R,
- (xii) Assist and facilitate aggrieved PAPs (for compensation and assistance) by bringing their cases to GRC,
- (xiii) Facilitate in opening of joint account of PAPs,
- (xiv) Generate awareness about the alternative economic livelihood and enable PAPs to make informed choice,
- (xv) Consultations with PAPs regarding the choice of resettlement (i.e. self or assisted), development of resettlement site, participation of women, etc.
- (xvi) Identify training needs of PAPs for income generation and institutions for imparting training,
- (xvii) Undertake outreach activities for HIV prevention for awareness and behaviour change as per RAP,
- (xviii) Hold consultations with local people and Panchayat Raj Institutions with regard to relocation, rehabilitation, reconstruction of affected CPRs as well as provision of new facilities under the project,
- (xix) Participate in various meetings relating to RAP and TDP/VCDP preparation and implementation,
- (xx) Submit monthly progress report, and

- (xxi) Undertake any other activities that may be required for the implementation of RAP & TDP, etc.

9.6 Replacement Cost Committee at District Level

A committee at district level will be constituted to fix the replacement cost of land in case of lands acquired through Direct Purchase method or Land lease, structures and other properties (trees, crops and other assets, tube well, hand pump, etc). The committee may be chaired by the District Collector/ Dy. Commissioner or his designated representative (not below the rank of SDM), Project Director-cum-Executive Engineer of the concerned PIU, District Agriculture Officer, Range Officer (Forest Department, if required), an independent certified valuer, Executive Engineer of the concerned District, elected representative (MLA) of the concerned area and Team Leader of RAP implementation agency.

The highest value of land obtained by the three methods mentioned in Section 26 and Schedule 1 of RFCTLARR will be presented by the Project Authority and approved by the committee as the replacement cost. Similarly, latest schedule of rates of the concerned districts shall be used for obtaining replacement cost of structures. For items not available in the schedule of rates, for those items market rates shall be collected from three different sources and then replacement cost shall be fixed by the committee. For replacement costs of crops, trees and other such items similar methods will be followed.

The committee will be constituted through an executive order and or other suitable instrument within one month (30 days) from the date of mobilization of RAP implementation agency at site.

9.7 Training and Capacity Building at Project and Sub-project Level

Training and development of project staff is an integral part of project implementation. A training needs identification shall be carried out at Corporate, Regional and Site level, based on which focused training modules will be developed in the first six months of project implementation;

- (i) Strengthening in house capacity to implement the provisions of RAP & TDP,
- (ii) Creating awareness, providing the tools for implementation of RAP & TDP, strategy and accompanying set of management procedures to all departments,
- (iii) Developing competence of key officials to provide training at respective level.

Based on skill requirement/improvement at all levels for proper implementation of RAP, a training programme focusing project implementing partners at Centre, State and field PIU has been developed, which will be implemented by the PMU, MoRTH in the next two years. These training programs, which will be zeroed down after a

quick training needs assessment, are to be conducted with the help of local and national training institutions and experts in various aspects of social management. MoRTH will also identify courses offered by the premier institutions in India and abroad on social management and inter-phase with identified programme. Provision for separate budget has been made for this activity. The budget reported under “institutional” head includes the cost estimates of training programs discussed above.

CHAPTER 10: GRIEVANCE REDRESSAL MECHANISM

10.1 Need for Grievance Redress Mechanism

The Resettlement Policy Framework (RPF) mandates formation of Grievance Redressal Mechanism in order to resolve disputes in an effective manner and at the door steps of the PAPs. Compensation and assistance as per eligibility is provided in the entitlement matrix of the approved RPF. Grievance of PAPs will be brought to the grievance redress committee for redressal. The decision of the GRC will be binding, unless vacated by court of law.

10.2 Grievance Redressal Committee (GRC)

The GRC will be constituted by the Project Authority with the aim to settle as many disputes as possible on LA and R&R through consultations and negotiations. There will be one GRC for each PIU. The GRC will comprise six members headed by a retired Revenue Officer/Social Welfare Officer not below Group I officer rank . Other members of the GRC will include the concerned Project Director-cum-Executive, a retired PWD Officer (not below the rank of Executive Engineer), RRO, representative of PAPs and Sarpanch (Elected Head of Village) of the concerned village.

Grievances of PAPs in writing will be brought to GRC for redressal by the RAP implementation agency. The RAP implementation agency 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 normally meet once in a month but may meet more frequently, if the situation so demands. A time period of 45 days will be available for redressing the grievance of PAPs. The decision of the GRC will not be binding to PAPs. ***The decision of the Grievance Committees will not be binding on the DPs and they will have the option of taking recourse to court of law, if s/he so desires at his or her own expense.*** Broad functions of GRC are as under:

- (i) Record the grievances of PAPs, categorize and prioritize them and provide solution to their grievances related to resettlement and rehabilitation assistance.
- (ii) The GRC may undertake site visit, ask for relevant information from Project Authority and other government and non-government agencies, etc, in order to resolve the grievances of PAPs. □ Fix a time frame within the stipulated time period of 45 days for resolving the grievance.
- (iii) Inform PAPs through implementation agency about the status of their case and their decision to PAPs and Project Authority for compliance.
- (iv) ***In case of grievances/complaints relating to GBV, ensure confidentiality and appropriate referral to mapped service providers.***

The GRC will be constituted within 3 months by an executive order from competent authority (centre/ state) from the date of mobilization of RAP implementation agency. The RRO will persuade the matter with assistance from implementation agency in identifying the suitable persons from the nearby area for the constitution of GRC. Secretarial assistance will be provided by the PIU as and when required. The flow diagram (Figure 10-1) shows the entire process of grievance redressal.

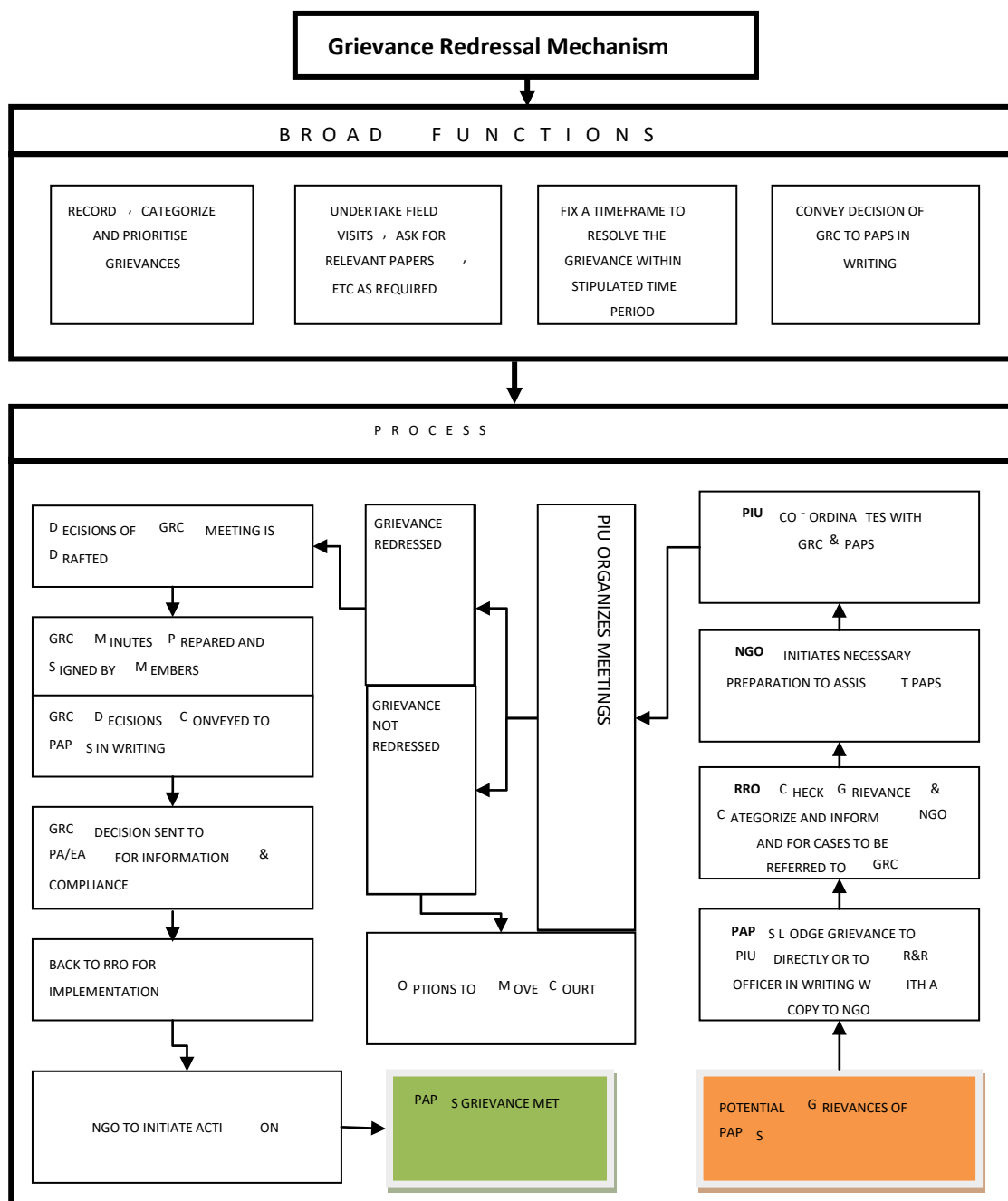


Figure 10-1: Grievance Redressal Mechanism

PAPs will be fully made aware about the GRM for effective, inexpensive and amicable settlement of claims for compensation and assistance by holding meetings

with PAPs, public meetings and distributing leaflets containing salient features and procedures of GRM. The RAP IA will assist the PAPs in getting their record of rights updated in case of disputes related to land. The RRO with support from RAP IA will make all possible efforts for amicable settlement. The RAP IA will document all cases brought to GRC and maintain the records of the proceedings of the grievance redressal committee meetings.

10.3 Suggestion and Complaint Handling Mechanism (SCHM)

The MoRTH recognizes the importance of this and hence intends to establish a SCHM for the GNHCP. The communication channels to report project related complaints/concerns will be disclosed at all levels of institutions—MoRTH, State and Sub-project levels.

Though the Right to Information Act, 2005 an Act of the Parliament of India provides for setting out the practical regime of right to information for citizens. The Act applies to all States and Union Territories of India except the State of Jammu and Kashmir. Under the provisions of the Act, any citizen may request information from a "public authority" (a body of Government or "instrumentality of State") which is required to reply expeditiously or within thirty days. The Act also requires every public authority to computerize their records for wide dissemination and to proactively publish certain categories of information so that the citizens need minimum recourse to request for information formally. In other words under the act, citizens have right to seek information from concerned agencies by following the set procedures. However, it is quite likely that many people may not use the provisions of this Act, only in limited cases covering serious concerns. Being an inter-state project involving several states and large scale of civil works along with R&R and Environment issues, the project is likely to receive many suggestions, complaints, inquiries, etc through the project implementation period. Therefore, MoRTH has agreed to establish SCHM as a good practice to address public concerns pertaining to various issues. SCHM will report all project related LA and R&R of the PAPs for redressal through the concerned PIU or GRC as appropriate. Several communication channels viz., toll free phone number, dedicated email, mechanism for on line submission of suggestions/ complaints/ inquiries, provision of suggestion/complaint box (at site and project office), post and other suitable means shall be set up for suggestion and complaint handling.

CHAPTER 11: MONITORING AND EVALUATION

11.1 Monitoring and Evaluation

Monitoring and evaluation are important activities of infrastructure development project particularly, those involving involuntary resettlement. It helps making suitable changes, if required during the course of implementation of RAP and also to resolve problems faced by the PAPs. Monitoring is periodical checking of planned activities and provides midway inputs, facilitates changes, if necessary and provides feedback to project authority for better management of the project activities. Evaluation on the other hand assesses the resettlement effectiveness, impact and sustainability of R&R activities. In other words, evaluation is an activity aimed at assessing whether the activities have actually achieved their intended goals and purposes. Thus monitoring and evaluation of resettlement action plan implementation are critical in order to measure the project performance and fulfillment of project objectives.

The monitoring and evaluation of RAP implementation will ensure monitoring of key indicators on inputs, outputs, project processes and evaluation of impact indicators. The overall purpose of the monitoring is to keep track of the implementation processes and progress, achievement of performance targets fixed in the annual work plans, learning lessons and taking corrective actions to deal with emerging constraints and issues. Monitoring and evaluation will constitute the following:

- Implementation progress (physical and financial aspects), monitoring of inputs, and outputs;
- Process documentation (case studies and lessons learnt);
- Impact evaluation based on sample survey and consultations; and
- Thematic studies.

11.2 Institutional Arrangement for M & E

The Resettlement Policy Framework (RPF) stipulates hiring services of an external agency (third party) for monitoring and evaluation of RAP implementation. This means the project authority through an external agency will carry out monitoring and evaluation from the subsequent month of the mobilization of RAP IA at project site. Internal monitoring will be carried out by the Social Officer of Project Coordination Unit (PCU) with assistance from R&R officer and RAP IA whereas external monitoring and evaluation will be carried by the third party engaged for the purpose. This will help monitor project activities closely. Regular monitoring by undertaking site visits and consultations with PAPs will help identify potential difficulties and

problems faced in the implementation and accordingly help take timely corrective measures including deviations, if needed.

Components of monitoring will include performance monitoring i.e., physical progress of the work and impact monitoring and external evaluation. Indicative indicators to be monitored related to performance are provided in the following sections. In case during the project implementation, if some other indicators are found relevant they will also be considered for monitoring.

11.3 Monitoring and Evaluation (M&E) at Project and Sub-Project level

The Resettlement Action Plan contains indicators and benchmarks for achievement of the objectives under the resettlement programme. These indicators and benchmarks will be of three kinds:

- (1) Proposed indicators, indicating project inputs, expenditures, staff deployment, etc.
- (2) Output indicators, indicating results in terms of numbers of affected People compensated and resettled, training held, credit disbursed, etc,
- (3) Impact indicators, related to the longer-term effect of the project on People's lives.

The benchmarks and indicators will be limited in number and combine quantitative and qualitative types of data. Some of these indicators may include, percentage of PAPs actually paid compensation before any loss of assets; percentage of PAPs whose incomes after resettlement are better than, or at least same as before resettlement; percentage of assets valued at replacement cost compensation; percentage grievances resolved; and/or percentage of cases to court. The first two types of indicators, related to process and immediate outputs and results, will be monitored to inform project management about progress and results, and to adjust the work programme where necessary if delays or problems arise. The results of this monitoring will be summarized in reports which will be submitted to the World Bank on a regular basis. Provision will be made for participatory monitoring involving the project affected persons and beneficiaries of the resettlement programme in assessing results and impacts. The Project Authority will engage services of an external agency (third party), which will undertake independent concurrent evaluations at least twice a year during the project implementation period. At the end of the project, an impact evaluation will be carried out as part of the project completion report. Such independent evaluation will focus on assessing whether the overall objectives of the project have been 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, and income recovery of the PAPs after they have been displaced from the project affected area, and,
- (ii) The types of complaints/ grievances and the success of the handling of grievance and public complaints towards the construction of project's infra-structures, means of redress for assets and lands and the amount of compensation, resettlement, and other forms of complaints.

Summarizing, M&E would be carried out for regular assessment of both process followed and progress of the RAP & TDP implementation. The internal monitoring will be carried out by the State PCU by the LA cum SDO with assistance from NGO/Consultancy firm and a quarterly report will be submitted to MoRTH. Each quarterly report would also be uploaded on the MoRTH website. The external agency (third party) however, would conduct assessment annually for each sub-project by undertaking field visits and all other necessary activities including consultations. The annual reports would cover detailed information on process and progress of RAP including TDP implementation. The report would highlight issues, if any that need attention of the Project Authority and suggest corrective measures that may be followed for better implementation of RAP & TDP.

11.4 Process & Performance Monitoring

Process monitoring would enable the project authority to assess whether the due process are being followed or not, whereas performance monitoring would mainly relate to achievement in measurable terms against the set targets. Monitoring report will also provide necessary guidance and inputs for any changes, if required during the course of the implementation. A list of indicators is given in Table 11.1 below.

Table 11-1: Performance Monitoring for RAP Implementation

Sr. No.	Indicators	Target	Status	Achievement (in %)	Remarks
1	Land acquisition (Private)				
	Notification published u/s 3D				
	Award declared u/s for				
	Land area (ha)				
	Land owners (No.)				
	Compensation disbursed by Competent Authority to land owners (No.)				

Sr. No.	Indicators	Target	Status	Achievement (in %)	Remarks
	Govt. land transfer (ha)				
2	Verification of identified PAPs completed (No.)				
3	New PAPs added, if any (who could not be enumerated at the time of survey)				
4	Consultations held with regard to RAP (dissemination of information, awareness generation, entitlements, HIV/ AIDS, SCHM, etc) – No.				
5	Leaflets, containing salient features of RAP, hand bills, fliers and other awareness materials distributed (No.)				
6	Measurement of structures likely to be affected completed (No.)				
7	Date of formation of DLC				
8	Meetings held by DLC for fixing the replacement cost (No.)				
9	Valuation of affected properties completed (No.)				
10	Micro plan submitted for THs for approval (No.)				
11	Identity cum entitlement card issued to PAPs (No.)				
12	Consultations held with local community regarding relocation or rehabilitation of CPRs (No.)				
13	Estimate submitted for relocation/rehabilitation of CPRs for approval				
14	Agency to carryout relocation/rehabilitation of CPRs as agreed by the project authority				
15	R&R assistances disbursed to PAPs (THs – No.				
16	PAPs re-established their shops/business (No.)				
17	PAPs covered under income generation schemes (No.)				

Sr. No.	Indicators	Target	Status	Achievement (in %)	Remarks
18	PAPs provided training for alternate livelihood (No.)				
19	CPRs relocated/ rehabilitated (No.)				
20	Grievance/ complaints brought to GRC for redressal (No.)				
21	GRC meeting held and cases resolved (No.)				
22	Various channels of SCHM used by category (No.)				
23	Consultation meetings held by LA cum SDO of Project Coordination Unit (PCU) (No.)				

11.5 Evaluation

The external agency engaged by the Project Authority shall carry out the evaluation at two stages viz., mid-term and after the completion of RAP implementation. The evaluation will be carried out under a set term of reference. The evaluation study would involve both quantitative and qualitative surveys and compare results before and after the implementation of the project. It will focus on assessing whether the overall objectives of the project are being met and will use the defined impact indicators as a basis for evaluation. The evaluation study would undertake the following but not limited to:

- Review monthly progress report submitted by RAP Implementation Agency (RAP IA);
- Undertake consultations with PAPs in order to assess their point of view with regard to overall process;
- Intensity and effectiveness of information dissemination with regard to RAP implementation covering eligibility of different categories of PAPs, frequency of interactions by RAP IA personnel with PAPs, deployment of RAP IA staff, quality of rapport maintained by RAP IA personnel with PAPs, capability of RAP IA personnel, behavior of RAP IA staff, availability of RAP IA staff, level of satisfaction as regards the work of RAP IA, etc;
- Collect information about distribution of awareness generation materials, entitlements, distribution of identity cum entitlement card, adequacy of

dissemination of information, consultations meetings with regard to policy and eligibility for entitlement, 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 resettlement policy, etc;

- 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 the project is improvement or at least restoration of economic status of the PAPs to the pre project level. An illustrative list of indicators is given in **Table 11-2**, which would be measured against the baseline data collected for the preparation of RAP. The M&E agency would finally select the indicators for the evaluation of the project depending upon the progress of R&R activities.

Table 11-2: Impact Indicators

Sr. No.	Indicator	Unit	Before Project Implementation	During/ after RAP Implementation
1	Monthly income of family/ household			
2	Consumer durables/material Assets owned			
3	Ownership of Transport and farm implements owned			
4	Occupation of head of Household and other members			
5	Type of dwelling units			
6	Number of Earning members/households			
7	Family under debt			
8	Size of loan			
9	Households purchased loans			
10	Households with various sizes of land			
11	Ownership/tenancy of dwelling units (owner, encroacher, squatter)			

Sr. No.	Indicator	Unit	Before Project Implementation	During/ after RAP Implementation
12	Access to water and sanitation facilities			
13	Access to modern sources of lighting and cooking			
14	Animal and poultry birds owned			
15	Migration for employment			

11.6 Reporting

Monthly Progress Reports on the progress of RAP implementation including mobilization of staff members, opening of site offices, etc of the project would be prepared by RAP IA and submitted to the R&R Officer at sub-project level.

Quarterly Monitoring Reports shall be compiled by the LA cum SDO of Project Coordination Unit (PCU) and submitted to MoRTH for review and onward submission to World Bank

Six monthly reports shall be prepared by the M&E agency by undertaking site visits and review of progress report, consultations, etc.

Evaluation Report shall be prepared by the M&E agency at the end of the project implementation as part of the project completion report.