

**Social Impact Assessment Study
of**

**Karamana – Vellarada Road (Reach 3)
(4.549 Hectare)**

*Kulathummal, Ottasekharamangalam, Keezharoor, Vellarada
Villages of
Kattakada & Neyyattinkara Taluks of
Thiruvananthapuram District*

Final Report

**Requisition Authority
Road Infrastructure Company, Kerala Ltd.
(RICK)**

By
KERALA VOLUNTARY HEALTH SERVICES

COLLECTORATE P.O.

MULLANKUZHY

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Abbreviations

APL	Above Poverty Line
BPL	Below Poverty Line
RICK	Road Infrastructure Company Kerala Limited
DLPC	District Level Purchasing Committee
LA	Land Acquisition
NGO	Non - Governmental Organisation
NTH	Non - Title Holder
MSW	Master of Social Work
PAP	Project Affected Person
PAF	Project Affected Family
TH	Title Holder
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
RTFCTLARR Act	The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act



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CHAPTER 1

EXECUTIVE SUMMARY

1.1. Introduction – Project and Public purpose

Smooth and safe traffic is an indicator of a nations' sustainable development. Rapid growth of India's population has put enormous strain on our transport systems. The vehicle population in the country is increasing tremendously in recent years. This leads to heavy traffic congestion in both rural and urban areas and it is considered as one of the major causes of slow economic growth of nations. This is also termed as a potential cause of road accidents. Wastage of fuel due to increased idling, acceleration and braking increasing air pollution and emissions. All these lead to heavy economic lose and public health issues. Widening of existing roads are the best solution for traffic problems due to heavy volume of vehicles in rural roads. Road widening is normally carried out when the road is inadequate for the traffic using it, or when extra lanes are needed. Widening of existing road is one of the useful methods to deal with the current long- standing traffic problems and improve traffic safety and capacity. Motor vehicles are a major source of pollution. If we widen roads, there will be much less pollution from motor vehicles since they will reach their destination at a much faster rate, leaving less pollution from the vehicles. Widening of roads, will lower the green house affect from cars, and other environmental problems since the vehicles will consume less fuel because they are able to reach their destination much quicker instead of wasting fuel and letting gas out just waiting because of traffic.

The project road, Karamana –Vellarada; Reach 3(Kattakkada-Vellarada) is an important District road connecting the eastern part of the Thiruvanthapuram to District Capital and it leads to the inter district road which goes to Tamil Nadu via Thenmala. The road is connecting the hilly region of Vellarada with the city. Several Residential houses, Public institutions, shops and small business establishments are situated in both sides of the road. This road is the major connectivity corridor of several villages in the area having a population of 98,000 (Approx.). The vehicle traffic study shows that 4000-5000 light and heavy vehicles daily (10 hour) passing through this road. The road is connecting two major roads ie Palod – Parasala road and Nedumangadu – Palod road. The accident cases in Vellarada and Kattakkada police station shows that Four to Five cases daily reported from the Kattakkada-Vellarada road. The project will address traffic congestion which is a common phenomenon at many spots on the project road stretch due to lack of width and unscientific stoppages for public transport services. After the proposed



development, the road will have a total width of 13.5 m. Of this, 10.5 m will be the bitumen surface. The road will have sideways of 1.5 m width each. There will be covered drainage lines upon which footpaths will be set up.

The road will become a bypass for the NH-66 and the proposed coastal and hill highways. The road will become an alternate route for vehicles from Tamil Nadu to the Vizhinjam port which is under construction. According to preliminary estimates, development of the stretch as a two-lane road with modern facilities will cost Rs 127 crore. Of this, Rs 21 crore will be spent for land acquisition alone.

As per GO (Rt) No.355/2016/PWD Dated: 15.02.2016 the government has provided administrative sanction of ₹21.44 crore for this road project which is being implemented by government company Road Infrastructure Company, Kerala Ltd (RICK). Boundary stones have been laid for the entire stretch from Km 0 to 35.50 Km for acquiring the land. Contingency charges remitted to Special Tahsildar LA(NH), PMG Thiruvananthapuram of Rs.1.07 Cr. on 30.01.2019. Joint inspection with Revenue officials for the entire 35.5 Kms is completed. Revised DPR after avoiding insignificant bus bays is submitted to the Principal Secretary, Public Works Department for Administrative Sanction on 04.12.2019.

The land acquisition process started and completed preliminary formalities of land acquisition except social impact assessment study. Revenue department and requisition authorities has conducted preliminary survey and Placed boundary stones.

By considering the public importance Government of Kerala placed this project under the RFCTLARR Act and Rules and submitted for social impact assessment study. This report is formulated after the completion of the study which took four months of social survey.

1.2. Location

The project location starts 200mts from Kattakkada Junction to Vellarada Junction (17.5 Km). Ottasekharamangalam and Vellarada are the major junctions and 32 minor junctions are in the project area. One major bridge, 3 minor bridges and 26 culvers are the major infrastructures affected. The location coming under Kulathummal, Ottasekharamangalam, Kezharoor & Vellarada villages. The start point of the project area is 800 mts from Kattakkada junction and the end point is Vellarada Junction on the Neyyar Dam- Parassala stretch. The end point is just half a km from Chenkal, a point on the proposed hill highway. The project area is situated 48KM from Thiruvanthapuram Air Port, 58 KM from Vizhinjam Port, 34Km from Thiruvanthapuram Railway Station and 67Km from Kanyakumari. Several



rural villages are situated in the location. This is one of the major residential area of Thiruvananthapuram district. Agriculture is the primary source of income of these villagers. The area is also famous for Rubber plantations.

Details of the Villages in the location.

Vellarada is a border village situated in Thiruvananthapuram district in the state of Kerala, India. It is 42 km from Thiruvananthapuram. It is sharing its border with Tamil Nadu. Vellarada is said to be the threshold to the high-range areas of the eastern part of Thiruvananthapuram district. The southernmost point of Western Ghats in Kerala is near Vellarada. As of 2011 India census, A total of 8285 families resides in Vellarada. Vellarada village had a population of 31839 with 15702 males and 16137 females. There is a positive sex ratio of 1027 existing in Vellarada. Literacy is at 87.78 %. The dominant religions in Vellarada are Hinduism and Christianity. The Scheduled Caste (SC) constitutes 5.82 % while Schedule Tribe (ST) was 0.78 % of the total population in Vellarada village. Majority of the population are practice agriculture, chiefly cash crops like rubber.

Kulathummal is a small Village/hamlet in Vellanad Block in Thiruvananthapuram District. It comes under Kulathummal Panchayath. It is located 18 KM towards East from District headquarter and 7 KM from Vellanad. Kulathummal had a population of 37463 with 18419 males and 19044 females. Majority of the population are practice agriculture, chiefly cash crops like rubber, Pepper, Coconut and food crops like Bananas and Root crops.

Keezharoor is a small Village/hamlet in Perumkadavila Block in Thiruvananthapuram District. It comes under Keezharoor Panchayath. It is located 23 KM towards East from District headquarters and 1 KM from Perumkadavila. Keezharoor had a population of 23595 with 11598 males and 11997 females. Village literacy rate is 84.0% and the Female Literacy rate is 41.9%. Female Literacy rate is 41.9 %. Scheduled Tribes Population is 0.3 %. Scheduled Caste Population is 9.5 %. Working Population is 45.8 % Majority of the population are practice agriculture, chiefly cash crops like rubber, Pepper, Coconut and food crops like Bananas and Root crops.

Ottasekharamangalam had a population of 19345 with 9322 males and 10023 females. Ottasekharamangalam is a Village in Perumkadavila Block in Thiruvananthapuram District. It is located 23 KM towards East from District headquarters and 4 KM from Perumkadavila. Total Literacy rate is 83.0 %. Female Literacy rate is 42.2 %. Scheduled Tribes Population is 1.1 %. Scheduled Caste Population is 10.2 %. Working Population is 40.9 %. Majority of the population are practice agriculture, chiefly cash crops like rubber, Pepper, Coconut and food crops like Bananas and Root crops.



1.3 Size and Attributes of Land Acquisition

Land Acquisition Authority

Special Tahsildar, L A (NH), PMG, Thiruvananthapuram is preparing the acquisition details including land sketch and extent of acquisition etc. Boundary stones were laid. Alignment sketch was prepared by RICK Ltd. Deputy Collector (LA) is monitoring the land acquisition process.

Details of project affected families

The social impact study finds that 1845 title holders and 604 Non-title holders 26 cultural properties, 19 Government properties 30 community properties are affected by the project. Out of it 57 residential properties are displaced and 99 are affected. 915 title holders losing their land only. Loss of 543 compound walls, 43 front yard; 17 septic tanks, 43 entrance or paths of houses, and also 127 commercial building displaced, 224 commercial buildings affected by the project. 394 Commercial shops are running in these commercial buildings. 11 bathrooms near houses 4 car sheds 2 cattle sheds 7 other structures are also displaced by the project. One private cemetery, one religious cemetery, one church shrine, one Mosque's property, Land and structure of Ottasekharamangalm temple, and some offering boxes are also displaced. The analysis shows that Hindus and Christians are the dominant religious groups in the area with 69% and 28% respectively. Sex ratio of THs shows that 72% are male. 10% of title holders having the educational qualification of below 10th standard. Thirty six percent THs are having above 10th educational qualification. 83% of peoples are reported as APL. The occupational distribution shows that 19% are farmers 28% are Private sector, 26% are doing business, 23% of people are doing other jobs. Male, Female ratio indicates 0.1% domination to male.

Out of 604 Non-Title Holders most of them are doing business of employees in the shops. The age wise distribution shows that 68% are 40-60, 18% are 20-40 and 12% are above 60 age group. The educational status shows that all are literate. 6% are having the educational qualification of below 10th standard. 19% are having Bachelor's degree. The analysis shows that 63% are Hindus 19% are Christians and 17% are Muslims. The economical status shows that 66% are having the monthly income of Rs. 20000 to 30000.

Details of the acquiring land

The total land acquiring for the project is 4.549 Hectare. The acquisition is for the widening of 17.5 km, Karamana - Vellarada road (Reach 3: Kattakkada-Vellarada). The land in both sides of the road is the acquiring land. The



analysis shows that 61% are residential, 19% commercial, 10% Government or community and 8% vacant land. The acquiring land is owned by 1845 title holders. All portion of the land is significant and irrigated. The presents of Several Educational Institutions, Pilgrim Centers, Tourist spots etc influence the importance of the acquiring land. The acquiring land is coming under the jurisdiction of four villages ie Kulathummam, Ottasekharamangalam, Kezharoor & Vellarada villages.

Socio Economic and Cultural Profile

The analysis on Socio-Economic and cultural profile of the PAPs shows that the area is a middle-class settlement area and having fast development indicators. Even though agriculture is reported as major occupation the prime earnings of the families are depends on various other sources. As per the economical standards the THs in Kulathummam, Ottasekharamangalam are compare to better Economic status than the THs in other two villages. The analysis shows that Hindus and Christians are the dominant religious groups in the area with 68 % and 29% respectively. Sex ratio of THs shows that 72% are male. 10% of title holders having the educational qualification of below 10th standard. Thirty six percent THs are having above 10th educational qualification. 83% of peoples are reported as APL. The occupational distribution shows that 19% are farmers 28% are Private sector, 26% are doing business, 23% of people are doing other jobs. Male, Female ratio indicates 0.1% domination to male.

1.4. Alternatives

Since the proposed project is the third reach of the Development of Karamana-Vellarada Road project, exclusive alternative suggestions not possible or relevant. People are not proposed any bypass suggestion. But few people requested to reduce the proposed widening width to save their structure. Other few suggested acquiring land equally from both sides of the existing road.

1.5. Social Impact

The visible impact of the project is the loss of land of 1845 title holders, loss of 57 residential houses and partial loss of 99 houses. Apart from the impact on residence 62 drinking water sources, mainly open wells, 127 commercial buildings are also displaced. 224 commercial buildings, 543 compound walls, 43 front yards of the residence, 17 septic tanks, 43 private roads etc. also affected by the project. It was identified that 394 business establishments are either affected or displaced by the project. 26 cultural properties, 30 community properties and 19 government institutions / properties are affected by the project. The gravity of the impact shows that a comprehensive



rehabilitation and resettlement policies is needed to mitigate the impact. The proposed project makes the traffic through the Karamana – Vellarada road become smooth and safe. This directly influences the development of the area.

Sl. No.	Risk Assumed	Approximate Quantity
1.	Residence (Displaced) (≥40% affected)	57
2.	Residence (Affected) (<40% affected)	99
3.	Mixed (Residence & Commercial) Displaced	4
4.	Mixed (Residence & Commercial) Affected	13
5.	Shops and Commercial Establishments (Displaced)	127
6.	Shops and Commercial Establishments (Affected)	224
7.	Non-Residential Building (Affected and Displaced)	43
8.	Compound Wall	543
9.	Structure allied to Residence (Car Shed)	9
10.	Loss of land	915
11.	Drinking water Source (Open Wells)	62
12.	Access/ Paths to Residence	25
13.	Septic Tank	17
14.	FronD Yard of Residence	43
15.	Loss of Agriculture	140-150
16.	Loss of trees	2250-2500
17.	Business needs to be relocated (TH)	29
18.	Business need to relocated (NTH)	11
19.	Business affected (TH)	130
20.	Business affected (NTH)	264
21.	Loss of livelihood	9
22.	Loss of business (Street Vendors)	21
23.	Involved in land acquisition process	-
24.	Grievance	-
25.	Uneconomic holdings	17
26.	Need Relaxation in Corporation building rules	23
27.	Bell mouth of sub roads affected	19
28.	Bell mouth of PWD roads affected	7
29.	Structures/Memorials by political parties	26
30.	Cultural Properties	26
31.	Government Properties	19
32.	Community Properties	30
33.	Other Structure	8



1.6. Mitigation Measures

Sl.No.	Risk Assumed	Approach	Mitigation Strategy
1	Loss of Residence	Compensation, Rehabilitation	Compensate the loss and rehabilitate the family
2	Loss of Part of Residence	Compensation, Resettlement	Compensate the loss and resettle the family
3	Loss of Land	Compensation	Compensate the loss
4	Loss of Part of land	Compensation	Compensate the loss.
5	Loss of Building	Compensation	Compensate the loss.
6	Loss of part of Building	Compensation and Resettlement	Compensate the loss. Case by case approach in resettlement. Eg. Relaxation in municipal Act etc.
7	Loss of structures	Compensation	Compensate the loss.
8	Loss of Part of structure	Compensation	Compensate the loss.
9	Loss of Business	Compensation	Compensation & Resettlement
10	Loss of employment	Compensation/R rehabilitation and Resettlement.	Compensation & Resettlement
11	Loss of household wells	Control/Compensation	Save/Compensation
12	Loss a community well	Control & Resettlement	Save/Resettlement
13	Loss of Parking Areas	Compensate & Control	Compensate the loss.
14	Loss of access to properties	Control& Resettle	Prepare a resettlement plan in consultation with Project Affected Families.
15	Loss of access to sub roads.	Control & Resettle	Prepare a resettlement plan in consultation with Project Affected people.
16	Loss of House' setback to Road	Control & Resettle	Resettle the access/Establish safety measures
17	Loss of Cultural Properties	Control & Resettle	Compensate the loss or resettle
18	Loss of Community Properties	Control and Resettle	Compensate or Resettle
19	Loss of School Building	Control and Resettle	Compensate or Resettle



20	Loss of water supply pipes	Resettle	Resettle
21	Loss of religious properties	Compensation	Compensate the loss
22	Loss of cemetery	Avoid/Exempted	Avoid/Exempted/Resettle
23	Loss of Trees	Control & Compensation	Plant equal no of trees
24.	Involved in land acquisition process	Control	Ensure community participation in the whole process.
25	Grievance	Control	Functional grievance redressal committee at village and district level.

1.7. Detailed Mitigation Plan

Potential Impact	Positive / Negative	Likelihood	Magnitude	Pre-Mitigation Level of Impact	Post - Mitigation Level of Impact	Mitigation Measures
Loss of Residence	Negative	Possible	Major	Medium	Medium	Compensate the loss and rehabilitate the family
Loss of Part of Residence	Negative	Possible	Moderate	Medium	Medium	Compensate the loss and resettle the family
Loss of Land	Negative	Possible	Moderate	Medium	Medium	Compensate the loss
Loss of Part of land	Negative	Possible	Major	Medium	Medium	Compensate the loss.
Loss of Building	Negative	Possible	Low	Minimum	Low	Compensate the loss.
Loss of part of Building	Negative	Possible	Low	Minimum	low	Compensate the loss. Case by case approach in resettlement. Eg Relaxation in



						municipal Act etc.
Loss of structures	Negative	Possible	Major	High	Medium	Compensate the loss.
Loss of Part of structure	Negative	Possible	Moderate	High	Medium	Compensate the loss.
Loss of Business	Negative	Possible	Low	Minimum	Low	Compensation & Resettlement
Loss of employment	Negative	Possible	Low	Medium	Low	Compensation & Resettlement
Loss of household wells	Negative	Possible	Low	Minimum	Low	Save/Compensation
Loss a community well	Negative	Possible	Major	High	Medium	Save/Resettlement
Loss of Parking Areas	Negative	Possible	Major	Medium	Medium	Compensate the loss.
Loss of access to properties	Negative	Possible	Moderate	Medium	Medium	Prepare a resettlement plan in consultation with Project Affected Families.
Loss of access to sub roads.	Negative	Possible	Moderate	Medium	Medium	Prepare a resettlement plan in consultation with Project Affected people.
Loss of House' set back to Road	Negative	Possible	Major	Medium	Medium	Resettle the access/Establish safety measures



Loss of Cultural Properties	Negative	Possible	Low	Minimum	Low	Compensate the loss or resettle
Loss of Community Properties	Negative	Possible	Low	Minimum	low	Compensate or Resettle
Loss of School Building	Negative	Possible	Major	High	Medium	Compensate or Resettle
Loss of water supply pipes	Negative	Possible	Moderate	High	Medium	Resettle
Loss of religious properties	Negative	Possible	Low	Minimum	Low	Compensate the loss
Loss of cemetery	Negative	Possible	Low	Medium	Low	Avoid/Exempted /Resettle
Loss of Trees	Negative	Possible	Low	Minimum	Low	Plant equal no of trees
Involved in land acquisition process	Positive	Possible	Low	Minimum	Medium	Ensure community participation in the whole process.
Grievance	Negative	Possible	Major	Medium	Medium	Functional grievance redressal committee at village and district level.



1.8. Assessment of Social Costs and Benefits

The proposed project aimed to develop the Kattakkada-Vellarada reach (Reach-3) of Seventeen kilometer of Karamana -Vellarada Road of Thiruvanthapuram District and it is the continuation of the first two reach ie Karamana to Kattakkada. Social impact studies of the first two reaches were conducted and development was started in the first reach of 5 KM. This shows the fact that the proposed project is a continuity of an already initiated development project and it minimizes the options for alternatives and the level of public interest is linked to the public interest of other two reaches. The development of Karamana-Vellarada road development is a long due development initiative of Thiruvanthapuram District. Since the project displaced 57 houses and partially affected 99 houses the impact of the project scaled as high. Apart from the impact on residence 62 drinking water sources, mainly open wells, 127 commercial buildings are also displaced. 224 commercial buildings, 543 compound walls, 43 front yards of the residence, 17 septic tanks, 43 private roads etc. also affected by the project. It was identified that 394 business establishments are either affected or displaced by the project. 26 cultural properties, 30 community properties and 19 government institutions / properties are affected by the project. The gravity of the impact shows that a comprehensive rehabilitation and resettlement policies is needed to mitigate the impact. In compared to the length of the road and area to be acquired, the above impact may term as moderate. The total land acquired for the project is Hectare. Therefore, per head land loss of each title holder is only 4-5 cents (Approximately). Special attention to the R&R of these families may mitigate the overall impact marginally. Others who may lose residential houses will also need effective compensation package to resettle their life. Out of the fifty-seven displaced residential house holders, twenty-three are having remaining land to rebuild the houses if Government gives certain relaxation in building rules. This may marginally mitigate the impact. Likewise, out of 127 owners of displaced commercial structures 40 has remaining land to maintain or rebuild the shops. This also reduces the chances of relocation and longtime business loss. Due to the project, road setbacks of 43 houses may minimize below 1 meter. This will affect their access, vehicle parking, safety etc. Special safety measures like retaining walls, resettlement of access, permission to underground parking facilities etc. may the solution to this impact. Technical experts of the requisition agency will explore the possibility to mitigate the impact and provide technical support may mitigate the impact and ensure minimum displacement. More over access of all PAPs will be resettled and the issue of loss of parking will also be addressed. Several community properties like libraries, waiting sheds and cultural properties like offering shrines are affected by the project. Detailed resettlement plan will be developed for these



properties. One cemetery of a Christian church is partially affected. It is very difficult to relocate and resettle it effectively. Avoid or exempted strategies may more effective than any mitigation plan. Many household drinking water wells and two public wells are affected by the project. Develop special plan to save maximum number of such wells. To compensate the loss of trees Government will direct requisition agency to plant equal number of trees in an around the project area. Government will give a chance to PAPs to take back the acquired structures with or without solecism. This will mitigate the impact of structural loss marginally. In case of religious properties Government will initiate discussion and consultation before the acquisition. Revenue department will survey the acquired area at the earliest, so that people can easily understand the impact and develop voluntary effort to mitigate the impact. Give relaxation in building rules to maintain and rebuilding structures, houses and building is also a better no cost strategy which government can implement. Maximize the categorization of affected land for fixing compensation also will improve transparency and community participation. Setting up a functional grievances committee also will speed up the acquisition process. Since the THs living in a land in the side of an important public road with a calculated risk of widening of the road and other development initiative, they were mentally prepared to face the consequences of the acquisition of land whenever required by the govt. The affected title holders are aware about the importance of the project and willing to surrender their land if an acceptable mitigation plan is implemented even though some are demanding the reduction in the width of the proposed road. No visible impact noticed in Lifestyle, Culture and Quality of life, Cohesion and Health of Title Holders and Community in the project area due to the project. A minimum duration of project implementation will minimize the impact of the project and maximize the mitigation. The proposed acquisition does serve public purpose and more over there was an overwhelming consensus among people, people' representatives, trade associations too with regard to the benefits accruing due to the proposed project.

The project is treated as framed for a public purpose under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (30 of 2013) Section 2 (i)(b)(iii). It is in this base, Government of Kerala notified to initiate acquisition procedure. Considering the public importance and interest the project is an inevitable need and the project is able to address the social impact of the project. Therefore, the project has to be implemented.



CHAPTER 2

DETAILED PROJECT DESCRIPTION

2.1 Background of the project, including developer's background and governance/ management structure.

Change is the law of nature and essential for living beings. Society also must change. The planned change called development. Development therefore encompasses many positive and negative results. Moreover, due to development projects people often have to leave their homes and sometimes people are forced to change their area of operation as well. These interventions may lead to need for rehabilitation and resettlement of the people which further leads to new challenges. As a result, there has always been a need to understand the adverse impacts of development projects in order to minimize the negative outfalls of any project.

Rapid growth of India's population has put enormous strain on transport systems and other public conveniences. Many smaller cities are expanded to nearby rural area due to increased density of population. The vehicle population in small cities and sub roads are increasing tremendously in recent years leading to congestion in this semi urban areas. Construction of new roads or widening of existing roads is the only solution to solve this problem.

The project road, Karamana -Vellarada; Reach 3(Kattakkada-Vellarada) is an important District road connecting the eastern part of the Thiruvanthapuram to District Capital and it leads to the inter district road which goes to Tamil Nadu via Thenmala. The road is connecting the hilly region of Vellarada with the city. Several Residential houses, Public institutions, shops and small business establishments are situated in both sides of the road. This road is the major connectivity corridor of several villages in the area having a population of 98,000 (Approx.). The vehicle traffic study shows that 4000-5000 light and heavy vehicles daily (10 hour) passing through this road. The road is connecting two major roads ie Palod - Parasalla road and Nedumangadu - Palod road. The accident cases in Vellarada and Kattakkada police station shows that Four to Five cases daily reported from the Kattakkada-Vellarada road. The project will address traffic congestion which is a common phenomenon at many spots on the project road stretch due to lack of width and unscientific stoppages for public transport services. After the proposed development, the road will have a total width of 13.5 m. Of this, 10.5 m will be the bitumen surface. The road will have sideways of 1.5 m width each. There will be covered drainage lines upon which footpaths will be set up.



The road will become a bypass for the NH-66 and the proposed coastal and hill highways. The road will become an alternate route for vehicles from Tamil Nadu to the Vizhinjam port which is under construction. According to preliminary estimates, development of the stretch as a two-lane road with modern facilities will cost Rs 127 crore. Of this, Rs 21 crore will be spent for land acquisition alone.

As per GO (Rt) No.355/2016/PWD Dated: 15.02.2016 the government has provided administrative sanction of ₹21.44 crore for this road project which is being implemented by government company Road Infrastructure Company, Kerala Ltd (RICK). Boundary stones have been laid for the entire stretch from Km 0 to 35.50 Km for acquiring the land. Contingency charges remitted to Special Tahsildar LA(NH), PMG Thiruvananthapuram of Rs.1.07 Cr. on 30.01.2019. Joint inspection with Revenue officials for the entire 35.5 Kms is completed. Revised DPR after avoiding insignificant bus bays is submitted to the Principal Secretary, Public Works Department for Administrative Sanction on 04.12.2019. By considering the public importance Government of Kerala placed this project under the RFCTLARR Act and Rules and submitted for social impact assessment study. This report is formulated after the completion of the study which took four months of social survey.

2.1.1. Implementing Agencies

2.1.1.(a). The Road Infrastructure Company Kerala Ltd. (RICK Ltd.)

The Road Infrastructure Company Kerala Ltd. (RICK Ltd.) is a Special Purpose Vehicle formed by Government of Kerala to implement State Road Improvement Project (SRIP), with the objective to develop an excellent State of the art road network by improving the existing State Highways (SH) and important Major District Roads (MDRs) the state. In this project it is proposed to improve 1100 Kms of State Highways and Major District Roads to IRC Standards. 469 Kms of roads are proposed under Rehabilitation Package without Land Acquisition and 621 Kms of roads are proposed under Upgradation Package with marginal Land Acquisition.

Accordingly, a special purpose vehicle namely Road Infrastructure Company Kerala Limited has been incorporated on 19th March 2012 with a paid-up capital of Rs.5,00,000/- with contribution by State Government (51%) and the Kerala Road Fund Board (49%) with appropriate provision in the State Budget.

2.1.2. Land Acquisition Authority

Special Tahsildar, L A (NH), PMG Thiruvananthapuram is preparing the acquisition details including land sketch and extent of acquisition etc.



Boundary stones were laid. Alignment sketch was prepared by RICK Ltd. Deputy Collector (LA) is monitoring the land acquisition process.

2.2. Rationale for project including how the project fits the public purpose criteria listed in the Act.

The proposed project aimed to develop the Kattakkada-Vellarada reach (Reach-3) of Seventeen kilometer of Karamana –Vellarada Road of Thiruvanthapuram District and it is the continuation of the first two reach ie Karamana to Kattakkada. Social impact studies of the first two reaches were conducted and development was started in the first reach of 5 KM. This shows the fact that the proposed project is a continuity of an already initiated development project and it minimizes the options for alternatives and the level of public interest is linked to the public interest of other two reaches. The development of Karamana-Vellarada road development is a long due development initiative of Thiruvanthapuram District.

The project road, Karamana –Vellarada; Reach 3(Kattakkada-Vellarada) is an important District road connecting the eastern part of the Thiruvanthapuram to District Capital and it leads to the inter district road which goes to Tamil Nadu via Thenmala. The road is connecting the hilly region of Vellarada with the city. Several Residential houses, Public institutions, shops and small business establishments are situated in both sides of the road. This road is the major connectivity corridor of several villages in the area having a population of 98,000 (Approx.). The project will address traffic congestion which is a common phenomenon at many spots on the project road stretch due to lack of width and unscientific stoppages for public transport services.

The road will become a bypass for the NH-66 and the proposed coastal and hill highways. The road will become an alternate route for vehicles from Tamil Nadu to the Vizhinjam port which is under construction.

2.3 Details of project size, location, capacity, outputs, production targets, cost, and risks.

Sl. No.	Risk Assumed	Approximate Quantity
1.	Residence (Displaced) (≥40% affected)	57
2.	Residence (Affected) (<40% affected)	99
3.	Mixed (Residence & Commercial) Displaced	4
4.	Mixed (Residence & Commercial) Affected	13



5.	Shops and Commercial Establishments (Displaced)	127
6.	Shops and Commercial Establishments (Affected)	224
7.	Non-Residential Building (Affected and Displaced)	43
8.	Compound Wall	543
9.	Structure allied to Residence (Car Shed)	9
10.	Loss of land	915
11.	Drinking water Source (Open Wells)	62
12.	Access/ Paths to Residence	25
13.	Septic Tank	17
14.	Fronn Yard of Residence	43
15.	Loss of Agriculture	140-150
16.	Loss of trees	2250-2500
17.	Business needs to be relocated (TH)	29
18.	Business need to relocated (NTH)	11
19.	Business affected (TH)	130
20.	Business affected (NTH)	264
21.	Loss of livelihood	9
22.	Loss of business (Street Vendors)	21
23.	Involved in land acquisition process	-
24.	Grievance	-
25.	Uneconomic holdings	17
26.	Need Relaxation in Corporation building rules	23
27.	Bell mouth of sub roads affected	19
28.	Bell mouth of PWD roads affected	7
29.	Structures/Memorials by political parties	26
30.	Cultural Properties	26
31.	Government Properties	19
32.	Community Properties	30
33.	Other Structure	8

2.3.1. Project Location

The project location starts 800 mts from Kattakkada Junction to Vellarada Junction (17.5 Km). Ottasekharamangalam and Vellarada are the major junctions and 32 minor junctions are in the project area. One major bridge, 3 minor bridges and 26 culvers are the major infrastructures affected. The location coming under Kulathummal, Ottasekharamangalam, Kezharoor & Vellarada villages. The start point of the project area is 800 mts from Kattakkada junction and the end point is Vellarada Junction on the Neyyar Dam- Parassala stretch. The end point is just half a km from Chenkal, a point on the proposed hill highway. The project area is situated 48KM from Thiruvanthapuram Air Port, 58 KM from Vizhinjam Port, 34Km from



Thiruvanthapuram Railway Station and 67Km from Kanyakumari. Several rural villages are situated in the location. This is one of the major residential area of Thiruvanthapuram district. Agriculture is the primary source of income of these villagers. The area is also famous for Rubber plantations.

2.4. Phase of project construction

Process of Land Acquisition started. Boundary stones are fixed.

2.5. Core design features and size and types of facilities.

Not Applicable

2.6. Need for ancillary infrastructural facilities.

Not Applicable

2.7. Work force requirements (temporary and permanent).

Not Applicable

2.8. Details of Social Impact Assessment / Environment Impact Assessment if already conducted and any technical feasibility reports.

Not Applicable

2.9. Applicable law and policies.

Sl.No.	Laws & Policies	Area of Application
1	The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013.	Mitigation of Impact
2	Land Acquisition Act 1893, Land Acquisition Act (Kerala) Rules 1990, Kerala Land acquisition Act 1961, Kerala Land Acquisition Act rules	Land acquisition
3	Kerala Shops and Establishment Act	



CHAPTER 3

STUDY APPROACH AND METHODOLOGY

3.1 Background

Government of Kerala was given administrative sanction to acquire 4.549 hectare of land for development of Karamana – Vellarada Road reach-3 in Kulathummal, Ottasekharamangalam, Keezharoor and Vellarada villages of Kattakada and Neyyattinkara Taluks of Thiruvananthapuram District. And Kerala Government entrusted Mr. Saju.V.Itty, Executive Director, Kerala Voluntary Health Services to conduct the Study through Kerala Gazette NO.1116 dated 4th May, 2020 and Notification GPNo.35/2020 Dated 3rd May, 2020.

3.2. Social Impact Assessment Team – Profile of Team Members

Sl.No.	Name & Address	Designation in the SIA Team	Profile
1	Saju V. Itty	Team Leader	28 years experiences in social work, social survey including R&R experience in KSTP & Tsunami Rehabilitation. Conducted social research study on health child rights and rehabilitation & resettlement. Conducted SIA study for five sub projects of Kannur International Airport, Kanjirappally Bypass, Kochi Metro Extension, Mattannur Industrial Park, Perambra Bypass, Railway Over Bridge Chettippady Malappuram and Kuttothu – Attakundu road Kozhikodu etc.
2	Rakesh R Nair	R & R Specialist & Social Investigator	13 years experiences in social work including social research, R & R activities and community mobilization. Team Member in SIA study for five sub projects of Kannur International Airport, Kanjirappally Bypass, Kochi Metro Extension, Mattannur Industrial Park, Perambra Bypass, Railway Over Bridge Chettippady Malappuram and Kuttothu –Attakundu road Kozhikodu etc.



3	Smitha R	R & R Specialist & Social Investigator	18 years experiences in social work including social research, R & R activities and community mobilization. Team Member in SIA study for five sub projects of Kannur International Airport, Kanjirappally Bypass, Kochi Metro Extension, Mattannur Industrial Park, Perambra Bypass, Railway Over Bridge Chettippady Malappuram and Kuttothu - Attakundu road Kozhikodu etc.
4	M.Ibrahimk utty	Sociologist	Rtd. Joint Director, Social Welfare Board.36 years of experience in social work.
5	Sheeba Johnson	Data Analyzer & Data entry	28 years experiences in social work and data entry operation. Team Member in SIA study for five sub projects of Kannur International Airport, Kanjirappally Bypass, Metro Extension, Mattannur Industrial Park, Perambra Bypass, Railway Over Bridge Chettippady Malappuram and Kuttothu - Attakundu road Kozhikodu etc.
6	N.Vijayakumara Pilla	L.A. Consultant	Rtd. Revenue Inspector
7	O.C.Chandi	L.A. Consultant	Rtd. Village Officer

3.3. Study Approach

The land which proposed to be acquired for the project is owned by 1845 Tittle Holders of Vellarada, Keezharoor, Ottasekharamangalam and Kulathummil villages. Stake holder analysis was conducted and find out key stake holders and their interest and involvement in the proposed acquisition process. After the secondary data collection Social Impact Assessment Unit developed a questionnaire for social survey and visited all Tittle Holders and collected opinion, family details, Socio-Economic details and suggestions. Apart from this SIA team has conducted discussion and consultation with Local Body Representatives and local public and recorded their suggestions and opinion. In continuation of it a focus group consultation of Project Affected People was conducted and noted their suggestions and opinion. Special Case studies were prepared for selected



cases. The study also used transit walk and observation visit to crosscheck the suggestions and grievance which were recorded.

3.4. Methodology & Tools

The study team reviewed the relevant and available documents in Special Thahasildar LA(NH) office, PMG Thiruvananthapuram and Deputy Collector LA, Thiruvananthapuram. SIA unit had also examined the records and documents and made a site visit along with the land revenue officials for area identification and information dissemination. SIA team had also conducted a one-to-one discussion and consultation with all Title Holder. Although SIA team had collected details by using pre prepared questionnaire. SIA team also had discussion and consultation with Members of Legislative Assembly, Local Body Representatives and local public. Special Case studies were prepared for selected cases. The study Team also used transit walk and observation tools to crosscheck the Suggestions and grievance which were recorded.

3.5. Sources of data collected

- a) Special Thahasildar LA(NH) office, PMG, Thiruvananthapuram
- b) Office of the RICK Ltd. Thiruvananthapuram
- c) Vellarada Grama Panchayath,
- d) Ottasekharamangalam Grama Panchayath
- e) Kattakada Grama Panchayath
- f) Aryancode Grama Panchayath
- g) Kulathummal, Ottasekharamangalam, Keezharoor, and Vellarada Village offices
- h) Project Affected Families and Title Holders.
- i) Local body leaders

3.6. Process and Schedule of Activities

- 04-05-2020 Government of Kerala entrusted Mr.Saju.V.Itty, Executive Director, Kerala Voluntary Health Services to conduct the SIA study
- 10-09-2020 to 20 -09-2020- Secondary Data Collection.
- 10-09-2020 to 15-09-2020 – Mapping of Stake Holders
- 25-09-2020 to 25-11-2020 - Online Social Survey.
- 25-09-2020 to 25-11-2020- Social Survey for Social Impact Assessment Study.



- 11.11.2020 and 12.11.2020- Discussion with Project Affected Tittle Holders.
- 1st& 2rdDecember-2020- Transit Walk, Observational Study and Case Studies
- 29 -12-2020 - Draft Report Submission.
- 10-02-2021 and 11-02-2021- Public Hearing
- 21-03-2021- Final Report Submission

3.8. PUBLIC HEARING

(1) Vellarada Village, 10-02-2021, LMS Church Parish Hall, Anchumaramkala at 11.00 a.m.

Section 5 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, of 2013 envisages that whenever a SIA study is required to be prepared the Government shall ensure that a Public Hearing is held at the affected area to ascertain the views of the affected families to be recorded and included in the SIA Report. Rule 14 of the Rules, 2015, have prescribed detailed procedure for the conduct of the public hearing.

SIA Unit took special care to inform the affected people in the area about Public Hearing by taking various steps like Notification for conducting public hearing as per Form 5 Rule 14 (1) of the RTFCTLARR Act, 2013. The notification was published in two Malayalam News Papers i.e., Mangalam and Janayugam on 26-01-2021. A notice has been served to the affected families in hand for informing about the public hearing. SMS & Phone call messages were sent to all PAPs. The copy of notice was served to Peoples Representatives, Local Body Leaders, Grama Panchayath Offices, Village Offices, Special Tahsildar LA NH office and RICK Ltd. Adequate copies of the SIA draft report and summaries were made available on the day of the public hearing. The major highlights of the study were presented in local language by Chairman, SIA Unit.

Sl.No.	Points raised	Remarks
1	Many places the alignment seems to be partial with protecting interest of some people.	The requisition agency representative explained in details about the alignment and assured that the spots in which the allegations are raised will be verified and cleared the doubt of the people.
2	Instead of proposed 18.5mts width adopt 12-15mts throughout the stretch	The present width of the project road is 8mts (average). The road is having 55 curves. So, standardizing the road as accident-free needs more width.
3	The width of the road will be minimized to 10 Mts.	This suggestion will not match with the Govt. policy on development of MDR.



4	More consultation with the PAPs will reduce the grievance. The alignment details will be given to Title Holders and PAPs before taking further step of land acquisition.	The report also supported the demand of the THs.
5	The unused bit land will either acquired or give permission to use it with relaxation in building rules.	The report also supported the request. These request of the THs will consider during negotiation.
6	Considering the commercial importance of the area maximum compensation will be given to title holders.	R&R policy will be followed during the fixation of land value.
7	Special compensation package will be formulated for displaced residential house owners.	The report also recommended suggestions.
8	The existing accesses will be resettled.	The accesses resettlement plan will be included in the detailed plan report of the project.
9	The affected open wells and drinking water sources will be protected.	Will take Maximum measures to protect the drinking water sources.
10	A functional system will be developed for communicating the PAPs about the progress of the project and acquisition process.	A special forum constituted with local body members and representatives of the PAPs can play a role to address the grievance of the PAPs and improving the communication regarding the project.
11	Instead of increasing the width of the road, the existing road will be cleared for smooth traffic (By shifting electric posts to extreme side and concrete the sides.)	This suggestion will not meet the objectives of the project.
12	Many merchants are losing their livelihood and it should be compensated. The Compensation package will be discussed with organizations working among commercial establishments.	A discussion with organizations working among commercial establishment owners is desirable to ensure effective rehabilitation.
13	Two Graveyards in front of the church is displaced by the project. Government should either protect it or take necessary step to shift it with	The matter will be discussed with church officials before the implementation of the project.



	due respect.	
14	Water supply pipes will be relocated to safe place without interrupting the water distribution.	A detailed resettlement plan will include in the implementation plan.
15	Instead of increasing the width of the road, the curve portions will be developed.	The project road is having 55 curves. The suggestion will note be meet with the objectives of the project.
16	Time bound acquisition process will be implemented.	Meeting of the demand will mitigate the impact
17	Rehabilitation and Resettlement process will be well informed and ensure community participation and consultation.	Meeting of the demand will mitigate the impact
18	The road will be developed with maximum width possible.	This is a positive suggestion and the possibility of the suggestion will discuss jointly by people's representatives, Local body leaders and PAPs.

Sri. A David, Jalaja Bhavan, Adv. Devarajan, Mr. Bhoovanachandran, Smt. Altma Harsha, Smt. Kamalabhai, Sri. Vellarada Rajendran, Sri. N. Sathyadas, Sri. Ravindran Nair, Pastor Vargheese, Sri Vijayakumar, Christ International H.S., Sri Vidhyarajan, Karakkattukuzhy, Smt. Aruna A.K., S.A. Bhavan, Smt. Sarojam, J.M. Bhavan, representing PAPs and expressed views in public hearing.

(2) Keezharoor Village - 10-02-2021, LMS LP SCHOOL, Chempoor at 2.30 p.m.

Section 5 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, of 2013 envisages that whenever a SIA study is required to be prepared the Government shall ensure that a Public Hearing is held at the affected area to ascertain the views of the affected families to be recorded and included in the SIA Report. Rule 14 of the Rules, 2015, have prescribed detailed procedure for the conduct of the public hearing.

SIA Unit took special care to inform the affected people in the area about Public Hearing by taking various steps like Notification for conducting public hearing as per Form 5 Rule 14 (1) of the RTFCTLARR Act, 2013. The notification was published in two Malayalam News Papers i.e., Mangalam and Janayugam on 26-01-2021. A notice has been served to the affected families in hand for informing about the public hearing. SMS & Phone call messages were sent to all PAPs. The copy of notice was served to Peoples Representatives, Local Body Leaders, Grama



Panchayath Offices, Village Offices, Special Tahsildar LA NH office and RICK Ltd. Adequate copies of the SIA draft report and summaries were made available on the day of the public hearing. The major highlights of the study were presented in local language by Chairman, SIA Unit. Sri. CK Hareendran MLA, Parasala participated in the meeting and answered the queries of the public.

Sl.No.	Points raised	Remarks
1	Smt. R. Vijayamma presented a high court judgment which stayed the proceedings regarding the acquisition of bus bay as part of Karamana Vellarada road.	The requisition authority told that for the time being all the acquisition regarding the bus bays are suspended by the government.
2	Sri. Biju John demanded a system for control the waterflow to his agricultural land.	The matter will be addresses during the implementation.
3	Smt. Sulochana, compliant about the land sliding.	The matter will be addresses during the implementation.
4	Many places the alignment seems to be partial with protecting interest of some people	The requisition agency representative explained in details about the alignment and assured that the spots in which the allegations are raised will be verified and cleared the doubt of the people.
5	Instead of proposed 18.5mts width adopt 12-15mts throughout the stretch	The present width of the project road is 8mts (average). The road is having 55 curves. So, standardizing the road as accident-free needs more width.
6	The width of the road will be minimized to 10 Mts.	This suggestion will not match with the Govt. policy on development of MDR.
7	More consultation with the PAPs will reduce the grievance. The alignment details will be given to Title Holders and PAPs before taking further step of land acquisition.	The report also supported the demand of the THs.
8	The unused bit land will either acquired or give permission to use it with relaxation in building rules.	The report also supported the request. These request of the THs will consider during negotiation.
9	Considering the commercial importance of the area maximum compensation will be given to title holders.	R&R policy will be followed during the fixation of land value.



10	Special compensation package will be formulated for displaced residential house owners.	The report also recommended suggestions.
11	The existing accesses will be resettled.	The accesses resettlement plan will be included in the detailed plan report of the project.
12	The affected open wells and drinking water sources will be protected.	Will take Maximum measures to protect the drinking water sources.
13	A functional system will be developed for communicating the PAPs about the progress of the project and acquisition process.	A special forum constituted with local body members and representatives of the PAPs can play a role to address the grievance of the PAPs and improving the communication regarding the project.
14	Instead of increasing the width of the road, the existing road will be cleared for smooth traffic (By shifting electric posts to extreme side and concrete the sides.)	This suggestion will not meet the objectives of the project.
15	Many merchants are losing their livelihood and it should be compensated. The Compensation package will be discussed with organizations working among commercial establishments.	A discussion with organizations working among commercial establishment owners is desirable to ensure effective rehabilitation.
16	Water supply pipes will be relocated to safe place without interrupting the water distribution.	A detailed resettlement plan will include in the implementation plan.
17	Instead of increasing the width of the road, the curve portions will be developed.	The project road is having 55 curves. The suggestion will not be meet with the objectives of the project.
18	Time bound acquisition process will be implemented.	Meeting of the demand will mitigate the impact
19	Rehabilitation and Resettlement process will be well informed and ensure community participation and consultation.	Meeting of the demand will mitigate the impact
20	The road will be developed with maximum width possible.	This is a positive suggestion and the possibility of the suggestion will discuss jointly by people's representatives, Local body leaders and PAPs.



Mr. Ajith, Mr. Gilfred, Mr. Prasanth, Shan Cottage, Mr. Raju, Mr. John, Mrs. Sunitha, Mr. Alfred Jose are also participated the discussion and expressed their concerns.

(3) Kulathummal Village- 11-02-2019, Viswadeepthi English Medium School Charupara at 11.00 a.m.

Section 5 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, of 2013 envisages that whenever a SIA study is required to be prepared the Government shall ensure that a Public Hearing is held at the affected area to ascertain the views of the affected families to be recorded and included in the SIA Report. Rule 14 of the Rules, 2015, have prescribed detailed procedure for the conduct of the public hearing.

SIA Unit took special care to inform the affected people in the area about Public Hearing by taking various steps like Notification for conducting public hearing as per Form 5 Rule 14 (1) of the RTFCTLARR Act, 2013. The notification was published in two Malayalam News Papers i.e., Mangalam and Janayugam on 28-01-2021. A notice has been served to the affected families in hand for informing about the public hearing. SMS & Phone call messages were sent to all PAPs. The copy of notice was served to Peoples Representatives, Local Body Leaders, Grama Panchayath Offices, Village Offices, Special Tahsildar LA NH office and RICK Ltd. Adequate copies of the SIA draft report and summaries were made available on the day of the public hearing. The major highlights of the study were presented in local language by Chairman, SIA Unit. Smt. Rani Chandrika.O., and Sri. S S Manikantan, (Kattakada Grama Panchayath Members) were attended the meeting and expressed their concerns and suggestions.

Sl.No.	Points raised	Remarks
1	Sri. Shahul Hameed, Ahalam demanded a four-line road instead of the present alignment.	Many more houses and commercial establishments will be displaced.
2.	Mr. Surendran Nair & Premachandran, Vigil Cottage demanded time bound implementation.	Time bound implementation will mitigate the impact.
3	Many places the alignment seems to be partial with protecting interest of some people	The requisition agency representative explained in details about the alignment and assured that the spots in which the allegations are raised will be verified and cleared the doubt of the people.
4	Instead of proposed 18.5mts width adopt 12-15mts throughout the stretch	The present width of the project road is 8mts (average). The road is having 55 curves. So, standardizing the road as accident-free needs



		more width.
5	The width of the road will be minimized to 10 Mts.	This suggestion will not match with the Govt. policy on development of MDR.
6	More consultation with the PAPs will reduce the grievance. The alignment details will be given to Title Holders and PAPs before taking further step of land acquisition.	The report also supported the demand of the THs.
7	The unused bit land will either acquired or give permission to use it with relaxation in building rules.	The report also supported the request. These request of the THs will consider during negotiation.
8	Considering the commercial importance of the area maximum compensation will be given to title holders.	R&R policy will be followed during the fixation of land value.
9	Special compensation package will be formulated for displaced residential house owners.	The report also recommended suggestions.
10	The existing accesses will be resettled.	The accesses resettlement plan will be included in the detailed plan report of the project.
11	The affected open wells and drinking water sources will be protected.	Will take Maximum measures to protect the drinking water sources.
12	A functional system will be developed for communicating the PAPs about the progress of the project and acquisition process.	A special forum constituted with local body members and representatives of the PAPs can play a role to address the grievance of the PAPs and improving the communication regarding the project.
13	Instead of increasing the width of the road, the existing road will be cleared for smooth traffic (By shifting electric posts to extreme side and concrete the sides.)	This suggestion will not meet the objectives of the project.
14	Many merchants are losing their livelihood and it should be compensated. The Compensation package will be discussed with organizations working among commercial establishments.	A discussion with organizations working among commercial establishment owners is desirable to ensure effective rehabilitation.



15	Water supply pipes will be relocated to safe place without interrupting the water distribution.	A detailed resettlement plan will include in the implementation plan.
16	Instead of increasing the width of the road, the curve portions will be developed.	The project road is having 55 curves. The suggestion will not meet with the objectives of the project.
17	Time bound acquisition process will be implemented.	Meeting of the demand will mitigate the impact
18	Rehabilitation and Resettlement process will be well informed and ensure community participation and consultation.	Meeting of the demand will mitigate the impact
19	The road will be developed with maximum width possible.	This is a positive suggestion and the possibility of the suggestion will discuss jointly by people's representatives, Local body leaders and PAPs.

Sri. Sam Kunjachan, Mr. Dileepkumar, Pranavam, Mr. Robert, Emmanuel Gardens, Mr. Pratheesh, Sooryavilasam, Mr. G. Manoharan, Aswathy Bhavan, Mr. Dileepkumar, Mr. S. Mahi, Mr. Soverin, Sharon, Mr. Manikuttan, Mr. Krishnan Nair, Kattakada, Mr. Ramadas, Karishma vilasam, Mr. Rajeevan, Nandanam, participated in the discussion and expressed their concerns and suggestions.

(4) Ottasekharamangalam Village - 11-02-2021, Kisan Grandhasala Hall, Ottasekharamangalam at 2.00 PM

Section 5 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, of 2013 envisages that whenever a SIA study is required to be prepared the Government shall ensure that a Public Hearing is held at the affected area to ascertain the views of the affected families to be recorded and included in the SIA Report. Rule 14 of the Rules, 2015, have prescribed detailed procedure for the conduct of the public hearing.

SIA Unit took special care to inform the affected people in the area about Public Hearing by taking various steps like Notification for conducting public hearing as per Form 5 Rule 14 (1) of the RTFCTLARR Act, 2013. The notification was published in two Malayalam News Papers i.e., Mangalam and Janayugam on 28-01-2021. A notice has been served to the affected families in hand for informing about the public hearing. SMS & Phone call messages were sent to all PAPs. The copy of notice was served to Peoples Representatives, Local Body Leaders, Grama Panchayath Offices, Village Offices, Special Tahsildar LA NH office and RICK Ltd. Adequate copies of the SIA draft report and summaries were made available on the day of the public hearing. The major highlights of the study were presented



in local language by Chairman, SIA Unit. Smt. Cherupushpam, (Ottasekharamangalam Grama Panchayath President), and Sri. Minerva Sukumaran, Smt. S Ushakumari, Smt. Bindhu R., (Ottasekharamangalam Grama Panchayath Members) were attended the Public hearing and expressed their concerns and suggestions.

Sl.No.	Points raised	Remarks
1	Sri. Ramachandran Nair. Kisan Granthasala, requested government to rehabilitate the library building which has seventy years history.	The government will discuss the resettlement plan with library authorities.
2	Many places the alignment seems to be partial with protecting interest of some people	The requisition agency representative explained in details about the alignment and assured that the spots in which the allegations are raised will be verified and cleared the doubt of the people.
3	Instead of proposed 18.5mts width adopt 12-15mts throughout the stretch	The present width of the project road is 8mts (average). The road is having 55 curves. So, standardizing the road as accident-free needs more width.
4	The width of the road will be minimized to 10 Mts.	This suggestion will not match with the Govt. policy on development of MDR.
5	More consultation with the PAPs will reduce the grievance. The alignment details will be given to Title Holders and PAPs before taking further step of land acquisition.	The report also supported the demand of the THs.
6	The unused bit land will either acquired or give permission to use it with relaxation in building rules.	The report also supported the request. These request of the THs will consider during negotiation.
7	Considering the commercial importance of the area maximum compensation will be given to title holders.	R&R policy will be followed during the fixation of land value.
8	Special compensation package will be formulated for displaced residential house owners.	The report also recommended suggestions.



9	The existing accesses will be resettled.	The accesses resettlement plan will be included in the detailed plan report of the project.
10	The affected open wells and drinking water sources will be protected.	Will take Maximum measures to protect the drinking water sources.
11	A functional system will be developed for communicating the PAPs about the progress of the project and acquisition process.	A special forum constituted with local body members and representatives of the PAPs can play a role to address the grievance of the PAPs and improving the communication regarding the project.
12	Instead of increasing the width of the road, the existing road will be cleared for smooth traffic (By shifting electric posts to extreme side and concrete the sides.)	This suggestion will not meet the objectives of the project.
13	Many merchants are losing their livelihood and it should be compensated. The Compensation package will be discussed with organizations working among commercial establishments.	A discussion with organizations working among commercial establishment owners is desirable to ensure effective rehabilitation.
14	Water supply pipes will be relocated to safe place without interrupting the water distribution.	A detailed resettlement plan will include in the implementation plan.
15	Instead of increasing the width of the road, the curve portions will be developed.	The project road is having 55 curves. The suggestion will not be meet with the objectives of the project.
16	Time bound acquisition process will be implemented.	Meeting of the demand will mitigate the impact
17	Rehabilitation and Resettlement process will be well informed and ensure community participation and consultation.	Meeting of the demand will mitigate the impact
18	The road will be developed with maximum width possible.	This is a positive suggestion and the possibility of the suggestion will discuss jointly by people's representatives, Local body leaders and PAPs.



Sri. Sukumaran Nair, Rani Bhavan, Mr. Anilkumar, Rohini, Mr. Sadasivan Nair, SR Nilayam, Mrs. Premaletha, Sabhalyam, Mr.Boobesh, Manager, SBI, Ottasekharamangalam, Mr.Ajayakumar, Headmaster, L.P. School, Ottasekharamangalam, Sri. Ayyappan, Puravara, Sri. Shibukumar, Kumaramangalam participated in the discussion and expressed their concerns and suggestions.



CHAPTER 4

LAND ASSESSMENT

4.1 Description of the land

The project location starts 800 mts from Kattakkada Junction to Vellarada Junction (17.5 Km). Ottasekharamangalam and Vellarada are the major junctions and 32 minor junctions are in the project area. One major bridge, 3 minor bridges and 26 culvers are the major infrastructures affected. The location coming under Kulathummal, Ottasekharamangalam, Kezharoor & Vellarada villages. The start point of the project area is 800 mts from Kattakkada junction and the end point is Vellarada Junction on the Neyyar Dam- Parassala stretch. The end point is just half a km from Chenkal, a point on the proposed hill highway. The project area is situated 48KM from Thiruvanthapuram Air Port, 58 KM from Vizhinjam Port, 34Km from Thiruvanthapuram Railway Station and 67Km from Kanyakumari. Several rural villages are situated in the location. This is one of the major residential area of Thiruvanthapuram district. Agriculture is the primary source of income of these villagers. The area is also famous for Rubber plantations.

4.2. Entire area of impact under the influence of the project.

The project road, Karamana -Vellarada; Reach 3(Kattakkada-Vellarada) is an important District road connecting the eastern part of the Thiruvanthapuram to District Capital and it leads to the inter district road which goes to Tamil Nadu via Thenmala. The road is connecting the hilly region of Vellarada with the city. Several Residential houses, Public institutions, shops and small business establishments are situated in both sides of the road. This road is the major connectivity corridor of several villages in the area having a population of 98,000 (Approx.). The vehicle traffic study shows that 4000-5000 light and heavy vehicles daily (10 hour) passing through this road. The road is connecting two major roads ie Palod - Parasalla road and Nedumangadu - Palod road. The accident cases in Vellarada and Kattakkada police station shows that Four to Five cases daily reported from the Kattakkada-Vellarada road. The project will address traffic congestion which is a common phenomenon at many spots on the project road stretch due to lack of width and unscientific stoppages for public transport services. The road will become a bypass for the NH-66 and the proposed coastal and hill highways. The road will become an alternate route for vehicles from Tamil Nadu to the Vizhinjam port which is under construction.



4.3. Total land requirement for the project.

The total land acquiring for the project is 4.549 Hectare. The acquisition is for the widening of 17.5 km, Karamana - Vellarada road (Reach 3: Kattakkada-Vellarada). The land in both sides of the road is the acquiring land. The analysis shows that 61% are residential, 19% commercial, 10% Government or community and 8% vacant land. The acquiring land is owned by 1845 title holders. All portion of the land is significant and irrigated. The presents of Several Educational Institutions, Pilgrim Centers, Tourist spots etc influence the importance of the acquiring land. The acquiring land is coming under the jurisdiction of four villages ie Kulathummal, Ottasekharamangalam, Kezharoor & Vellarada villages.

4.4. Present use of any public utilized land in the vicinity of the project area.

Not Applicable.

4.5. Land (if any) already purchased alienated, leased or acquired and the intended use for each plot or land required for the project.

Not Applicable

4.6. Quantity and location of land proposed to be acquired by the project.

The total land acquiring for the project is 4.549 Hectare. The acquisition is for the widening of 17.5 km, Karamana - Vellarada road (Reach 3: Kattakkada-Vellarada). The land in both sides of the road is the acquiring land. The analysis shows that 61% are residential, 19% commercial, 10% Government or community and 8% vacant land. The acquiring land is owned by 1845 title holders. All portion of the land is significant and irrigated. The presents of Several Educational Institutions, Pilgrim Centers, Tourist spots etc influence the importance of the acquiring land. The acquiring land is coming under the jurisdiction of four villages ie Kulathummal, Ottasekharamangalam, Kezharoor & Vellarada villages.



4.7. Nature, present use and classification of land and if agricultural land, irrigation coverage and cropping patterns

Sl.NO.	Nature of land	Present Use of Land	Irrigated / Non irrigated	Cropping Pattern	No. of Holdings
1.	Dry	Residential	Irrigated	NA	566
2.	Dry/Low	Agricultural land	Irrigated	Rubber, Cash crops etc.	395
3.	Dry	Commercial	Irrigated	NA	793
4.	Dry	Government/Community	NA	NA	49
5.	Dry	Vacant land	Irrigated	NA	65
6.	Dry	Religious	NA	NA	26
	Total				1894

(49 Government/Community properties are included)

4.8 Size of holding ownership pattern land distribution and number of residential houses.

Land holding size in the project area is in the state average. The following figure shows the pattern of holding.

Size of Holdings	No. of Holdings
10 cents ≤	161
10- 20 cents	242
20 - 30	395
30 - 40	491
40 - 50	376
50- 1acre	112
1 acre above	68
Total	1845

4.9 Land prices and recent changes in ownership, transfer and use of lands over the last 3 years.

Not Applicable



CHAPTER 5

ESTIMATION AND ENUMERATION OF AFFECTED FAMILY AND ASSETS

5.1. Families which are directly affected.

The social impact study finds that 1845 title holders and 604 Non-title holders 26 cultural properties, 19 Government properties 30 community properties are affected by the project. Out of it 57 residential properties are displaced and 99 are affected. 915 title holders losing their land only. Loss of 543 compound walls, 43 front yard, 17 septic tanks, 43 entrance or paths of houses, and also 127 commercial building displaced, 224 commercial buildings affected by the project. 394 Commercial shops are running in these commercial buildings. 11 bathrooms near houses 4 car sheds 2 cattle sheds 7 other structures are also displaced by the project. One private cemetery, one religious cemetery, one church shrine, one Mosque's property, Land and structure of Ottasekharamangalm temple, and some offering boxes are also displaced. The analysis shows that Hindus and Christians are the dominant religious groups in the area with 69% and 28% respectively. Sex ratio of THs shows that 72% are male. 10% of title holders having the educational qualification of below 10th standard. Thirty six percent THs are having above 10th educational qualification. 83% of peoples are reported as APL. The occupational distribution shows that 19% are farmers 28% are Private sector, 26% are doing business, 23% of people are doing other jobs. Male, Female ratio indicates 0.1% domination to male.

5.1. Families which are indirectly affected by the project.

The project road, Karamana -Vellarada; Reach 3(Kattakkada-Vellarada) is an important District road connecting the eastern part of the Thiruvanthapuram to District Capital and it leads to the inter district road which goes to Tamil Nadu via Thenmala. The road is connecting the hilly region of Vellarada with the city. Several Residential houses, Public institutions, shops and small business establishments are situated in both sides of the road. This road is the major connectivity corridor of several villages in the area having a population of 98,000 (Approx.). The vehicle traffic study shows that 4000-5000 light and heavy vehicles daily (10 hour) passing through this road. The road is connecting two major roads ie Palod - Parasala road and Nedumangadu - Palod road. The accident cases in Vellarada and Kattakkada police station shows that Four to Five cases daily reported from the Kattakkada-Vellarada road. The project will



address traffic congestion which is a common phenomenon at many spots on the project road stretch due to lack of width and unscientific stoppages for public transport services. After the proposed development, the road will have a total width of 13.5 m. Of this, 10.5 m will be the bitumen surface. The road will have sideways of 1.5 m width each. There will be covered drainage lines upon which footpaths will be set up.

5.3. Inventory of productive assets and no significant lands.

All affected land holdings under the project is productive and significant.



CHAPTER 6

SOCIO ECONOMIC AND CULTURAL PROFILE

6.1. Demographic Details

The analysis on Socio-Economic and cultural profile of the PAPs shows that the area is a middle-class settlement area and having fast development indicators. Even though agriculture is reported as major occupation the prime earnings of the families are depends on various other sources. As per the economical standards the THs in Kulathummal, Ottasekharamangalam are compare to better Economic status than the THs in other two villages. The religious distribution shows that 56% Hindus and 42 % are Christians. The average family size of THs is 4-5. All THs are literate. But 3% of family members of THs are illiterate. 78% THs are claimed that they are in BPL category. Eleven women headed families and 21 aged THs need special support in land acquisition process.

6.2. Age wise distribution of TH

Age of THs	No of THs
20-30	51
31-40	152
41 - 50	752
51 - 60	529
61 - 70	214
Above 70	121
Not Applicable	26
Total	1845

6.3. Gender wise Distribution of TH

Gender	No of TH
Male	1473
Female	346
Not Applicable	26
Total	1845



6.4. Family size of THs

Family Size of THs	No of Families
0-2	118
3-4	1032
5-7	614
Above 7	55
Not Applicable	26
Total	1845

6.5. Educational Qualification of THs

Educational Qualification	No of THs
Below 10	181
SSLC	550
PDC	343
DEGREE	259
PG	129
Others	357
Not Applicable	26
Total	1845

6.6. Religious Distribution

Religion of THs	No. of TH
Hindu	1255
Muslim	55
Christian	509
Not Applicable	26
Total	1845



6.7. Economic Distribution of THs

Economic Status of THs	No. of TH
APL	1510
BPL	309
Not Applicable	26
Total	1845

6.8. Occupational Distribution THs

Major Occupation of THs	No of TH
Agriculture	355
Business	483
Government service	68
Private Job	491
Other	422
Not applicable	26
Total	1845

6.9. Income distribution of THs

Monthly Income of THs	No of THs
Below 10000	656
10000 -20,000	466
20,000 - 30,000	375
30,000 - 40,000	145
40,000 - 50,000	116
Above 50,000	61
Not Applicable	26
Total	1845



6.10. Socio Economic Profile of Project Affected Family Members.

6.10.1. Age wise distribution of PAF Members

Age of PAF Members	No of PAF Members
≤10	636
11-20	825
21-30	965
31-40	914
41 – 50	1030
51 – 60	878
61 – 70	765
Above 70	310
Total	6323

6.10.2. Educational Qualification of PAF Members

Educational Qualification	No of PAF Members
Below 10 th	1014
10 th	1137
+2	760
Degree	941
PG	286
Professional	695
Others	1490
Total	6323

6.10.3 Occupational Status of PAF Members

Major Occupation of PAF	No of PAF
Agriculture	365
Business	1237
Government service	121
Private Job	1591
Other	1595
No Job	1414
Total	6323



6.11. Non - Title Holders

The total Non- Title Holders affected by the project is in two categories. (1). Families living in rented houses which are displaced by the project (2). The persons who are doing business in the rented shops or buildings. The first category of Non - Title Holders need to pay compensation for their shifting and assistance for resettlement. But the second category the impact is multi fold. They are losing their job and residence due to the displacement of their non-rental residential house and job setting (i.e., rubber plantation). Therefore, special care and attention is needed for their rehabilitation. Necessary compensation for loss of livelihood, wages and residence may mitigate the impact. Many of the displaced families are from far away areas. Shifting may affect the education of their siblings. So special support needed to children of these families to enrolled in schools after shifting.

Socio Economic Profile of Non - Title Holders

6.11.1. Demographic Details of NTH

Sl. No.	Type of NTH	Activity		
		Commercial	Residential	Others
1	Tenant	595	9	-
2	Encroacher	-	-	-
3	Squatter	-	-	-
4	Other	-	-	-
	Total	604		

6.11.2. Age wise distribution of NTH

Age of NTHs	No of NTHs
20-30	31
31 -40	198
41 - 50	239
51 - 60	91
61 - 70	32
Above 70	13
Total	604



6.11.3. Educational Qualification of NTHs

Educational Qualification	No of NTHs
SSLC	242
PDC	129
DEGREE	116
PG	9
Professional	17
Others	91
Total	604

6.11.4. Religious Distribution of NTHs

Religion of NTHs	No. of NTHs
Hindu	312
Muslim	97
Christian	195
Total	604

6.11.5. Economic Distribution of NTHs

Economic Status of NTHs	No. of NTHs
APL	546
BPL	58
Total	604

6.11.6. Income distribution of NTHs

Monthly Income of NTHs	No of NTHs
Below 10000	68
10,000 - 15,000	149
16,000 - 20,000	171
21000 - 25000	188
76000 - 100000	20
Above 100000	19
Total	604



CHAPTER 7

SOCIAL IMPACT MANAGEMENT PLAN

The visible impact of the project is the loss of land of 1845 title holders, loss of 57 residential houses and partial loss of 99 houses. Apart from the impact on residence 62 drinking water sources, mainly open wells, 127 commercial buildings are also displaced. 224 commercial buildings, 543 compound walls, 43 front yards of the residence, 17 septic tanks, 43 private roads etc. also affected by the project. It was identified that 1104 business establishments are either affected or displaced by the project. 26 cultural properties, 30 community properties and 19 government institutions / properties are affected by the project. The gravity of the impact shows that a comprehensive rehabilitation and resettlement policies is needed to mitigate the impact. The proposed project makes the traffic through the Karamana - Vellarada road become smooth and safe. This directly influences the development of the area.

7.1. Approach to Mitigation/ Measures to avoid, mitigate and compensate impact

Sl.No.	Risk Assumed	Approach	Mitigation Strategy
1	Loss of Residence	Compensation, Rehabilitation	Compensate the loss and rehabilitate the family
2	Loss of Part of Residence	Compensation, Resettlement	Compensate the loss and resettle the family
3	Loss of Land	Compensation	Compensate the loss
4	Loss of Part of land	Compensation	Compensate the loss.
5	Loss of Building	Compensation	Compensate the loss.
6	Loss of part of Building	Compensation and Resettlement	Compensate the loss. Case by case approach in resettlement. Eg. Relaxation in municipal Act etc.
7	Loss of structures	Compensation	Compensate the loss.
8	Loss of Part of structure	Compensation	Compensate the loss.
9	Loss of Business	Compensation	Compensation & Resettlement
10	Loss of employment	Compensation/R rehabilitation and Resettlement.	Compensation & Resettlement
11	Loss of household wells	Control/Compensation	Save/Compensation
12	Loss a community well	Control & Resettlement	Save/Resettlement
13	Loss of Parking	Compensate &	Compensate the loss.



	Areas	Control	
14	Loss of access to properties	Control & Resettle	Prepare a resettlement plan in consultation with Project Affected Families.
15	Loss of access to sub roads.	Control & Resettle	Prepare a resettlement plan in consultation with Project Affected people.
16	Loss of House' setback to Road	Control & Resettle	Resettle the access/Establish safety measures
17	Loss of Cultural Properties	Control & Resettle	Compensate the loss or resettle
18	Loss of Community Properties	Control and Resettle	Compensate or Resettle
19	Loss of School Building	Control and Resettle	Compensate or Resettle
20	Loss of water supply pipes	Resettle	Resettle
21	Loss of religious properties	Compensation	Compensate the loss
22	Loss of cemetery	Avoid/Exempted	Avoid/Exempted/Resettle
23	Loss of Trees	Control & Compensation	Plant equal no of trees
24.	Involved in land acquisition process	Control	Ensure community participation in the whole process.
25	Grievance	Control	Functional grievance redressal committee at village and district level.

7.3 Measures those are included in the terms of Rehabilitation and Resettlement

Many Title Holders are not having very sufficient land remaining after acquisition for constructing house / buildings. If Government could provide relaxation in building rules may reduce the impact and improve the chances of getting the benefit of the project.

7.4 Measures that the Requiring Body has stated it will introduce in the Project Proposal

Not Applicable

7.5 Alterations to project design and additional measures that may be required to address the extent and intensity of impacts across various groups as identified during the Social Impact Assessment Process.

Not Applicable



7.6 Detailed Mitigation Plan

Potential Impact	Positive / Negative	Likelihood	Magnitude	Pre-Mitigation Level of Impact	Post - Mitigation Level of Impact	Mitigation Measures
Loss of Residence	Negative	Possible	Major	Medium	Medium	Compensate the loss and rehabilitate the family
Loss of Part of Residence	Negative	Possible	Moderate	Medium	Medium	Compensate the loss and resettle the family
Loss of Land	Negative	Possible	Moderate	Medium	Medium	Compensate the loss
Loss of Part of land	Negative	Possible	Major	Medium	Medium	Compensate the loss.
Loss of Building	Negative	Possible	Low	Minimum	Low	Compensate the loss.
Loss of part of Building	Negative	Possible	Low	Minimum	low	Compensate the loss. Case by case approach in resettlement. E.g. Relaxation in municipal Act etc.
Loss of structures	Negative	Possible	Major	High	Medium	Compensate the loss.
Loss of Part of structure	Negative	Possible	Moderate	High	Medium	Compensate the loss.
Loss of Business	Negative	Possible	Low	Minimum	Low	Compensation & Resettlement



Loss of employment	Negative	Possible	Low	Medium	Low	Compensation & Resettlement
Loss of household wells	Negative	Possible	Low	Minimum	Low	Save/Compensation
Loss of community well	Negative	Possible	Major	High	Medium	Save/Resettlement
Loss of Parking Areas	Negative	Possible	Major	Medium	Medium	Compensate the loss.
Loss of access to properties	Negative	Possible	Moderate	Medium	Medium	Prepare a resettlement plan in consultation with Project Affected Families.
Loss of access to sub roads.	Negative	Possible	Moderate	Medium	Medium	Prepare a resettlement plan in consultation with Project Affected people.
Loss of House' set back to Road	Negative	Possible	Major	Medium	Medium	Resettle the access/Establish safety measures
Loss of Cultural Properties	Negative	Possible	Low	Minimum	Low	Compensate the loss or resettle
Loss of Community Properties	Negative	Possible	Low	Minimum	low	Compensate or Resettle
Loss of School Building	Negative	Possible	Major	High	Medium	Compensate or Resettle



Loss of water supply pipes	Negative	Possible	Moderate	High	Medium	Resettle
Loss of religious properties	Negative	Possible	Low	Minimum	Low	Compensate the loss
Loss of cemetery	Negative	Possible	Low	Medium	Low	Avoid/Exempted/Resettle
Loss of Trees	Negative	Possible	Low	Minimum	Low	Plant equal no of trees
Involved in land acquisition process	Positive	Possible	Low	Minimum	Medium	Ensure community participation in the whole process.
Grievance	Negative	Possible	Major	Medium	Medium	Functional grievance redressal committee at village and district level.



CHAPTER 8

SOCIAL IMPACT MANAGEMENT PLAN AND INSTITUTIONAL FRAMEWORK

8.1- Institutional structure for key personal

Key persons responsible for mitigation	Role in mitigation
District Collector	Compensation & Grievance redress
Deputy Collector (L.A) NH	Compensation
Tahsildar	Compensation
District Forest Officer	Compensation measurement for trees
Requisition Authority	Resettlement of access and structure valuation



CHAPTER 9

SOCIAL IMPACT MANAGEMENT BUDGET AND FINANCING OF MITIGATION

9.1 Costs of all resettlement and rehabilitation costs

Not Applicable

9.2 Annual budget and plan of action

Not Applicable

9.3 Funding sources with breakup

Not Applicable



CHAPTER 10

SOCIAL IMPACT MANAGEMENT PLAN MONITORING AND EVALUATING

10.1. Key Monitoring and Evaluating Indicators

- Participation of THs in DLPC meeting
- Number of direct purchases happened.
- Methodology of fixing compensation
- No. of affected access resettle
- Amount of compensation paid for land/structure
- Entitlement of PAPs-land/cash
- Number of business re-established
- Utilization of compensation
- House sites/business sites purchased
- Successful implementation of Income Restoration Schemes
- Formation of Grievance Redressal Committee
- Number of times GRC met
- Number of appeals placed before grievance redressal cell
- Number of grievances referred and addressed by GRC
- Number of cases referred and addressed by arbitration
- Number of PAPs approached court
- Women concern

10.2. Reporting mechanisms and monitoring roles

Not Applicable

10.3. Plan of Independent Evaluation

Not Applicable



CHAPTER 11

ANALYSIS OF COSTS AND BENEFITS AND RECOMMENDATION ON ACQUISITION

The proposed project aimed to develop the Kattakkada-Vellarada reach (Reach-3) of Seventeen kilometer of Karamana -Vellarada Road of Thiruvanthapuram District and it is the continuation of the first two reach ie Karamana to Kattakkada. Social impact studies of the first two reaches were conducted and development was started in the first reach of 5 KM. This shows the fact that the proposed project is a continuity of an already initiated development project and it minimizes the options for alternatives and the level of public interest is linked to the public interest of other two reaches. The development of Karamana-Vellarada road development is a long due development initiative of Thiruvanthapuram District. Since the project displaced 57 houses and partially affected 99 houses the impact of the project scaled as high. Apart from the impact on residence 62 drinking water sources, mainly open wells, 127 commercial buildings are also displaced. 224 commercial buildings, 543 compound walls, 43 front yards of the residence, 17 septic tanks, 43 private roads etc. also affected by the project. It was identified that 394 business establishments are either affected or displaced by the project. 26 cultural properties, 30 community properties and 19 government institutions / properties are affected by the project. The gravity of the impact shows that a comprehensive rehabilitation and resettlement policies is needed to mitigate the impact. In compared to the length of the road and area to be acquired, the above impact may term as moderate. The total land acquired for the project is Hectare. Therefore, per head land loss of each title holder is only 4-5 cents (Approximately). Special attention to the R&R of these families may mitigate the overall impact marginally. Others who may lose residential houses will also need effective compensation package to resettle their life. Out of the fifty-seven displaced residential house holders, twenty-three are having remaining land to rebuild the houses if Government gives certain relaxation in building rules. This may marginally mitigate the impact. Likewise, out of 127 owners of displaced commercial structures 40 has remaining land to maintain or rebuild the shops. This also reduces the chances of relocation and longtime business loss. Due to the project, road setbacks of 43 houses may minimize below 1 meter. This will affect their access, vehicle parking, safety etc. Special safety measures like retaining walls, resettlement of access, permission to underground parking facilities etc. may be the solution to this impact. Technical experts of the requisition agency will explore the possibility to mitigate the impact and provide technical



support may mitigate the impact and ensure minimum displacement. More over access of all PAPs will be resettled and the issue of loss of parking will also be addressed. Several community properties like libraries, waiting sheds and cultural properties like offering shrines are affected by the project. Detailed resettlement plan will be developed for these properties. One cemetery of a Christian church is partially affected. It is very difficult to relocate and resettle it effectively. Avoid or exempted strategies may more effective than any mitigation plan. Many household drinking water wells and two public wells are affected by the project. Develop special plan to save maximum number of such wells. To compensate the loss of trees Government will direct requisition agency to plant equal number of trees in an around the project area. Government will give a chance to PAPs to take back the acquired structures with or without solecism. This will mitigate the impact of structural loss marginally. In case of religious properties Government will initiate discussion and consultation before the acquisition. Revenue department will survey the acquired area at the earliest, so that people can easily understand the impact and develop voluntary effort to mitigate the impact. Give relaxation in building rules to maintain and rebuilding structures, houses and building is also a better no cost strategy which government can implement. Maximize the categorization of affected land for fixing compensation also will improve transparency and community participation. Setting up a functional grievances committee also will speed up the acquisition process. Since the THs living in a land in the side of an important public road with a calculated risk of widening of the road and other development initiative, they were mentally prepared to face the consequences of the acquisition of land whenever required by the govt. The affected title holders are aware about the importance of the project and willing to surrender their land if an acceptable mitigation plan is implemented even though some are demanding the reduction in the width of the proposed road. No visible impact noticed in Lifestyle, Culture and Quality of life, Cohesion and Health of Title Holders and Community in the project area due to the project. A minimum duration of project implementation will minimize the impact of the project and maximize the mitigation. The proposed acquisition does serve public purpose and more over there was an overwhelming consensus among people, people' representatives, trade associations too with regard to the benefits accruing due to the proposed project.

The project is treated as framed for a public purpose under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (30 of 2013) Section 2 (i)(b)(iii). It is in this base, Government of Kerala notified to initiate acquisition procedure. Considering the



public importance and interest the project is an inevitable need and the project is able to address the social impact of the project. Therefore, the project has to be implemented.



CHAIRMAN
SOCIAL IMPACT ASSESSMENT STUDY UNIT

Annexure

1. List of PAFs.
2. Photographs – Field Investigation.
3. Form No. 5 Notification.
4. Notice – Public Hearing.
5. Public Hearing Attendance.
6. Gazette Notifications regarding SIA study.
7. Name and details of PAFs who submitted Complaints during the SIA Study.

