

SOCIAL IMPACT ASSESSMENT STUDY

FINAL REPORT

Entrusted by Revenue (B) Department, Government of Kerala

**LAND ACQUISITION FOR THE CONSTRUCTION OF SEAPORT - AIRPORT ROAD
PHASE II, SECTION A PACKAGE 2 & 3 - NAD JUNCTION TO ASSISSI JUNCTION
& ASSISSI JUNCTION TO MAHILALAYAM JUNCTION - IN CHOORNIKKARA,
KEEZHMAADU, ALUVA WEST VILLAGES OF ALUVA & KANAYANNUR TALUKS
IN ERNAKULAM DISTRICT**

03/12/2020

RequiringBody

**ROADS AND
BRIDGES
DEVELOPMENT
CORPORATION OF
KERALA LTD
COCHIN 682025**

SIA Unit

RAJAGIRI outREACH

**RAJAGIRI COLLEGE OF SOCIAL
SCIENCES**

RAJAGIRI.P.O., KALAMASSERY

PIN: 683104

**PH:0484 – 2911330-332, 2550-
785**

rossrajagiri@gmail.com

www.rajagirioutreach.in

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CHAPTER 1

EXECUTIVE SUMMARY

1.1 Project and Public Purpose

The prosperity of a country depends upon the development of the infrastructure. Physical infrastructure like transportation, power and communication through its backward and forward linkages facilitates growth; and social infrastructure including water supply, sanitation, sewage disposal, education and health have a direct impact on the quality of life. Provision of adequate infrastructure is a prerequisite for sustained growth of economy and inherent to such growth is the need to ensure cost-effective movement of people and goods. Therefore an efficient road infrastructure is an essential requirement. Over the successive five year plans, investment in road infrastructure has been increasing progressively in the state. So Kerala has been developed an extensive road network which provides connectivity to all settlements.

Kochi, located in the central part of Kerala, is among one of the rapidly growing Tier-II cities in the country. The Kochi International Airport, established in 1999, has got its hinterland stretch to a vast part of Kerala covering districts of Ernakulam, Kottayam, Idukki, Pathanamthitta, Alappuzha, Palakkad and Thrissur districts. The construction of the new Airport terminal has necessitated the development of a good road infrastructure for passengers as well as cargo movement. Furthermore, the development of a good infrastructure is an essential pre-requisite for the growth and development of the region.

The proposal for the Airport-Seaport road is to connect the seaport at Willington Island with the Cochin International airport through the outskirts of the Ernakulam town. It is planned from Irumpanam Junction in NH 66 to Nedumbassery Airport Road. On completion of the project it will give better connectivity between Cochin International Airport and Cochin Seaport. It will also act as a bypass for National Highway from

SIA Study - Land Acquisition for the Construction of Seaport-Airport Road Phase II, Section A

Nedumbassery to Kundannoor. The project is divided into 2 phases. Phase I - Irumpanam to Kalamassery and Phase II- Kalamssery to Nedumbassery. Phase -I was completed in 2003 as two lane and since the traffic volume is very high and four lining of the phase is urgently required. Phase-II, the stretch from Kalamassery HMT Road point to Nedumbassery Airport Road is again divided into three sections; Section A : Kalamassery HMT Road Point to Mahilalayam Junction Section B : Mahilalayam Junction to Chowara Section C : Chowara to airport Road.

The proposed project is the land acquisition for section A package 2 & 3 of the 2nd phase of Seaport-Airport road construction ie from NAD junction to Mahilalayam Junction. The construction work of package 1 of section A ie from HMT road point to NAD junction is progressing. It will also form a major connectivity link and easy access to Smart city, Eloor and the Airport which are situated in the suburbs of the city and to Vyttila Mobility Hub. The extension of Airport Seaport road Phase II will pave way for better connectivity of the Cochin city to the outer City areas and is also expected to cater the smooth flow of increasing traffic projected for the years to come. The traffic from Infopark and Smart City can reach both Airport and Cochin City through this road. Once the Airport - Seaport Road is constructed, passengers can use this road to reach the Airport as they will get considerable savings in time. They can take diversion from NH 544 to Airport-Seaport road either at Kundannoor junction, Vyttila junction, Palarivattom or HMT junction to reach Airport. The new formation of Phase II is of utmost importance taking the following aspects into consideration:

1. This stretch will be a major connectivity link for traffic between the Vyttila Mobility Hub, which is in the expansion mode (IInd phase) to Cochin International Airport.
2. A continuous and uninterrupted flow of traffic to the Smart city, Infopark, Veega land and also west and south parts of Cochin can be successfully achieved.

3. The new alignment will cater to the increasing traffic volume from Karingachira, Kakkanad, Thrikakkara, Kalamassery, etc. Moreover, the proposed road will provide an easy and fastest connectivity between NH 85 and NH 544.
4. The connectivity between Central Business District (CBD) areas of Kochi and residential areas of Tripunithura and south Kochi will be improved if this stretch is completed till Mahilalayam.
5. This will ensure a faster and reliable connectivity from Cochin International Airport towards whole areas of south Kerala.
6. The stretch can also be integrated with water transport operating in Chitrapuzha (IWT III – Ambalamugal branch) for a smoother connectivity to NH 49 and NH 47.
7. With the presence of metro rail, the proposed stretch will invite more movement of people and vehicles towards Irumpanam from Petta station.
8. The proposed road will also ease the movement of cargo vehicles from Vallarpadam terminal to Cochin Airport by taking diversion from Kalamassery and also can bypass the high traffic density stretch from Kalamassery to Athani for the vehicles towards north direction.

Seeing the project as a public purpose, Revenue (B) Department of Kerala Government issued a Notification G.O.(P)No.30/2020/RD dated 20/03/2020 which was published in the Kerala Gazette (Extra ordinary) No.1047 dated 7th April 2020. The said Notification notified the land details which may be acquired for the construction Seaport-Airport road Phase II, Section A and also entrusted Rajagiri outREACH to conduct the Social Impact Assessment as insisted in section 4(1) of RFCTLARR Act 2013.

This is the Final Report of the Social Impact Assessment Study conducted in Choornikara, Keezhmadu, Aluva West villages in Aluva Taluk and Thrikkakara North village in Kanayannoor Taluk, the affected areas of the Project of Land Acquisition for the Construction of Seaport-Airport road Phase II, Section A.

1.2 Location

The land proposed to be acquired for the Construction of Seaport-Airport Road Phase II, Section A belongs to Choornikkara, Keezhmadu, Aluva West villages of Aluva Taluk and Thrikkakara North village of Kanayannur Taluk. The location belongs to Choornikkara, Keezhmadu and Edathala Panchayaths and Aluva Municipality. The project area is heavily built up with commercial centres, public buildings, private institutions, religious structures and residential plots. Besides there are used or unused open lands which are suitable for agriculture. The proposed road has a total length of 6.60 km and passes mostly through vacant land.

1.3. Size and attributes of land acquisition

Notification of Revenue (B) Department, Government of Kerala G.O.(P)No.30/2020/RD dated 20/03/2020, published in Kerala Gazette (Extraordinary) No.1047 dated 7th April 2020 reveals that approximately 30.3590 hectares of land belongs to Choornikkara, Keezhmadu and Aluva West villages in Aluva Taluk and Thrikkakara North village in Kanayannur Taluk needed or likely to be needed for the construction of Seaport-Airport road Phase II, Section A. The land details published in the said Notification are given in Table 1.3.1.

Table 1.3.1. : Details of the Land to be Acquired

<i>Village</i>	<i>Block Number</i>	<i>Survey Number</i>
Choornikkara	34	303/p, 305/p, 306/p, 312/p, 314/p, 315/p, 316/p, 317/p, 435/p, 436/p, 437/p, 438/p, 439/p, 440/p, 441/p, 442/p, 443/p, 444/p, 445/p, 446/p, 448/p, 449/p, 450/p, 451/p, 453/p, 454/p, 455/p, 460/p, 484/p, 485/p, 486/p, 492/p, 493/p, 494/p, 495/p, 498/p, 499/p, 553/p, 554/p, 555/p, 556/p, 557/p

Keezhmadu	33	21/p, 22/p, 23/p, 28/p, 29/p, 31/p, 32/p, 33/p, 41/p, 42/p, 55/p, 56/p, 57/p, 65/p, 67/p, 68/p, 69/p, 71/p, 73/p, 74/p, 208/p, 209/p, 212/p, 213/p, 215/p, 216/p, 217/p, 227/p, 228/p, 229/p, 230/p, 233/p, 234/p, 260/p, 261/p, 262/p, 263/p, 264/p, 268/p, 269/p, 270/p, 34/p, 207/p, 218/p, 267/p
Aluva West	59	90/p, 93/p, 94/p, 95/p, 96/p, 97/p, 98/p, 99/p, 100/p, 101/p, 122/p
	60	105/p, 106/p, 134/p
Thrikkakara North	6	56/p, 57/p, 134/p

The major part of the proposed new alignment passes through fallow agricultural land. Land use pattern of the proposed road shows a mix up with agricultural, commercial and residential uses. Out of the 192 land properties identified by the SIA unit 105 lands belong to “Wet land”, the land of 83 belong to “Dry land” and the remaining 4 land belong to “Nilam nikarthu” category.

1.4. Alternatives considered

According to the Requiring Body consideration of alternative is not relevant since the project is designed in such a way to cause minimum impacts to the families. The alignment mainly passes through plain land and wet land hence the impact on residences are less. Furthermore the Form No.2 submitted by the Requiring Body reveals that no other suitable site is available for the project.

1.5. Social Impacts

The proposed project is the land acquisition for section A of the 2nd phase of Seaport-Airport road construction ie from Kalamassery HMT Road Point to Mahilalayam Junction. The project of Seaport-Airport Road Construction is proposed for enhancing the infrastructure facilities of the region by developing a better connectivity between the Cochin International Airport and Cochin Seaport. Eventhough the land acquisition for section A of the 2nd phase of the Seaport-Airport road Construction is planned in such a way to minimize negative impacts to the people, it is understood that the land acquisition may cause some impacts like Loss of land, loss of properties attached to the land, Displacement of Families, Loss of livelihood, Inadequate land for reconstruction, affecting the facilities of an school etc. The impacts of the project in general are mentioning below:

a. Loss of Land

Through the survey conducted in the affected land Social Impact Assessment Unit could identify the land owners of 192 affected properties. Out of the total 192 affected properties 117 were acquired from their ancestors and the remaining 75 were purchased by the owners in different periods.

b. Impact on Residences

The residential structures in 35 land properties may be fully/partially destroyed due to the project. Out of these houses 22 are used by the owners for staying and the remaining are given for rent or locked. It is understood that 2 of the houses are locked because its owners are presently abroad and in other state for employment purpose. There are 2 villas under construction in the land property of 1 owner. Some families have shared their distress to the SIA unit on including the houses in acquisition which were constructed with the earnings from the service in abroad and in other state and also by availing bank loan It is understood that the families of 14 impacted houses will

be displaced from the project area since there may not balance land or the remaining land may be insufficient to reconstruct the houses with sufficient facilities. The details of the affected houses are given in Table 1.5.1.

Table 1.5.1. The Project Affected Houses

Sl.No.	Name and Address	Impact	Present status
1	K.M. Muhammed Kunj Kallunkal House Thuruthy Land Edayapuram	Fully	The family is staying
2	Zainaba W/o.Hassanpillai Pazhangadi House Thottumukham Mahilalayam	Fully	The house is locked since the family is presently staying in Gulf
3	Sajeera C.A. & Sajeera Mahin Mavela House Near Amalabhavan Ashalane Aluva	Fully	The family is staying and 1 shop attached
4	P.M.Varghese Pappaly House Ashoka	Partial	Locked since last 3 months
5	Majun Varghese, Nelsan.P.V. &Rajan P.V. Pappaly House Ashokapuram	Partial	Given on rent
6	Mukundan K.P. Kaipalathil House Edayappuram Aluva	Partial	The family is staying
7	Abdul Hameed Vilappil House Thottumukham Aluva	Fully	The family is staying
8	Naseema Muhammedkutty Thattarakudy House Zee Mahal	Fully	The family is staying

	Thottumugham		
9	Sunny Pappally(Late) Pappally House Pappally Lane Ashokapuram,Aluva	Partial	The family is staying
10	Muhammed Hashim K.A Pazhayaparambil House Thottumugham	Fully	Locked since last few months
11	Alikunju C.M(Late) Sajeer C.A Cheratt House Thottmugham	Fully	Residence and shop
12	Muhammed Ashraf Vilappillil House Thottumugham	Fully	Locked since last few months
13	Basheer K.P Kanjirathinkal House Thottumugham	Fully	The family is staying . 2 shops given for rent.
14	P.P Pappachan(Late) Pappaly House Pappaly Lane Ashokapuram	Fully	The family is staying
15	Sainaba,Mahinkutty P.A&Usman P.A Puthanpura House Kunnathery Thaikkattukara	Partial	Given for rent
16	Shahina K.A C/O.Abbas T.M Thachavallath House Aluva East	Fully	2 houses and 1 shop given for rent
17	Mary Benny Puthoor Pulickal House Ashokapuram Aluva	Fully	Residence and church
18	Velayudhan Parathikattil House Ashokapuram Aluva	Partial	The family is staying
19	Pushpa Konath House	Partial	The family is staying

	Manakkapady Ashokapuram Aluva		
20	Thomas P.K Puliyanthuruthil Assissi Junction Aluva	Fully	The family is staying
21	Hamsa K.A&Shyla Kallunkal House Aluva	Partial	The family is staying
22	Sabnim Kannachackassery House Thottumugham Aluva	Partial	The family is staying
23	Denny Jacob S/O Thommy Pappaly House Andi Company Aluva	Fully	Given for rent
24	Joji Antony Panackal House Amitty Villa Assissi Junction	Partial	House locked since the family is staying in Mumbai
25	Latha Sajeew Swathy Bhavan Nethaji Road Aluva	Partial	The family is staying
26	Maheshan C.K Chathamparambil Choornikkara	Partial	Locked
27	Akbar Badusha&Jameela Saithu Muhammed Elanjikkal House Aluva	Fully	The family is staying
28	Varghese Payyappilly Payyappilly House Church Hill Road Ashokapuram	Fully	The family is staying
29	E.M Saleem Elanjikkayil House Ashokapuram	Fully	The family is staying

30	Hydros Ali Puthavayil Ashokapuram	Fully	The family is staying
31	K.M Antony Kallellil House Assissi,Aluva	Fully	Given for rent
32	Nasar E.M Elanjikkayil House Ashokapuram	Fully	House&workshop The family is staying
33	Khadeeja Muhammed Elanjikkayil House Ashokapuram	Fully	Given for rent
34	Sheela Francis Parackal House Assisi Junction Aluva	Partial	The family is staying
35	Sindhu.V. 128 Harmony Apartment Old Desam Road Thaikkattukara Aluva	Fully	2 villas partially constructed

c. Loss of Properties attached to the Land

The survey revealed that some structures constructed in the affected land properties have to be demolished for the project. Structures like compound wall, water tank, toilet, cattle shed etc. are included in it. The structures in 42 land properties will have to be destroyed. Details of the affected structures except the houses are given in Table 1.5.2.

Table 1.5.2. Project Affected Structures

Sl.No.	Structure	Number
1	Compound Wall	36
2	Gate	12
3	Water Tank	7

4	Toilet	14
5	Shops	7
6	Workshop	2
7	Well	13
8	Shed	4
9	Cattle shed	3
10	Septik tank	2
11	Septik tank's outlet	1
12	Pond	1
13	Godown	5

d. Displacement of Families

It is understood that 14 land owners whose residences are affected have to be displaced from the project area as there is no land remains or the remaining land may be insufficient to construct their houses with sufficient facilities.

e. Loss of Livelihood

There are shops and business enterprises in the project land which may be fully or partially affected. The people who runs the business in the affected structures, either may be the owner or tenant will lose their livelihood. The people who works in the affected business centres will also lose their livelihood. The owners who gave the affected structures for rent will lose the income as rent and some families shared that this rent is their major income. Some of the families shared the income from the agricultural yields of the affected land is their major income.

Out of this 192 land owners surveyed, 34 families shared that their major source of income will be affected due to the project. The shops run by 3 owners, workshops run by 2 owners and metal crusher unit of one owner will lose their income. And also the

income from agricultural land of 20 families, income from the cattle rearing of one family and income as rent of 7 families will lose it due to the project. In addition to that 9 tenants who have been done business in the affected land and 14 employees working in the affected shops/firms will lose their livelihood.

f. Loss of Agriculture

The proposed alignment of the road goes mainly through non residential land. No land is included in acquisition which is presently having major agriculture like paddy. However the land in which having lot of coconut trees and tropical agriculture like tapioca, plantain etc are included in acquisition. Among the families studied by the SIA unit 19 families will lose their coconut farm (10 and above trees). Banana cultivation of 16 families, tappiocca cultivation of 9 families, and vegetable garden of 6 families, Arecanut farm (15 and more trees) of 2 families and nutmeg farm of 1 family will be affected. During the survey 20 land owners shared that the income received from the agriculture of the affected land is their means of livelihood. Besides that approximately 1330 trees including fruit bearing and yielded trees may be destroyed for the project.

g. Inadequate Land for Reconstruction

After acquisition inadequacy of the remaining land for the reconstruction of affected structures and for agriculture is found to be an impact of the project. During the Social Impact Assessment study survey, 5 families whose residences are partially affected shared that the remaining land will not be sufficient to reconstruct their house with sufficient facilities. 4 families shared that the remaining land will not be sufficient to reconstruct the affected toilet and its related facilities. And 1 family opined that their remaining land will not be sufficient for agriculture.

h. Impact on the properties for public usage

The facilities like Auditorium, Playground etc. Of the Crescent Public School which functions in the area is included in acquisition. The school authorities are afraid of a possibility for the denial of sanction for the school due to the loss of these facilities.

Table 1.5.3. Impacts of the Project

Sl.No.	Impacts	Description
1	Loss of land	192 land owners
2	Impact on houses (Fully/partially)	Houses owned by 35 land owners (Details are in table 1.5.1)
3	Impact on shops	5 land owners (3 - run by the owners, 2 - given for rent)
4	Structures affected	Boundary wall : 36 Gate : 12 Shed/Cattleshed : 7 Toilet : 14 Well : 13 Water tank : 7 Parking area : 1 Septic Tank : 2 Toilet Outlet : 1 Godown : 5
5	Loss of Livelihood	57 individuals Owners : 34 Tenants : 9 Employees : 14

6	Agriculture affected	Coconut farm : 19 Plantain cultivation : 25 Tapioca cultivation : 9 Vegetable garden : 6 Nutmeg farm : 1 Arecanut Farm : 2
7	Loss of trees	Approximately 1330 trees
8	Impact on the properties for public usage	Auditorium, Play ground, sports store room, security room and toilet complex of Crescent public school

Note: The above data is arrived as per the information provided by the respondents during the Survey. Supporting documents need to be verified during Land acquisition.

1.6 Mitigation Measures

The following measures shall be taken to mitigate the above mentioned impact due to the land acquisition from Choornikkara, Keezhmadu, Aluva West villages of Aluva Taluk and Thrikkakara North village of Kanayannur Taluk for the Construction of Seaport-Airport Road Phase II, Section A.

- Compensation shall be provided to the affected families as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.
- R&R package shall be provided for the affected properties as per the Policies vide G.O.(Ms)No.485/2015/RD dated 23/09/2015 and G.O.(MS)No.448/2017/RD dated 29/12/2017 issued by Revenue(B) Department, Government of Kerala for the rehabilitation and resettlement package for acquisition of land in the state in lieu of RFCTLARR Act 2013.

- For avoiding residential problems of the families timely rehabilitation measures shall be taken for the affected houses.
- If the partially affected houses/shops need maintenance and the stay/functioning would be impossible for that period, the amount for a rented house/amount for livelihood will be compensated for the said period.
- Rehabilitation measures should be taken before the evacuation of the shops/enterprises not to cause more impact on the livelihood of the families.
- Ensure that the functioning of the shops which are not included or partially included in the acquisition is not hindering during the project construction period. Otherwise, consider for compensation for the affected livelihood during the construction period
- The resettlement of the basic facilities like toilet, septic tank, well etc need to be ensured without causing inconvenience to the families.
- If land remains after acquisition will be legally insufficient to reconstruct the affected houses, shops etc either consider it for full acquisition or possible concession shall be given for the reconstruction in the remaining land based on the existing laws, if needed.
- Either the land acquisition should be done in such a way by avoiding distraction in the functioning of Crescent Public school or should do the resettlement procedures accordingly.

- Based on the legal documents consider the tenants and employees for R&R package who have been doing business in the affected structures /working in the affected enterprises for 3 and more years
- Speedy land acquisition procedures are recommended since the residents of the area have been facing mental stress as the Seaport-Airport construction had been planned in the area for many years back.
- For the protection of the environment perpetuate the trees in the affected area as far as possible and measures should be taken for replantation in lieu of the destroyed trees
- During the project construction period the unhindered entry to the nearby houses and shops, convenient mobility of the people and vehicle and scientific and timely disposal of the construction waste should be ensured
- When a field is separating from the major agricultural field due to acquisition it may become unsuitable for agriculture by losing water source and irrigation facilities and it may be changed to the state of dry land. This change of status happens not because of the land owner but due to the nature/ human interference. So if there is any possibility, consider the land to upgrade the category from wet land to dry land.
- While demolishing the affected houses and structure, if owners demand, the remains of the buildings shall be given to the owners by charging a certain percentage of the price decided by PWD, which will be useful to construct a new house sustaining an emotional bond. The reuse of these materials will be helpful to minimize the wastage issues and exploitation of natural resources.
- Sufficient ramp facilities should be provided for the houses, shops and lands if it become under when the bridge constructs in height from land area.
- Since there is confusion among the project affected people regarding the finalization of the project alignment, it should be cleared to them before the implementation of the project.

CHAPTER 2

DETAILED PROJECT DESCRIPTIONS

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

The establishment of Kochi International Airport in 1999, necessitated the development of good road infrastructure both for passengers and cargo movement as it's benefitted in vast part of Kerala covering districts of Ernakulam, Kottayam, Idukki, Pathanamthitta, Alappuzha, Palakkad and Thrissur districts. Airport - Seaport Road is planned from Irumpanam Junction in NH 66 to Nedumbassery Airport Road. On completion of the project it will give better connectivity between Cochin Airport and Cochin Seaport. It will also act as a bypass for National Highway from Nedumbassery to Kundannoor. The project is divided into 2 phases; phase I - Irumpanam to Kalamassery and phase II- Kalamssery to Nedumbassery. Phase -I of the project was completed in 2003 as two lane. Phase II stretch is again divided into three sections Section A : Kalamassery HMT Road Point to Mahilalayam Junction Section B : Mahilalayam to Chowara Section C : Chowara to airport Road. Out of this works of Section B- one Km road from Mahilalayam to Chowara including 2 bridges is completed in 2017. Work for a length of 2.7 km from HMT Road point to Naval Armament Depot (NAD) is progressing in the Section A and balance 6.6 Km 4 lane road from NAD to Mahilalayam is now proposed. Hence the present land acquisition is proposed for package 2 & 3 of section A of the Phase II ie from N.A.D. junction to Assissi junction and Assissi junction to Mahilalayam junction. The fund for the project is sanctioned by KIIFB vide order No. PWD-006-03-PA-01 dated 29.06.2018. The Government accorded Administrative Sanction for the project vide G.O.(Rt)No.1656/2016/PWD dated 02.12.2016.

Roads and Bridges Development Corporation of Kerala Ltd (RBDCK), the Project Management Organisation, is an autonomous body under the Government of Kerala which manages construction of roads and bridges in the state of Kerala. RBDCK manages the project with a 3 member technical team which involves in taking the important decisions for the project. The external project management consultant appointed by RBDCK Ltd. will be responsible for quality control, safety at site and also involves in monitoring the day to day activities at site. The contractor will be appointed through competitive bidding and has to execute the work as per the conditions mentioned in the contract agreement. The work schedule for the project is prepared by the contractor which will be reviewed by the Project management organisation (RBDCK Ltd.) and external consultancy on a regular basis to ensure timely completion of the project.

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

The development of a good infrastructure is an essential pre-requisite for the growth and development of the region. Kochi is one of the fast growing city in the State of Kerala and the establishment of the International Airport pave way to the need for a good road infrastructure. Hence the Airport-Seaport project is proposed and it has accorded sanction vide G.O.(Rt)No.1656/2016/PWD dated 02.12.2016. The Phase I of the project has been completed and package 1 of the Section A of Phase II ie from HMT Road point to Naval Armament Depot (NAD) is progressing. The present land acquisition is for the alignment from N.A.D. junction to Mahilalayam junction ie the package 2 & 3 of section A of Phase II.

On completion of Phase-II it will forms an extension of Airport – Seaport road Phase I to the Cochin International Airport and NH 544. The newly proposed alignment of Phase II will form a major connectivity link and easy access to Smart city, Eloor and the Airport

which are situated in the suburbs of the city and to Vyttila Mobility Hub and it will also cater to the smooth flow of increasing traffic projected for the years to come.

The project comes under the public purposes stated in Section 2(1)b of RFCTLARR Act 2013. Further the Notification G.O.(P)No.30/2020/RD dated 20/03/2020 issued by Revenue (B) Department, Government of Kerala which was published in Kerala Gazette (Extra ordinary) No.1047 dated 7th April 2020 stated the said project as a public purpose.

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

The Proposed alignment of four lane connectivity starts from NAD road and ends at Mahilalayam junction in Aluva Perumbavoor road. The length of this four lane connectivity road will be 6.60 km.

The location of the project belongs to Choornikkara, Keezhmadu, Aluva West villages of Aluva Taluk and Thrikkakara North village of Kanayannur Taluk. The project area is heavily built up with commercial centres, public buildings, private institutions, religious structures and residential plots. The proposed road is passes mostly through vacant land and it will crosses the major irrigation canal from Periyar valley project at Ch.17+350.

Detailed estimates for quantities (considering designs and source of materials) and the project cost (civil packages wise), have been taken based on MoRTH's Standard Data Book, latest Kerala PWD schedule of rates and PWD Project Information and Cost Estimation (PRICE) software. The estimated total cost of the project as per the Detailed Project Report is Rs.455.84 Crores including Land acquisition charges Rs.317.75 crores and Rehabilitation and Resettlement charges Rs.50 lakhs.

2.4 Examination of alternatives

The proposed alignment is a continuation of the phase I of Airport-Seaport Road Construction project, which was already completed. In the Detailed Project Report the Requiring Body stated that the present alignment of the proposed road was finalized after several meetings and deliberations to solve the dispute and it is designed in such a way to cause minimum impacts to the families. The alignment mainly passes through plain land and wet land and also the impact of residences are less. Also the Form No.2 submitted by the Requiring Body reveals that no other suitable site is available for the project.

2.5 Phases of the project construction

Airport-Seaport Road Construction project is divided into 2 phases. Phase I - Irumpanam to Kalamassery and Phase II- Kalamssery to Nedumbassery. Phase-II, the stretch from Kalamassery HMT Road point to Nedumbassery Airport Road is again divided into three sections Section A : Kalamassery HMT Road Point to Mahilalayam Junction Section B : Mahilalayam Junction to Chowara Section C : Chowara to airport Road.

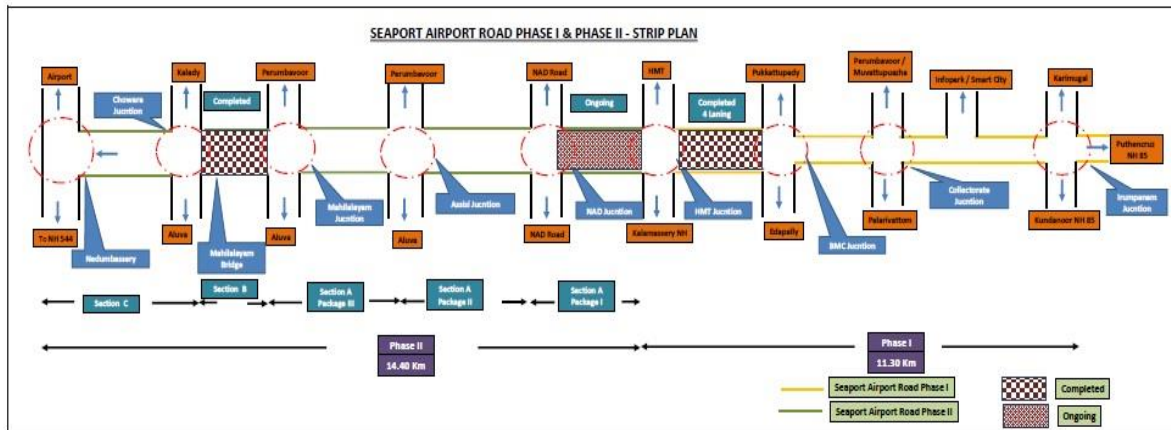
2.6 Core design features and size and type of facilities

The proposed alignment of four lane connectivity from NAD junction to Mahilalayam is connecting the state highway 16 at Assisi junction and ends at the Aluva Perumbavoor road at Mahilalayam junction. The length of four lane connectivity road is 6.60 km. The Detailed Project Report reveals that Design Standards given in IRC codes, guidelines and special publications and MORTH circulars as applicable to National Highways are followed for this project. Flexible pavement of 4 lane configuration has been proposed for the Airport - Seaport Road Phase II. Based on the traffic volume and the Subgrade strength, the thickness of flexible pavement has been obtained from IRC: 37-2012, Cl.10.1, Plate 7 . Each carriage way will be provided with 7.25 m and having 1.50 meter paved shoulder and 2.00 meter unpaved shoulder on both sides. The proposed median is of

SIA Study - Land Acquisition for the Construction of Seaport-Airport Road Phase II, Section A

width 3.0 meter. Since the alignment of the road is mainly through the wet lands, 1.5 meter RR drain will be provided. 12 culverts are also included in the design. Besides all allied facilities and road safety measures will be provided

Figure 2.6.1 : Strip Plan of the Project



2.7 Need for ancillary infrastructural facilities

The cost for the shifting of utilities are included in the estimated project cost. The arrangement for uninterrupted people's movement and transportation shall be undertaken during the project construction period. Also the construction activities has to plan in such a way to not hindering the access to the houses and shops in the project area.

2.8 Work force requirements (temporary and permanent)

The contractor will be appointed through competitive bidding and has to execute the work as per the conditions mentioned in the contract agreement. The work schedule for the project will be prepared by the contractor which will be reviewed by the Project management organisation (RBDCK Ltd.) and external consultancy on a regular basis to ensure timely completion of the project. The workforce required for the completion of the project will be deployed by the Contractor.

2.9 Details of social impact assessment/ environment impact assessment if already conducted and any technical feasibility reports

The Detailed Project Report reveals that technical studies like Topographic study, Geo technical investigation and sub soil exploration were done in the project area. A Traffic survey also was conducted. Social Impact Assessment Study for the land acquisition of the project is undertaking now.

2.10 Applicable legislations and policies

The applicable laws on land acquisition, with regards to compensation, rehabilitation and resettlement for the proposed land land acquisition from Choornikkara, Keezhmadu, Aluva West villages of Aluva Taluk and Thrikkakara North village of Kanayannur Taluk for the Construction of Seaport-Airport Road Phase II, Section A. are the following:

- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
- Kerala The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015
- Government of Kerala- Revenue (B) Department -State Policy for Compensation and Transparency in Land Acquisition vide G.O (Ms) NO.485/2015/RD dated 23/09/2015.
- Government of Kerala, Revenue (B) Department -State Policy for Rehabilitation and Resettlement Package for Land Acquisition in the State in lieu of RFCTLAR&R Act 2013 vide GO(MS)No.448/2017/RD dated 29/12/2017.
- Right to Information Act, 2005

CHAPTER 3

TEAM COMPOSITION APPROACH, METHODOLOGY AND SCHEDULE OF THE SOCIAL IMPACT ASSESSMENT

Notification of Revenue (B) Department, Government of Kerala G.O.(P)No.30/2020/RD dated 20/03/2020 published in Kerala Gazette (Extra ordinary) No.1047 dated 7th April 2020, stated that approximately 30.3590 hectares of land comprised in Choornikkara, Keezhmadu, Aluva West and Thrikkakara North Villages of Aluva and Kanayannur Taluk in Ernakulam district for the construction of Seaport-Airport Road Phase II, Section A Package 2&3. The said Notification also accorded sanction to Social Impact Assessment Unit - Rajagiri outREACH, Rajagiri College of Social Sciences, Kalamassery- to conduct the Social Impact Assessment Study of the project as insisted in Section 4 of RFCTLARR Act 2013. Further, a team was constituted by the SIA unit with experts who have engaged in similar projects and deployed them into the project with a set of specific roles and responsibilities.

3.1 List of all team members with qualification

Social Impact Assessment study of the land acquisition for the construction of Seaport-Airport Road Phase II, Section A Package 2&3 was conducted by 13 members who are experienced in conducting such studies. The study team is headed by the Director of Rajagiri outREACH, who is also the Chairperson of the SIA unit. Details of the study team is given in Table 3.1.1.

Table 3.1.1. Study Team

SIA Study - Land Acquisition for the Construction of Seaport-Airport Road Phase II, Section A
Package 2&3

Sl.No	Name	Qualification & Position	Experience
1	Dr.Binoy Joseph	Ph.D.,M.A(HRM),LLB Chairperson	26 years experience in teaching and research
2	Dr.Fr.Saju.M.D.	M.Phil,Ph.D Consultant	13 years experience in teaching and research
3	Fr.Shinto Joseph	M.S.W Consultant	5 years experience in teaching and research
4	Meena Kuruvilla	MSW Consultant	33 years experience in development sector
5	Maria Tency V.S.	M.A.,D.S.S. Research Associate	29 years experience in developmental sector
6	Biju.C.P.	B.A. Development Officer	29 years experience in developmental sector
7	George.V.A	MSW Research Associate	27 years experience in developmental sector
8	Linda Chacko	M.A.,D.S.S. Research Associate	16 years experience in developmental sector
9	Gigin P.S	MSW Research Associate	2 years experience in developmental sector
10	Albin Noble	MSW Research Associate	2 years experience in developmental sector
11	Elizabeth Penelop Lobo	MBA Research Associate	33 years experience
12	Philomina.K.A	Data Entry Operator	27 years experience
13	Indira.V.V	Data Entry Operator	29 years experience

3.2. Description and rationale for the methodology and tools used to collect information for the social impact assessment

Estimation of the number of project affected families and individuals, estimation of the project affected properties, finding out the social impacts of the project and prepare Social Impact Mitigation Plan are the objectives of Social Impact Assessment study. The primary and secondary sectors have to be studied in detail to collect the data for the preparation of Social Impact Assessment Study. A questionnaire was prepared to collect the details from the project affected families based on the investigation and primary visit of the study team in the project area. The questions related to the socio-economic status of the families, demographic details, details of the affected properties, usage of the affected land, opinions of the families about the land acquisition and the project were included in the questionnaire. Later, the primary data was collected by conducting socio-economic survey in the affected families by using the prepared questionnaire. Public Hearings were conducted in the area by disseminating its details through various means. Through telephonic and direct interviews details were collected from those who were not included in the first survey but participated in public hearings. Telephonic survey was conducted with the land owners who are not staying in the project area. Besides telephonic key informant interviews were conducted to know about the expected impacts of the project in the region.

The secondary details for the study was collected from the Requiring Body and office of the Land Acquisition Officer.

Based on the scientific analysis of the data collected through the study a Draft Report of Social Impact Assessment Study was prepared which includes the Social Impact Management Plan. The said report was presented in the public hearings held in Crescent public school Aluva on 5th November, 2020 and given opportunity to the affected people to suggest additions and deletions to the final report. Besides it was a venue for the

affected people to raise doubts and anxieties about the project and land acquisition for which the Special Tahsildar appointed for the project and officials from the Requiring Body were answered.

In short, the steps taken for the study are as follows:

- Study of relevant documents received from Roads and Bridges Development Corporation Kerala Limited and Special Tahsildar (L.A) No.III, Nedumbassery.
- Visit to the project area
- Socio-economic survey and enumeration of the affected properties
- Analysis of the data received through the socio-economic survey
- Preparation of Draft Report
- Public hearing
- Second phase survey and analysis of the received data
- Seeking answers from the Land Acquisition Officer and the Requiring Body for the questions raised by the affected people during public hearing.
- Finalization of SIA Report

3.3 Sampling Methodology Used:

The impact of each family is different and as the Social Impact Assessment Study requires the data of the entire affected families and individuals. Therefore instead of sampling methods the study of all universe is suitable for Social Impact Assessment Study. During the study period SIA unit could identify the land owners of 192 affected land properties. A socio-economic survey was conducted with these land owners by using a structured questionnaire.

3.4 Overview of information/ data sources used

A questionnaire was prepared, tested and finalized to collect data through a socio-economic survey. The questions related to the details of demographic, economic, livelihood, affected properties and the expected impacts were included in the questionnaire.

Both the qualitative and quantitative primary details and also the secondary details were scientifically collected and analysed by the study team. The primary data was collected from the affected families by using the questionnaire. The secondary details for the study were collected from the Requiring Body and office of the Land Acquisition Officer.

The response and data points were analyzed and findings are included in the report along with recommendations

3.5 Schedule of consultations with key stakeholders and brief description of public hearings conducted

Details of the interviews and visits conducted for the data collection are explained in Table 3.5.1

Table 3.5.1. Activities and Time Schedule

<i>Activities</i>	<i>Date</i>
Initial visit to project area	05/06/2020
Joint project area visit by the LAO, Requiring Body and SIA unit	18/06/2020
Socio-economic survey in the Project area	August , September & October 2020
Notice distribution for Public Hearing	31/10/2020
Public Hearing	5/11/2020

Public Hearing

As part of the land acquisition from NAD Junction to Assisi junction and Assisi junction to Mahilalayam junction for the Seaport-Airport Road construction project phase II, Section A, package 2 & 3, two public hearings were held in Crescent Public School, Aluva

on 5th November, 2020. The officials from land acquisition office and office of the Requiring Body were present in it. Sri. Anwar Sadath, MLA of Aluva Constituent Assembly inaugurated the hearing and Sri.K.A Haris, President, Choornikkara Grama Panchayath was presided over the meeting. Ms.Meena Kuruvilla, Chairperson of SIA Unit explained above the objectives of the public hearing. Ms.Maria Tency, SIA study Team member presented the Draft report of Social Impact Assessment study. Further the affected people raised doubts for which Sri.Vinod.G.Mullassery, Special Tahsildar and RBDCK Officials Sri.Abdul Salam and Sri.P.P.Rajan given answers. SIA study Team members Sri.Biju.C.P, and Sri.George.V.A were delivered Welcome speech and Vote of Thanks respectively.

The doubts raised by the affected people during the public hearing and also the questions given in writing to the SIA unit was given in writing to the Land Acquisition Officer and Requiring Body for which they have given written reply. Those questions and answers are given in Table 3.5.2

Table 3.5.2 Questions raised during the Public Hearing & Answers given by the concerned officials

Venue : Crescent Public School, Aluva

Date : 05.11.2020

Sl. No.	Name of the person, Survey No.	Comment/Concern	Reply from the Official
1.	P.K. Anil Kumar 215/3-2 215/4-2	In 1998, I had bought 10 cents of land and filled it with 140 loads of soil. I was preparing to build a house. It was at that time the Seaport-Airport road was measured and nailed down. Therefore I would like to have a reasonable compensation.	Reasonable compensation will be provided as per RFCTLARR Act (L.A.Officer)

2	Smitha Balakrishnan 22/3-4 R 22	Half portion of the land in this survey number will be taken over for the road. Since the remaining land is not sufficient to build a house or shop and also the road to the property will also be lost, requested full acquisition of the land. Reasonable compensation is required.	On receipt of application legal procedures will be taken in consultation with the Requiring Body (L.A.Officer)
3	Neseema Muhammadkutty 69/4	<p>The total land I have is 4 cents. I had brought it in 1978. Me and my wife are elderly and have so much grief in losing our home. We have other elderly health issues as well. My son is mentally challenged and I had built the 2500 square feet house as phase to phase from the balance amount saved after our treatments and education.</p> <p>The ground floor of the house has been asked by many for rent of Rs.30, 000. But as the road was peg marked, I could not give it for rent. I live on my minimal income. I request to complete the acquisition process before March 2020 and rehabilitation and fair compensation shall be provided. The land should be acquired in a decent manner.</p>	<p>Fine decision will be taken as per RFCTLARR Act</p> <p>(L.A.Officer)</p>
4	Abdul Gafoor 32/9, 555/11-2, 555/12,	I seek the assistance of the concerned department to change my land type in the data bank and to waive the legal procedures for	Concerned Revenue Divisional Officer is the authority to do the procedures

	555/13-2	future construction work on the site.	The concession for future construction activity is not under the jurisdiction of our office (L.A.Officer)
5	Majitha P.M 557/7-22 R	My father who died in 2016 owned the 6.1/2 cents land and we, four brothers are claimants in it. The basement was constructed on this land to build a house and a shop. Fair compensation should be provided. Seeking support to change the land type into dry land.	Reasonable compensation will be provided as per RFCTLARR Act. Apply to the concerned Revenue Divisional Officer for changing the type of land. (L.A.Officer)
6	M.K. Abdul Kareem 454/12, 454/11, 454/6, 454/10-2, 453/7-2	As after acquisition the remaining land from the said survey numbers belongs to Churnikkara Block No. 34 will not be suitable for cultivation. it is requested to change the type of remaining land in data bank as dry land and should grant permission to undertake construction work.	Revenue Divisional Officer Fort Kochi is the authority to take decision on this. Give application to him (L.A.Officer) Apply to the concerned department to get sanction for construction (RBDCK)
7	Thanzeeruddhin P.A (For Alisha M & Safiya Ali)	As after acquisition the remaining land owned by me which belongs to Churnikkara Block No. 34 will not be suitable for cultivation it is requested to change the type of	Revenue Divisional Officer Fort Kochi is the authority to take decision on this. Give application to

		remaining land in data bank as dry land and should grant permission to undertake construction work.	him. (L.A.Officer)
8	Rani Thomas 4356/11 436-3 436/5-1 436/5-2-5 436/7-1-9 29/3	Whether we receive the sketch of the road being built? Will land or compensation be given in lieu of land to be acquired?	Give application in RBDCK Office. (RBDCK) Compensation (L.A.Officer)
9	Jose Mathew	The land purchased in 2008 was then filled with soil and prepared to build a house. But at present the house could not be built as the road was peg marked. Special consideration should be provided to this matter.	Possible consideration will be given within the limit of RFCTLARR Act (L.A.Officer)
10	Maria Abu	On the side of the road via Manakapadi- Kunnatheri Kattepadam, 6.1/2 cents of land have bought by my father (who passed away) to build house and shop. We four brothers are claimants on it. The land type is wet land. Requires reasonable compensation for the land. The floor was laid to build a house and a shop on this land. Fair compensation should be provided. Is it required that all claimants to be present or should an authorization letter be needed to	Compensation will be provided as per RFCTLARR Act (L.A.Officer) The Mukthyar or Power of Attorney who is legally entrusted will be enough. (L.A.Officer)

		receive compensation?	
11	K.S. Kochupillai 209/7, 209/19, 209/18, 209/4, 209/5, 209/17, 209/6	The land to be acquired for Seaport-Airport road belongs to me and my brothers. A metal crusher unit was operated at this mentioned place. The metal crusher unit was in operation at the time of the road survey. The buildings in this area were inhabited by metal crush workers. Therefore he will lose the business which is the means of livelihood and also would not be able to find another work. Hence requesting to give fair compensation should be given for the building and the metal crusher unit and land being acquired.	Compensation will be provided as per RFCTLARR Act (L.A.Officer)
12	Thomas.T. Lukose 443/7.2, 446/01, 443/15, 446/07, 443/05, 446/10, 442/4, 443/12, 443/10, 440/0.1, 442/10, 446/9.2, 442/11, 446/2, 446/3, 442/3, 443/3, 446/9, 443/6, 443/4, 446/8, 446/9-2-2, 446/8-2, 443/2, 442/2, 446/7, 446/1-2, 448/7-2, 443/13, 443/9, 443/8, 446/7, 443/14, 443/15, 443/5, 443/1	The extension of Seaport Airport Road passes approximately through 10 acres of owned land. I am willing to give the land required for the road for a fair value provided legally as per the government policy. As the road crosses through the property, water cannot flow from the excess land and becomes unsuitable for cultivation which will cause a great loss for me. Hence it is requested that the remaining land be converted into dryland in the data bank and permission be granted to do construction work for residential and business purpose.	Reasonable compensation will be provided as per RFCTLARR Act . On receipt of the application. It can be suggested to the Requiring Body to do the construction activities without distracting the natural water source. It will be informed to the District Collector and Revenue Divisional Officer. (L.A.Officer) Cana and culverts

			<p>will be constructed along with the road to not hinder the frequent flow from the water source. Hence the statement that the remaining agricultural land cannot use for agriculture is baseless. Land Acquisition will not hinder the water source</p> <p>(RBDCK)</p>
13	<p>M.M. Vahidha Shihabudheen</p> <p>56 Block No.33</p>	<p>The land under this survey number was set aside for my children to build houses. But now the half of the land will be acquired for road requested to acquire the land fully and provide price for the properties attached to the land.</p>	<p>Compensation will be provided as per RFCTLARR Act. The application for injurious affection will be considered verifying its worthiness</p> <p>(L.A.Officer)</p>
14	<p>Vidhyadharan P.S</p> <p>317/5</p>	<p>Good returns has been received from the 36 year old yielded coconuts in the 1 acre 40 cents land in this survey number. When this land is acquired for development, a fair compensation should be sought for the coconuts in the land.</p>	<p>Compensation will be provided as per RFCTLARR Act. The price decided by the Agricultural Officer and Social-Forestry department for coconut trees etc. and other legal benefits will be given.</p> <p>(RBDCK)</p>

15	Premdas K.U 22/1-4	The Seaport-Airport road passes through the side of my house. Moreover the road passes through the land attached to my house. Therefore reasonable compensation should be given for this.	Compensation will be provided as per RFCTLARR Act. (L.A.Officer)
16	Zeenath Ashraf No survey number	According to the outline the alignment is found passing near my house which is behind the Keezhmaadu Co-operative bank in the 18 th ward of Keezhmaadu Panchayath. If there is any difficulty for the house due to the construction a fair compensation should be provided.	No need to fear about laying stone near to house. If land or house will loss compensation will be provided as per RFCTLARR Act 2013. Since the road passes near to the house it will be benefitted to increase the land value in future. (RBDCK)
17	Salim Haidrose, Naser, Saidu Muhammad	Our land type is dryland. Requested to upgrade the remaining land type into dryland.	Apply to the concerned Revenue Divisional Officer (L.A.Officer)
18	Dr. M.C. DileepKumar, Deepak.N 494/10 (23/16) 494/9 (08/04)	We are having equal ownership in the more than 77 cents of land in the said survey number. It is understand that approximately half of the land will be acquired for road. Permission should be granted to use the remaining land for house/commercial use. Also requested to distribute the compensation equally.	Apply to the concerned Revenue Divisional Officer. Decision will be taken according to the ownership (L.A.Officer)

19	Eliyamma Joseph (Late Sunny Pappaly) 59/98	Requesting to complete the acquisition as soon as possible. She, who is a widow and 2 daughters who are in marriageable age are residing in a 70 years old house. As the land is taken for construction of the road the house has not been renovated. And could not do any transaction of the land to meet the needs of education and marriage of her daughters. Therefore will you grant permission to build a house in the excess land without any restrictions?	Procedures will complete as early as possible. (L.A.Officer) The maintenance of house and transaction of land is not permitted only after 11(1) notification. (RBDCK)
20	Sajeer 69/7 Muhammad Ashraf 69/5-2 Fr.J. Paulose 68/7 Abdul Hameed 69/5 Subair 69/2 Naseema muhammadkutty 69/4 K.R..Basheer 68/5 Sainaba 68/6 Muhammad hasim 69/4 Anoop 69/8	There are 10 of us living in Aluva Mahilalayam Junction. Over the past 20 years , the area including different properties and houses have been marked for the seaport airport road and also issued several notices. There has been no progress to date from the changing governments. A group including those who moved to rented accommodation, poor housing conditions and agriculturalists are losing their source of income and houses. I request to reach the decision as soon as possible. Currently the land is suited for Rs.25, 00,000 at a marketable price.	All possible mitigation procedures will be taken as per RFCTLARR Act. (L.A.Officer) Fund for the project was not sanctioned so it could not implement earlier. Now the fund is sanctioned with the help of KIIFB. So no need for anxiety. (RBDCK)
21	Abdul Jaleel C.M 32/1-3	The owner of the survey numbered land is Fibeesh s/o Kayal Madathil Moideenkutty .	Decision will be taken if a detailed application given to

	Block No. 33	<p>He is abroad regarding his work. The given address will not be available. Therefore the issues related to the land and the compensation should be given to his father-in-law's address. The address is given below:</p> <p>Abdul jaleel C.M Chungath House South Aduvasserry.P.O Chungam Junction Nr. Petrol Pump Ernakulam Phone no.: 9349532064/0484-2474048</p>	<p>our office. (L.A.Officer)</p>
22	Gracy Xavier	The fish shop and the land rented at the Cashew Company Bus stop will be lost. The fact that this place is also situated at the junction should be considered when calculating compensation.	<p>Compensation as per RFCTLARR Act will be provided. (L.A.Officer)</p>
23	<p>Rani Jomy</p> <p>270/1-3</p> <p>270/1-4</p>	The fish shop and the land rented at the Cashew Company Bus stop will be lost. The fact that this place is also situated at the junction should be considered while calculating compensation.	<p>Compensation as per RFCTLARR Act will be provided (L.A.Officer)</p>
24	<p>Thankappan(s/o Kunjayyan)</p> <p>317/3</p> <p>317/4</p>	The land in the survey number is in his possession from the late Kunjappan under the 30.04.1987 sale agreement. He also informed that he is currently in dispute with the heirs of the late Kunjappan at court.	<p>Compensation will be given in accordance with the award on dispute (L.A.Officer)</p>
25	<p>Geetha. K.R</p> <p>556/4-6</p>	There is a loss of 14 good quality coconuts and 2 mango trees. About 400 to 450 coconuts were	Reasonable compensation as per RFCTLARR Act will

		harvested every 45 days. The lifespan of a coconut is 100 years. Therefore fair compensation should be provided.	be provided (L.A.Officer)
26	Viswanadhan Secretary	Kerala headload Workers Union, 14 workers working under the Thrikkunnath Agencies in the Cashew company building will be affected. The Rehabilitation Package should be included to help in their living.	Applications submitted to our office will be send to the District Collector for consideration. (L.A.Officer)
27	Abdul Gafoor	Most of the area is steep down. Is the road designed like a bridge or will the road be raised by sand? How long will it take? And the compensation should be provided in time. When will the plan occur?	Road will be raised by sand. We will try to complete the project on time. Compensation will be given as per RFCTLARR Act. (RBDCK)
28	Kunjumuhammad Kaarotheukuzhi hospital 114, 115, 116	The house was built beyond the boundary of the old proposed area. The house is inside when it is peg marked currently. The house should be avoided if possible.	Government finalized the alignment in consultation with KIIFB after considering all features like minimum land acquisition, social impacts and costs. So change in alignment is not possible. The land will be acquired as per the stone laid earlier. Hence it is difficult to clear this petition. (RBDCK)

29	Saadiq, Meckadu House, Asokapuram	Almost 40 cents will go to the place for construction and some part is left out. Will it be taken over? Will the owner get it? How is the pricing set?	It will be decided on receipt of application for injurious affection. The price will be decided as per RFCTLARR Act (L.A.Officer) The extend of remaining land will clearly get only after the land surveyed from L.A.Office (RBDCK)
30	Shanavas	An application has been filed to rectify the situation where the house and land are lying. Kindly take into consideration and do the needful.	Application should be given to the concerned Revenue Divisional Officer. (L.A.Office)
31	V.V. Anoop	An application has been filed to rectify the situation where the house and land are lying. Kindly take into consideration and do the needful.	
32	Kasim P.B	There will be excess land that would be of no use after the 12 cents taken.	It will be decided based on receiving application for injurious affection. (L.A.office)
33	Sajeev K.V, Block No.60, Survey No. 105	We have been living in a house on Aluva- Netaji road for 9 years. The 10 cent land and the house is the only wealth earned by working in Gulf. Changing the alignment of the road to a barren	Compensation as per RFCTLARR Act 2013 and R&R package as per G.O.(MS)No.448/2017 RD dated 29.12.2017

		<p>field on the east side, which has not been cultivated for years, can help prevent our home from losing. It is also possible to make unnecessary bend in the road at this point. My wife is a cancer patient and under this situation would be grateful from exempting our home.</p>	<p>will be sanctioned by the District Collector in accordance with the order of Land Revenue Commissioner.</p> <p>Government finalized the alignment in consultation with KIIFB after Considering all features like minimum land acquisition, social impacts and costs. So change in alignment is not possible. The land will be acquired as per the stone laid earlier. Hence it is difficult to clear this petition.</p> <p>(RBDCK)</p>
34	<p>Saly, Pappaly</p> <p>Block No.59, Re-Survey No. 96</p>	<p>I wanted to build my own house on the 17.5 cents of land I inherited. Over the past 21 years, the area including different properties and houses have been marked for the seaport airport road and also issued several notices. There has been no progress till date. For the past 10 years I have been living in a rented house with 2 daughters who are in marriageable age and an elderly mother. I am financially distressed by my husband's treatment and my children's education. I could not sell the land at this time.</p>	<p>All possible favors will be done according to the RFCTLARR Act.</p> <p>(L.A.office)</p> <p>The transaction of land will be blocked only after 11(1) notification</p> <p>(RBDCK)</p>

		Therefore, I request that the scheme should be implemented as soon as possible and that we should be given fair compensation considering the difficulties we have faced in the last few years.	
35	Joji Antony Block No.33,Survey No. 262/614/2	My family lives in Mumbai as part for our work. We used to stay here when we visit our homeland. But the house has been taken as part of acquisition. It causes mental distress. Kindly do the proceedings as soon as possible and provide fair compensation.	Speedy possible procedures will done as per RFCTLARR Act. (L.A. Officer) Compensation and R&R package as per RFCTLARR Act 2013 will be decided and provided by District Collector/LAO. The project is for the development of Ernakulam district which will a solution for the traffic block. The construction will be completed timely after the acquisition of land. (RBDCK)
36	Sheela Francis 59/99	Earlier, a corner of my house was a part of the acquisition which is situated in Assisi lane. I would like to know if the current plan would affect my house in Assisi Line.	It will be cleared after the land surveyed by L.A.Office (RBDCK)
37	Ibrahimkutty	The plot is in Aluva-Perumbavoor route. The building that is taken	Procedures will be as

		into consideration for the road is given out on lease. How will the compensation be calculated? How will the excess land be considered?	per RFCTLARR Act. (L.A.Officer) If the land remains will be unused application can be given to the District collector to acquire that land too. The application will be examined and action will be taken based on the act. (RBDCK)
38	Abdul Lateef, Churnikkara	I am doing a Hollow Bricks Unit. Unlike the pegs that were put in the place, new pegs have been put in recently. Which would be the actual measure and what would the width of the road be?	It will be cleared after the land surveyed by L.A. Office. The land to be acquired for road is 45 meter width (RBDCK)
39	Noufal	I own a property with a Godown. The proposed plan will destroy 10-15 feet wall. Will compensation be provided?	Compensation will be provided as per RFCTLARR Act 2013. (L.A.Officer)
40	Pratheesh Iype	The place is mortgaged to the bank. How will you consider the transaction with the bank when paying compensation?	The remaining amount after the settlement of Bank loan will be given to the owner (L.A.Officer)
41	Akbar	The land and the house is been taken. Our land is depicted as wet	Application should be given to the concerned

		land. Kindly do convert it into land in the data bank.	Revenue Divisional Officer.
42	Shanavas	The land and the house is been taken. Our land is depicted as ground. Kindly do convert it into land in the data bank.	(L.A.Officer)
43	Bipin	The land and the house is been taken. Our land is depicted as ground. Kindly do convert it into land in the data bank.	
44	Joju Philip & Sony Joy	Currently the stone is put in an apartment where 6 households live on Netaji road. The septic tank, the well and the parking area will be lost. There is an unused field nearby. If the alignment is slightly changed the apartment would not be affected.	Government finalized the alignment in consultation with KIIFB after Considering all features like minimum land acquisition, social impacts and costs. This alignment has been finalized in 2000.Hence if we change the alignment that will affect the project. So change of alignment is not possible. (RBDCK)
45	Jose Varghese	Is the road raised by using sand or concrete?	Using sand (RBDCK)
46	Aneeshkumar P.S.	Beside the Ashokapuram-Manakkapady-Thaikkavu road RBDCK laid stone 18 years back in the land owned by 7 families and in the field in opposite side.	Land and buildings within the alignment is acquiring. A clarity on acquisition will get only after the survey

		It is understand that those stones laid to extend the width of the Panchayath road related to Seaport-Airport road project. I would like to know whether these lands are included in the present acquisition.	from L.A. Office. They will inform it after survey. Extension of Panchayath road is not included in the project (RBDCK)
47	P.K.Sasi 557/10	As per the peg mark, after acquisition, the entrance to his house will lose. Sufficient access is needed.	The land acquisition will not hinder the entry to house (RBDCK)

Public Hearings Held on 5.11.2020 at Crescent school, Aluva



CHAPTER 4

LAND ASSESSMENT

4.1 Description with the help of the maps, information from land inventories and primary sources

The proposed project is the land acquisition for the construction of Section A package 2 & 3 of the 2nd phase of Seaport-Airport road construction ie from NAD junction to Mahilalayam Junction. The land proposed to be acquired belongs to Choornikkara, Keezhmadu, Aluva West villages of Aluva Taluk and Thrikkakara North village of Kanayannur Taluk. The project sites belong to Choornikkara, Keezhmadu and Edathala Panchayaths and Aluva Municipality. The area is heavily built up with commercial centres, public buildings, private institutions, religious structures and residential plots. Besides there are used or unused open lands which are suitable for agriculture. The proposed road is passes mostly through vacant land and it will crosses the major irrigation canal from Periyar valley project at Ch.17+350.

4.2 Entire area of impact under the influence of the project (not limited to land area for acquisition)

The project of Seaport-Airport Road Construction is proposed for enhancing the infrastructure facilities of the region by developing a better connectivity between the Cochin International Airport and Cochin Seaport. The extension of Airport Seaport road Phase II will pave way for better connectivity of the Cochin city to the outer City areas and is also expected to cater the smooth flow of increasing traffic projected for the years to come. The traffic from Infopark and Smart City can reach both Airport and Cochin City through this road. Once the Airport - Seaport Road is constructed, passengers can use this road to reach the Airport as they will get considerable savings in time. They can take diversion from NH 544 to Airport-Seaport road either at Kundannoor junction, Vyttila junction, Palarivattom or HMT junction to reach Airport.

This stretch will be a major connectivity link for traffic between the Vyttila Mobility Hub, which is in the expansion mode (IInd phase) to Cochin International Airport. The connectivity between Central Business District (CBD) areas of Kochi and residential areas of Tripunithura and south Kochi will be improved if this stretch is completed till Mahilalayam. The stretch can also be integrated with water transport operating in Chitrapuzha (IWT III - Ambalamugal branch) for a smoother connectivity to NH 49 and NH 47. The proposed road will also ease the movement of cargo vehicles from Vallarpadam terminal to Cochin Airport by taking diversion from Kalamassery and also can bypass the high traffic density stretch from Kalamassery to Athani for the vehicles towards north direction.

4.3 Total land requirement for the project

The proposed alignment is a four lane connectivity from NAD junction to Mahilalayam junction and its length will be 6.60 km. The Require body stated in the Requisition Form (Form No.2) that 30.3590 hector land to be acquired for the project.

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

The facilities like auditorium, the ground used for sports and physical activities etc of the Crescent Public School are included in the acquisition. The school authorities concerned that the recognition of the school will lose if these facilities are acquired.

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

As per the information received from the concerned office, no land is already purchased, alienated or leased for the project. The land proposed to be acquired will be used for the construction of four lane connectivity from NAD junction to Assisi junction and Assisi junction to Mahilalayam junction, ie the construction of Section A package 2 & 3 of the 2nd phase of Seaport-Airport road construction project.

4.6 Quality and location of land proposed to be acquired for the project

The land proposed to be acquired for the project from 42 survey numbers of block 34 of Choornikkara village, 45 survey numbers in block 33 of Keezhmadu village, 11 and 3 survey numbers respectively from block 59 and 60 of Aluva West village and 3 survey numbers of block 6 of Thrikkakara North village. The project sites belong to Choornikkara, Keezhmadu and Edathala Panchayaths and Aluva Municipality.

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

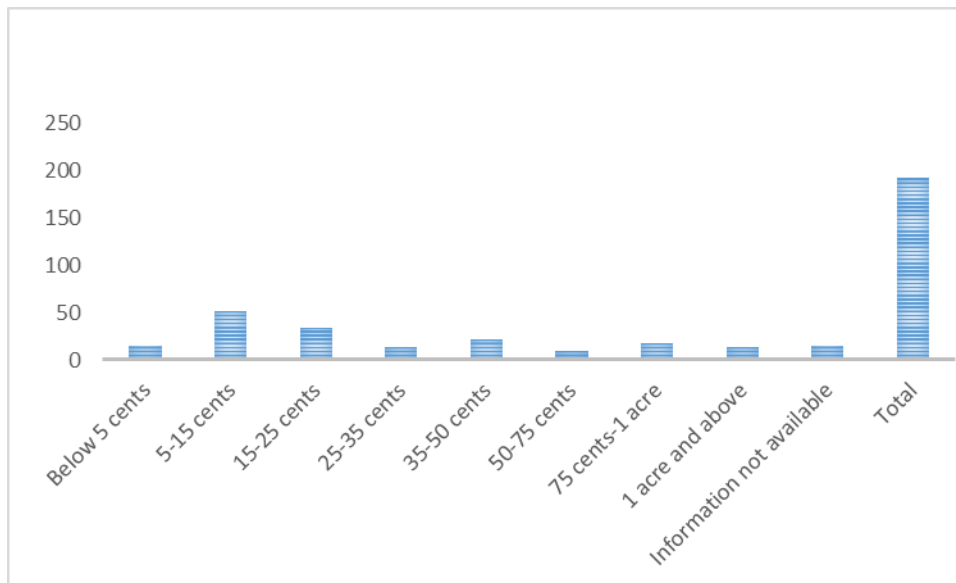
Out of the 192 land properties identified by the SIA unit 105 lands belong to “Wet land”, 83 land belong to “Dry land” and the remaining 4 land belong to “Nilam nikarthu” category. Land use pattern of the proposed road shows a mix up between agricultural, commercial and residential uses. Presently unused land is also there in the project area. Out of the 192 land properties 65 are presently unused fallow land. 69 are using for agriculture, 47 are using for residential purpose, 8 for commercial purpose and 1 is using for school needs.

No land is included in acquisition which is presently having major agriculture like paddy. However the land in which having lot of coconut trees and tropical agriculture like tapioca, plantain etc are included in acquisition. Among the families studied by the SIA unit 19 families are having coconut farm (10 and above trees), 25 families doing Banana cultivation, 9 families doing tapioca cultivation, 6 families having vegetable garden, 2 families having arecanut farm and 1 family is having nutmeg cultivation in the affected land.

4.8 Size of holdings, ownership patterns, land distributions and number of residential houses

The figure 4.8.1. shows the total land holdings of the owners of 192 land properties identified by the SIA study team

Figure 4.8.1. Size of Land Holding of the Families



The figure above shows that out of the owners of 192 affected properties 15 families possess below 5 cents of land , 52 families possess 5-15 cents, 34 families possess 15-25 cents, 13 families possess 25-35 cents and 22 families possess 35-50 cents of land. 10 families are having land between 50 and 75 cents and 10 families are having between 75 and 100 cents. 13 families shared that they possess above 1 acre of land and the said information was not received from 15 families.

Among the 192 affected land properties identified by the SIA unit, 25 are under joint ownership.

The residential structures of 35 families are included in acquisition which will be fully/ partially destroyed due to the project.

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

As per the data given by the informants except in 6 land properties no transactions have been done for the last 3 years. The existing land owners of these 6 land properties were legally received the property from their ancestors within the last 3 year period.

Land use pattern of the project area shows a mix up between agricultural, commercial and residential uses. Presently unused open land is also there in the project area. Among the 192 land properties 65 are fallow land with no specific usage presently, 69 are using for agricultural purpose, 47 are using for residential purpose, 8 are using for business purpose and 1 is using for school needs.

CHAPTER 5

ESTIMATION AND ENUMERATION (WHERE REQUIRED) OF AFFECTED FAMILIES AND ASSETS

5.1 Estimation of families

There will be possibility of direct and indirect impacts when a land acquired for a public purpose. The owners of the land to be acquired would be considered as the families facing direct impact and those who have been depending on the said land for their livelihood/residence/any basic facilities would be considered as the families face indirect impact. It is understood that the land acquisition for the construction of Section A package 2 & 3 of the 2nd phase of Seaport-Airport road project cause direct and indirect impact.

5.1.1 Families which are directly affected (own land that is proposed to be acquired)

Revenue (B) Department, Government of Kerala put out the details of the land ie survey numbers, block numbers, village and taluk of the land proposed to be acquired for the construction of Section A package 2 & 3 of Seaport-Airport road construction Project Phase II via Notification No. G.O.(P)No.30/2020/RD dated 20/03/2020 which was published in Kerala Gazette (Extraordinary) No.1047 dated 7th April 2020. The Notification reveals that the total extend of land is approximately 30.3590 hectares. The SIA unit could identify owners of the 192 affected land properties. The details of those land owners are given as **Annexure 8**

5.2 Family of scheduled tribes and other traditional forest dwellers who have lost any of their forest rights

Neither Scheduled Tribe families nor any traditional forest dwellers are being affected by the project.

5.3 Families which depend on common property resources which will be affected due to acquisition of land of their livelihood

None of the common property resources are being affected due to the project.

5.4 Families which have been assigned land by the State Government or the Central Government under any of its schemes and such land is under acquisition

No such families are residing in the project area.

5.5 Families which have been residing on any land in the urban areas for proceeding three years or more prior to the acquisition of the land

No such families are residing in the project area.

5.6 Families which have depended on the land being acquired as a primary source of livelihood for three years prior to the acquisition

The project area comprises of shops, workshops, cement godown, metal crusher unit and also agriculture in some areas. The land owners who are doing business in the affected structures, those who are given for rent and those who are doing agriculture and related activities revealed in the survey that the income from the project area is the major income of their family.

5.6.1 Families which are indirectly impacted by the project (not affected directly by the acquisition of own lands)

SIA unit could identify 9 tenants who have been doing business in the affected shops for 3 and more years and 14 employees working in Thrikkunnath Agencies, the affected cement Godown.

Table 5.6.1.1 Name and Address of the Tenants working in the area 3 and more years

Sl.No.	Name & Address
1	Nadirsha Pallikuzhy House Thottumugham P.O. Aluva
2	Jency Erelithara House Pappali Lane Assissi Auva
3	Sajid V.M Vellukuzhiyil House Edayapuram Aluva
4	Ibrahim Kalluvettiparambil House Edappuram Aluva
5	Saneera Puthenmaliyekkal House Thottumugham.P.O. Aluva
6	Moideenkunju Neduvath House Mahilalayam junction Thottumugham.P.O Aluva
7	Saji Varghese Chackachaalil House Chunangamveli Erumathala.P.O.
8	Joy Varghee Thrikkunnath Agencies Cement Godown
9	Chentharaman.R Puliparamb House Nenmara Palakkad

Table 5.6.1.2. Labours working in the area for 3 and more years

Sl.No.	Name
1	Viswanathan M.P.
2	Tomy M.P.
3	Benny M.P.
4	Louis P.V.
5	Dommini P.V.
6	Hentry P.V.
7	Mano P.V.
8	Karthikeyan P.K.
9	Ambujakshan P.K.
10	Paulson K.R.
11	Dinesh P.A.
12	Antony P.O.
13	Chandran V.A.(Boby)
14	Francis K.C. (James)

5.6.2 Inventory of productive assets and significant lands.

SIA unit understands that the land uses for agriculture, commercial and residential purposes are included in acquisition. Presently unused open land are also there in the project area. No land is included in acquisition which is presently having major agriculture like paddy. However the land in which having lot of coconut trees and tropical agriculture like tapioca, plantain etc are included in acquisition. Among the families studied by the SIA unit 19 families are having coconut farm (10 and above trees), 25 families doing Banana cultivation, 9 families doing tappiocca cultivation and 6 families are having vegetable garden, 2 families are having areca nut farm and 1 family has Nutmeg

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farm in the affected land. Besides the above, approximately 1330 trees in the project area may be cut down for the project. The name and approximate number of trees in the affected land is mentioning in the Table 5.6.2.1.

Table 5.6.2.1. The Trees may be affected in the area

Name of the Tree	Approximate Number
Jackfruit tree	93
Areca nut	207
Teak	62
Coconut	474
Mango tree	50
Mahagani	4
Nutmeg	169
Mangostin	5
Anjili	20
Other trees	246

CHAPTER 6

SOCIAL ECONOMIC AND CULTURAL PROFILE

(AFFECTED AREA AND RESETTLEMENT SITE)

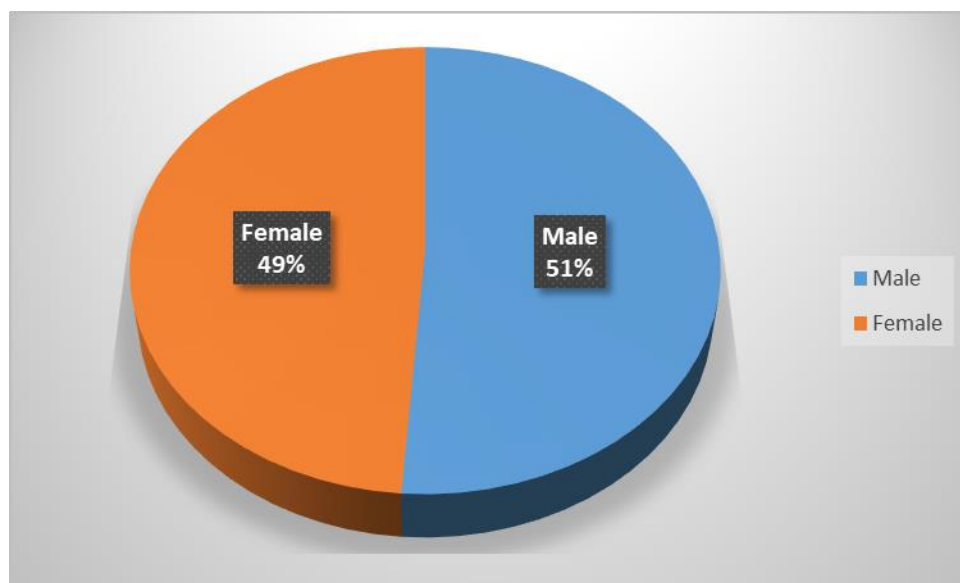
This chapter contains information about the socio-economic and cultural aspects of the affected families residing in the project area. It includes the demographic details, economic status, vulnerability among the affected families, local economic activities in the area, enumeration of the livelihood affected families and other related information.

Out of the 192 land properties identified by the Social Impact Assessment Unit through the survey conducted in the area it is understood that 47 land properties are used for residential purpose. could identify 117 project affected land owners belong to 112 families through the survey conducted in the affected area. The SIA unit visited the 49 families staying in the area and studied the socio-economic background of these families through a socio-economic survey by using a specific questionnaire. This chapter analyzes the details of the said families.

6.1 Demographic details of the population in the project area

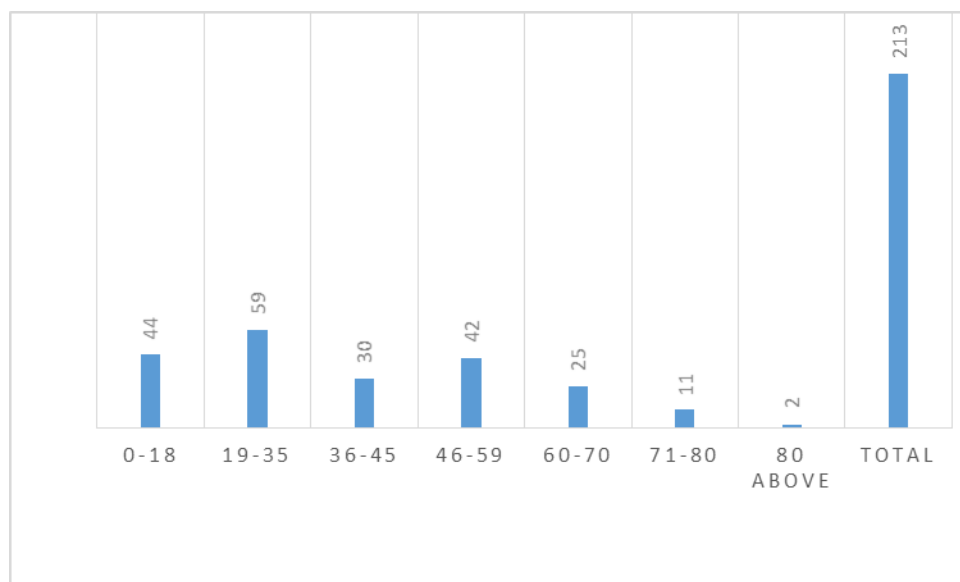
Demographic details of the 49 families among the project affected land owners of Seaport-Airport road Construction project Phase 2, Section A package 2 & 3, who reside in the project area are explained below.

Figure 6.1.1 : Demographic details of the project affected families



The figure 6.1.1. depicts that out of 213 total population of the affected families 109 (51%) are male members and 104 (49%) are females.

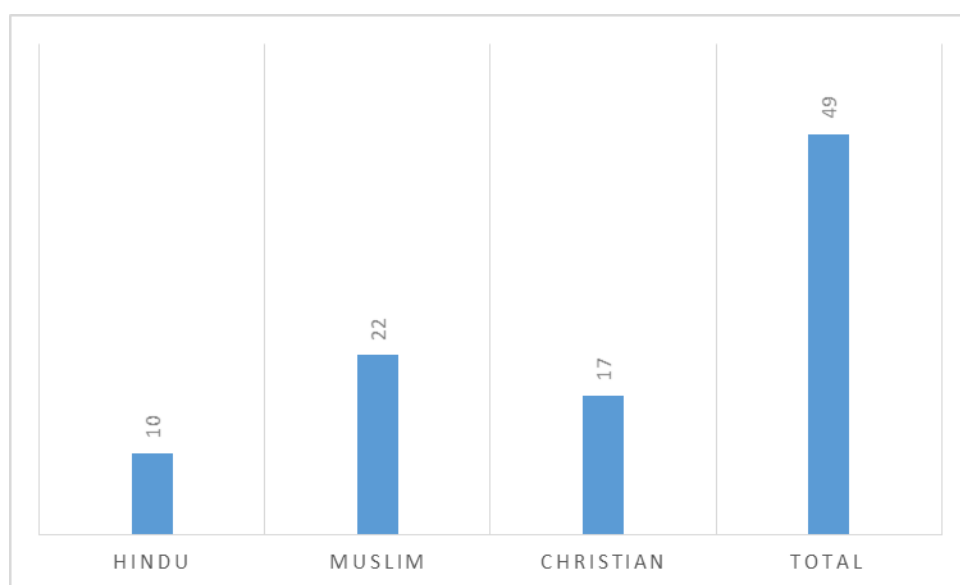
Figure 6.1.2.: Age of the Project Affected Family Members



Among the total 213 project affected family members 44 are in the age group of 0-18 and 59 are in the age group of 19-35. 30 family members are in the age group of 36-45 and 42 members are in the age group of 46-59. There are 38 elderly members in these families out of them 25 are in the age group of 60-70, 11 members are in the age group of 71-80 and the remaining 2 members's age is 80 and above.

Social Background of the Project Affected Families

Figure 6.1.3: Religion of the Project Affected Families



Majority of the project affected families ie 22 (45%) families belong to Muslim religion, 10 (20.4%) families belong to Hindu religion and the rest of the families ie 17(35%) belong to Christian religion.

Figure 6.1.4 : Social Group of the Project Affected Families

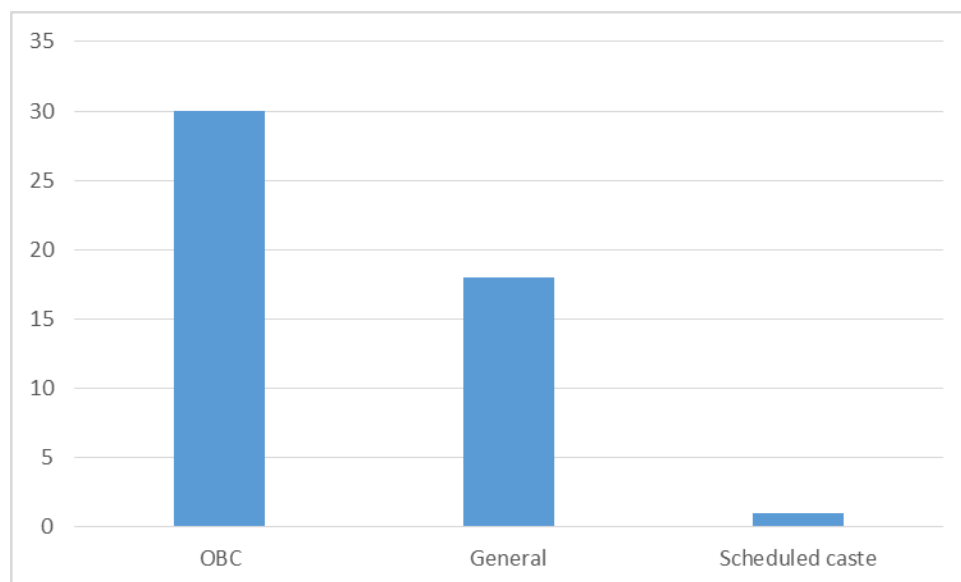


Figure 6.1.4 shows that majority of the affected families ie 30 are belong to Other Backward Community, 18 affected families belong to General category and the remaining 1 family belongs to Scheduled Caste Community.

6.2. Income and poverty levels

Based on the Public Distribution System it is understood that 2 families possessed pink colour ration card, 22 families possessed blue colour ration card, 22 families possessed white colour ration card and 1 family possessed yellow colour ration card. The related information was not received from 2 families.

Table 6.2.1: Monthly Income and Expenditure of the Families

<i>Amount (Rs.)</i>	<i>Monthly Income No. of families</i>	<i>Monthly Expenses No.of families</i>
1000-5000	3	3
5001-10000	4	11
10001-15000	13	13
15001-25000	10	7
25001-30000	11	4
30001-40000	6	1
40001-50000	3	1
50001-75000	2	0
75001-1 lakh	2	1
1 lakh above	1	0

The table 6.2.1. compare about the families' monthly income and expenses. 3 families revealed that they earns in between Rs.1000-5000. 4 families shared that their monthly income comes in between Rs.5001-10000 and that much amount spends by 11 families. 13 families earns and spends Rs.10001-15000 monthly. 10 families earn Rs.15001-25000 and 7 families spend that much amount. There are 11 and 4 families who earn and spend Rs.25001-30000 respectively. The number of families who earn and spend Rs.30001-40000 are 6 and 1 respectively. While 3 families earn Rs.40001-50000 1 family spends the same amount. There are 2 families each in the ranges who earns Rs.50001-75000 and Rs.75001-100000 and 1 project affected family in the area is having the monthly income above Rs.1 lakh.

6.3 Vulnerable groups

Out of total population of the project affected residents of the project area 44 members are below 18 years of age and 38 are elderly ie in the age of 60 and above. There are 10 widows and 1 widower in these families. Besides 1 handicapped lady who is a divorcee also included in project affected population. It is understand that 17 project affected family members have been suffering from ailments related to Cardiac, Kidney, cancer

etc in which a cancer patient is the owner of a project affected house. 1 of the project affected family belongs to Scheduled Caste community.

6.4 Land use and livelihood

Land use pattern of the project area shows a mix up between agricultural, commercial and residential uses. Presently unused open land is also there in the project area. Out of the 192 land owners surveyed 34 families shared that their major source of income will be affected due to the project. Income from the shops run by 3 owners, workshops run by 2 owners and metal crusher unit of one owner will lose. Besides the income from agricultural land of 20 families, income from the cattle rearing done by one family among the cattle shed affected and income as rent of 7 families will lose due to the project. In addition to that 9 tenants who have been doing business in the affected land and 14 employees working in the affected shops/firms will lose their livelihood.

6.5 Local economic activities

The project area is having shops and some business enterprises. Besides there are agricultural land in which coconut, tapioca, nutmeg etc are cultivating. 6 shops, 2 workshops, 1 cement godown, 1 metal crusher unit in the area will be affected due to the project.

6.6 Factors that contribute to local livelihoods

The project area comprises of shops and agricultural land and plain land. In addition to shops and enterprises, the cultivation like coconut, tapioca, Nutmeg etc. are undertaken in the area. Among the affected families in the area 19 families have coconut farm (10 and above trees). 25 families have banana cultivation, 9 families have tapioca cultivation, 6 families have vegetable garden, 2 families have Arecanut farm (15 and more trees), 1 family has nutmeg farm and 3 families have cattle shed in the affected land.

6.7 Kinship patterns and social and cultural organization

Most of the Project affected families are nuclear families. None of cultural or organization will be affected due to the project.

6.8 Administrative organization

None of the administrative organisations are being affected by the project.

6.9 Political organization

None of the political organisations are project affected.

6.10 Community based and civil society organizations

No such organizations are being affected by the project.

6.11 Regional dynamics and historical change processes

Kochi, located in the central part of Kerala, is among one of the rapidly growing Tier-II cities in the country. The city has witnessed rapid growth in the last decade. As a milestone of development the Kochi International Airport was established in 1999 at Nedumbassery, one of the outskirts of Kochi. Besides the Metro rail and the development of Kochi as an industrial city also changes the face of the region. The development of these facilities including the construction of the new Airport terminal has necessitated the development of good road infrastructure both for passengers and cargo movement. Further, the development of a good infrastructure is an essential pre-requisite for the growth and development of the region.

6.12 .Quality of the living environment

The proposed project is the land acquisition for section A package 2 & 3 of the 2nd phase of Seaport-Airport road construction i.e. from NAD junction to Mahilalayam Junction. The project area is heavily built up with commercial centres, public buildings, private institutions, religious structures and residential plots. Besides there are used or unused open lands which are suitable for agriculture. People of the area are having better access to all necessities of life.

CHAPTER 7

SOCIAL IMPACT MANAGEMENT

7.1 Approach to mitigation

To assess the mitigation, the expert research team of SIA Unit has adopted an approach that is spanned in four phases. In the first phase, a physical observation of the area was held and conducted a pilot study to understand major risks and opportunities involved with the project. Later the affected families was surveyed by using a structured questionnaire and collected details on the socio-economic background of the families, dynamics of risks of each affected families etc were collected. To understand the common risks and advantages involved with the project, in-depth interviews were held with selected key persons and stakeholders of the project. As the 4th stage 2 Public Hearings were held on 5/11/2020, Thursday from 10.30 am to 5 pm at Crecent Public School, Aluva in which the officials from LAO and the Requiring body were replied to the queries of the project affected people related to land acquisition and implementation of the project. The draft report of the Social Impact Assessment was presented in the Public Hearing the project affected people has given opportunity to express views related to the study report. Further the information was collected directly and over phone from those who did not participated in 1st phase of survey but present in the Public Hearing and that details were also analyzed and included when finalizing the Social Impact Assessment Report.

7.2 Measures to avoid mitigate and compensate impact

The proposed land acquisition for the construction of Seaport-Airport road Project Section A package 2 & 3 of is planned by the requiring body by minimizing the impact in the most possible manner. However it is understood that the project cause impacts like loss of land, structures, livelihood etc. to the families. Following measures can be taken to mitigate the above said impacts:

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Package 2&3

- Compensation shall be provided to the affected families as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.
- R&R package shall be provided for the affected properties as per the Policies vide G.O.(Ms)No.485/2015/RD dated 23/09/2015 and G.O.(MS)No.448/2017/RD dated 29/12/2017 issued by Revenue(B) Department, Government of Kerala for the rehabilitation and resettlement package for acquisition of land in the state in lieu of RFCTLARR Act 2013.
- For avoiding residential problems of the families timely rehabilitation measures shall be taken for the affected houses.
- If the partially affected houses/shops need maintenance and the stay/functioning would be impossible for that period, the amount for a rented house/amount for livelihood will be compensated for the said period.
- Rehabilitation measures should be taken before the evacuation of the shops/enterprises not to cause more impact on the livelihood of the families.
- Ensure that the functioning of the shops which are not included or partially included in the acquisition is not hindering during the project construction period. Otherwise, consider for compensation for the affected livelihood during the construction period
- The resettlement of the basic facilities like toilet, septic tank, well etc need to be ensured without causing inconvenience to the families.

- If land remains after acquisition will be legally insufficient to reconstruct the affected houses, shops etc either consider it for full acquisition or possible concession shall be given for the reconstruction in the remaining land based on the existing laws, if needed.
- Either the land acquisition should be done in such a way by avoiding distraction in the functioning of Crescent Public school or should do the resettlement procedures accordingly.
- Based on the legal documents consider the tenants and employees for R&R package who have been doing business in the affected structures /working in the affected enterprises for 3 and more years
- Speedy land acquisition procedures are recommended since the residents of the area have been facing mental stress as the Seaport-Airport construction had been planned in the area for many years back.
- For the protection of the environment perpetuate the trees in the affected area as far as possible and measures should be taken for replantation in lieu of the destroyed trees
- During the project construction period the unhindered entry to the nearby houses and shops, convenient mobility of the people and vehicle and scientific and timely disposal of the construction waste should be ensured
- When a field is separating from the major agricultural field due to acquisition it may become unsuitable for agriculture by losing water source and irrigation facilities and it may be changed to the state of dry land. This change of status happens not because of the land owner but due to the nature/ human interference. So if there is any possibility, consider the land to upgrade the category from wet land to dry land.

- While demolishing the affected houses and structure, if owners demand, the remains of the buildings shall be given to the owners by charging a certain percentage of the price decided by PWD, which will be useful to construct a new house sustaining an emotional bond. The reuse of these materials will be helpful to minimize the wastage issues and exploitation of natural resources.
- Sufficient ramp facilities should be provided for the houses, shops and lands if it became under when the bridge constructs in height from land area.
- Since there is confusion among the project affected people regarding the finalization of the project alignment, it should be cleared to them before the implementation of the project.

7.3 Measures that are included in terms of Rehabilitation and Resettlement and Compensation as outlined in the Act

Measures for providing compensation and Rehabilitation and Resettlement package as per the RFCTLARR Act 2013 and the Policies issued by Revenue (B) Department, Government of Kerala vide G.O.(MS)No.485/2015/RD dated 23/09/2015 and G.O.(Ms)No.448/2017/RD dated 29/12/2017 for the rehabilitation and resettlement package for land acquisition in the state in lieu of RFCTLAR&R Act 2013 are applicable for the project of land acquisition for the construction of Seaport-Airport road project Section A package 2 & 3.

7.4 Measures that the Requiring Body has stated it will introduce in the project proposal

The Estimated Project cost mentioned in the Detailed Project Report stated that Rs.317.75 crores will be required as land acquisition charges and Rs.50 lakhs requires as Rehabilitation and Resettlement charges.

7.5 Alterations to project design and additional measures that may be required to address the extend and intensity of impacts across various groups as identified during SIA

Requiring body is planned the project alignment in such a way to cause very minimum impacts to the families. However the family of an affected residence in Aluva West Block survey No.60/105 in Nethaji road, Aluva requested for a change in alignment to avoid impact on their house. They suggested to change the alignment to a little to the fallow land near to their house which has been remains unused since many years through which a possible turn to the new road can be avoided. If this change of alignment is possible an impact on the house of a cancer patient can be avoided.

7.6 Detailed Mitigation Plan including detailed activities to be carried out for each mitigation strategy, timelines for each mitigation strategy

The social impacts of the proposed land acquisition can be mitigated by providing compensation and R&R package to the affected families as per the Policies issued by Revenue (B) Department, Government of Kerala vide G.O.(MS)No.485/2015/RD dated 23/09/2015 and G.O.(Ms)No.448/2017/RD dated 29/12/2017 for the compensation and R & R package for land acquisition in the state in lieu of RFCTLARR Act 2013 by strictly following the time plan and procedures stated in the Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015. On the basis of the scientific assessment SIA Study - Land Acquisition for the Construction of Seaport-Airport Road Phase II, Section A

of the data obtained through the SIA study a Social Impact Management Plan is prepared, to mitigate the impacts of land acquisition for the construction of Seaport-Airport road project Section A package 2 & 3, which is given in Table 7.6.1.

Table 7.6.1. Social Impact Management Plan

Sl. No.	Impacts	Impact Management	Time Plan	Monitoring Indicators
1	Loss of land	Provide compensation as per the 1 st schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government	Time frame as per the Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.	Sensitize the affected families about the reasonable price and other legal benefits of the land is providing
2	Loss of the properties attached to the land	Provide compensation as per the 1 st schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government		Assets should be measured in the presence of the land owners and inform them the procedures of its valuation
3.	Impact on residences including displacement	Provide compensation and R&R package as per the 1 st & 2 nd schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government		Speedy resettlement procedures. Resettlement before displacement. Ensure the

				families will not face difficulty for stay and basic facilities even for a day.
4	Loss of livelihood	Provide R&R package as per the 2 nd schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government		Reasonable consideration for the dropping livelihood of the owners and also for the tenants and employees who have been working in the affected structure for 3 and more years based on the legal documents
5	Evacuaton of shops	Provide compensation and R&R package as per the 1 st & 2 nd schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government		Resettlement procedures before the evacuation of shop to avoid losing livelihood of families even for a day

6	Impact on Agriculture/trees	Provide compensation and R&R package as per the 1 st & 2 nd schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government. As far as possible protect the trees in the area otherwise measures to be taken to replant equal number of destroyed trees		Non disturbance of environment of the area
7	Insufficiency of the remaining land for reconstruction	Consider full acquisition/possible concession in legal procedures for construction, if needed		Reasonable consideration for the affected house, basic facilities and livelihood measures
8	Possibility of business distraction during project construction period for the structures not included in acquisition /partially affected	Plan the construction activities without disturbing the business activities in the area. If it will be disturbed provide compensation for that period		Undisturbed business activities and livelihood of the families in the region during the project construction period
9	Impact on the facilities of Crescent Public School	Provide compensation and R&R package as per the 1 st & 2 nd schedule of RFCTLARR Act 2013 and the related policies of		Suitable and timely resettlement

		Kerala State Government		procedures without disturbing the functioning of school
10	Possible distraction in vehicle and people's movement during project construction period	Measures for safety, seamless vehicle movement, undisturbed people's mobility etc. should be planned before project construction period.	Plan before the project construction period.	Plan and execution of the measures for unhindered traffic and people's mobility during project construction period
11	Waste formation during construction	Scientific and timely disposal of construction waste.	Plan for waste disposal before construction period	Ensure the wastage is properly disposed before the commissioning of the project without causing environmental issues to the area.

7.7 The SIA plan indicating which measures the Requiring Body has committed to undertake and those that have been proposed, but not committed to be undertaken by the Requiring Body

Not Applicable

CHAPTER 8

SOCIAL IMPACT MANAGEMENT PLAN INSTITUTIONAL FRAMEWORK

8.1 Description of institutional structures and key person responsible for each mitigation measures

RFCTLARR Act, 2013 section 43 and The Kerala RFCTLARR Rules 2015 Rule 22 define the Administrator appointed by the State Government would be the person responsible for Preparation of Rehabilitation and Resettlement Scheme for affected families of Land Acquisition. Subject to the superintendence/ directions / control of the appropriate Government and the Commissioner for Rehabilitation and Resettlement, the formulation, execution and monitoring of the Rehabilitation & Resettlement Scheme shall vest with the Administrator. Special Tahsildar (LA) K.I.A.No.3, Nedumbassery is the Administrator of the land acquisition from Aluva and Kanayannur Taluks in Ernakulam district for the project of Construction of Seaport-Airport road Project Section A package 2 & 3

As per The Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015 and the Policy framed by the State government via G.O. (Ms) No.485/2015/RD, dated 23/09/2015, 2 committees shall be constituted for the land acquisition in Kerala State.

1. District Level Fair Compensation, Resettlement and Rehabilitation Committee comprises the following members:
 - District Collector
 - Administrator for resettlement and rehabilitation
 - Land Acquisition officer,
 - Finance Officer

- Representatives of the requiring body empowered to take financial decisions on Its behalf.
 - Representatives of Local Self Government Institution of the project area
2. The State Monitoring Committee for Rehabilitation and Resettlement comprises the following members:
- Chief Secretary
 - Revenue Secretary
 - Secretary of the Administrative Department
 - Law Secretary
 - Finance Secretary

The District Level Fair Compensation, Resettlement and Rehabilitation Committee will finalize the estimate of a fair and reasonable price of land and compensation along with the Rehabilitation and Resettlement package to be given to the affected person/ family and submit the same to the State Level committee. The State Level Empowered Committee shall approve the estimate or return it for reconsideration with suggestions/observations.

After the approval of the State Level Monitoring Committee the District Level Fair Compensation Resettlement and Rehabilitation Committee shall present the estimated compensation and resettlement and rehabilitation package to the affected family or affected person and explain the terms and conditions of the same. Upon receiving the consent of the affected person or affected family, the District Level Fair Compensation Resettlement and Rehabilitation Committee shall submit the consent along with the minutes of its proceedings to the District Collector for finalizing the conveyance of land in terms of the consent. The Compensation and package agreed upon shall be paid into the bank account, the details of which shall be submitted by the affected family or affected person along with the consent. On completion of the conveyance the Collector shall take possession of the land.

8.2. Specify role of Non-Governmental Organizations

RFCTLARR Act 2013 section 4 insist to conduct a Social Impact Assessment study whenever the Government intends to acquire land for a public purpose. As per the Rule 9 of The Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015, the Government shall empanel the individuals/ organizations as Social Impact Assessment units to conduct the Social Impact Assessment study of the land acquisition. Hence Rajagiri outREACH is entrusted by the Revenue (B) Department, Government of Kerala via Notification No. G.O.(P)No.30/2020/RD dated 20th March 2020 to conduct the Social Impact Assessment Study of the land acquisition for Seaport-Airport road Construction Project Section A package 2 & 3. Therefore Rajagiri outREACH, the SIA agency is responsible to conduct procedures for Social Impact Assessment including Public Hearing.

8.3. Indicate capacities required and capacity building plan, including technical assistance if any

Not applicable

8.4 .Timelines for each activity

Timeline for each activity of the land acquisition will be as per the Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015.

CHAPTER 9

SOCIAL IMPACT MANAGEMENT PLAN BUDGET AND FINANCING OF MITIGATION PLAN

9.1 Costs of all resettlement and rehabilitation costs

Revenue (B) Department, Kerala Government put out the survey numbers of the land to be acquired for Seaport-Airport road construction Project Phase II, Section A, package 2 & 3 via Notification No. G.O.(P)No.30/2020/RD dated 20/03/2020 which reveals that the total extend of land requires for the project is 30.3590 hectares approximately. The SIA unit could identify owners of the 192 affected land. The house structures in the land of 35 owners which include the residents of owners, given on rent, locked and is under construction and shops of 5 owners are included in acquisition. In addition to that 54 owners will lose their means of livelihood includes agriculture. Through the Social Impact Study, the SIA unit could understand that the project requires rehabilitation and resettlement as it causes displacement of families, loss of attached properties, loss of livelihood etc. The estimated total cost of the project as per the Detailed Project Report is Rs.455.84 Crores including Land acquisition charges Rs.317.75 crores and Rehabilitation and Resettlement charges Rs.50 lakhs. The fund for the project is sanctioned by KIIFB vide order No. PWD-006-03-PA-01 dated 29.06.2018. Considering all the impacts of land acquisition a draft R&R package plan will be prepared by the Administrator appointed for the project.

9.2 Annual budget and plan of action

Not Applicable

9.3 Funding sources with break up

Not Applicable

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Package 2&3

CHAPTER 10

SOCIAL IMPACT MANAGEMENT PLAN MONITORING AND EVALUATION

10.1 Key monitoring and evaluative indicators

- Land price and compensation amount
- Time frame of the procedures for compensation, Rehabilitation and Resettlement
- Construction Activities without hindering the business activities and access to the nearby properties
- Non disturbance to the existing entrance to the properties in the area after implementation of the project.
- Resettlement procedures without hindering the functioning of the affected school.
- Time bound and scientific clearance of construction waste from the site

10.2 Reporting mechanisms and monitoring roles

Reporting mechanisms and monitoring roles of the land acquisition for the Seaport-Airport road construction Project Phase II, Section A, package 2 & 3 will be as per the Rules stated in the Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015. The Special Tahsildar (LA) KIA No.3, Nedumbassery is the Administrator of the proposed project and he is responsible for the formulation, execution and monitoring of the Rehabilitation & Resettlement Scheme. A draft of the Rehabilitation & Resettlement Scheme prepared by the Administrator shall be finalized by the District Level Rehabilitation and Resettlement Committee formed for the project and shall be approved by the State Monitoring Committee.

10.3 Plan for independent evaluation

Not applicable

CHAPTER 11

ANALYSIS OF COSTS AND BENEFITS

AND RECOMMENDATION ON ACQUISITION

11.1 Final conclusions on assessment of public purpose, less displacing alternatives, minimum requirements of land, the nature and intensity of social impacts, and viable mitigation measures will address costs

The proposed project is the land acquisition for section A package 2 & 3 of the 2nd phase of Seaport-Airport road construction ie from NAD junction to Mahilalayam Junction. On completion of Phase-II it will forms an extension of Airport – Seaport road Phase I to the Cochin International Airport and NH 544. It will also form a major connectivity link and easy access to Smart city, Eloor and the Airport which are situated in the suburbs of the city and to Vyttila Mobility Hub. The extension of Airport Seaport road Phase II will pave way for better connectivity of the Cochin city to the outer City areas and is also expected to cater the smooth flow of increasing traffic projected for the years to come. The traffic from Infopark and Smart City can reach both Airport and Cochin City through this road. Once the Airport - Seaport Road is constructed, passengers can use this road to reach the Airport as they will get considerable savings in time. They can take diversion from NH 544 to Airport-Seaport road either at Kundannoor junction, Vyttila junction, Palarivattom or HMT junction to reach Airport. The new alignment will cater to the increasing traffic volume from Karingachira, Kakkanad, Thrikakkara, Kalamassery, etc.

Requiring Body finalised the present alignment while considering minimum impacts to the land owners. The project area is heavily built up with commercial centres, public buildings, private institutions, religious structures, residential plots, agricultural land and vacant land. The proposed road has a total length of 6.60 km and passes mostly through vacant land. However the land acquisition causes impacts like loss of land, displacement

of families, evacuation of shops, loss of livelihood etc. The SIA unit could identify owners of 192 affected land properties. House structures in the land 35 owners in which they reside/given on rent/locked/under construction and shops in the land of 5 owners are included in acquisition. Besides 57 individuals will lose their means of livelihood including agriculture. It is understood that the project may cause displacement of families, loss of attached properties, loss of livelihood etc. All the families surveyed have a favourable attitude towards the project as it causes the development of the region. Hence the impacts of the project can be mitigated by providing compensation and R&R package as per the RFCTLARR Act 2013 to the project affected families.

11.2 The above analysis will use the equity principle as a framework of analysis for presenting a final recommendation on whether the acquisition should go through or not.

Based on the analysis and assessment of the positive and negative impacts of the land acquisition for Seaport-Airport road Construction Project, Section A, Package 2 & 3 it is understood that the project is expected to improve quality of living in the region and also the infrastructure of the state and the same is empathized by many of the affected persons despite the adverse impact the project brings. Hence the SIA Team recommends the project of Land Acquisition from Choornikkara, Keezhmadu, Aluva West and Thrikkarakara North villages in Aluva & Kanayannur Taluks in Ernakulam district for Seaport-Airport road Construction Project, Section A, Package 2 & 3 shall be implemented with the existing land acquisition plans. The following measures are recommended to mitigate the impacts:

- Compensation shall be provided to the affected families as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.

- R&R package shall be provided for the affected properties as per the Policies vide G.O.(Ms)No.485/2015/RD dated 23/09/2015 and G.O.(MS)No.448/2017/RD dated 29/12/2017 issued by Revenue(B) Department, Government of Kerala for the rehabilitation and resettlement package for acquisition of land in the state in lieu of RFCTLARR Act 2013.
- For avoiding residential problems of the families timely rehabilitation measures shall be taken for the affected houses.
- If the partially affected houses/shops need maintenance and the stay/functioning would be impossible for that period, the amount for a rented house/amount for livelihood will be compensated for the said period.
- Rehabilitation measures should be taken before the evacuation of the shops/enterprises not to cause more impact on the livelihood of the families.
- Ensure that the functioning of the shops which are not included or partially included in the acquisition is not hindering during the project construction period. Otherwise, consider for compensation for the affected livelihood during the construction period
- The resettlement of the basic facilities like toilet, septic tank, well etc. need to be ensured without causing inconvenience to the families.
- If land remains after acquisition will be legally insufficient to reconstruct the affected houses, shops etc either consider it for full acquisition or possible concession shall be given for the reconstruction in the remaining land based on the existing laws, if needed.

- Either the land acquisition should be done in such a way by avoiding distraction in the functioning of Crescent Public school or should do the resettlement procedures accordingly.
- Based on the legal documents consider the tenants and employees for R&R package who have been doing business in the affected structures /working in the affected enterprises for 3 and more years
- Speedy land acquisition procedures are recommended since the residents of the area have been facing mental stress as the Seaport-Airport construction had been planned in the area for many years back.
- For the protection of the environment perpetuate the trees in the affected area as far as possible and measures should be taken for replantation in lieu of the destroyed trees
- During the project construction period the unhindered entry to the nearby houses and shops, convenient mobility of the people and vehicle and scientific and timely disposal of the construction waste should be ensured
- When a field is separating from the major agricultural field due to acquisition it may become unsuitable for agriculture by losing water source and irrigation facilities and it may be changed to the state of dry land. This change of status happens not because of the land owner but due to the nature/ human interference. So if there is any possibility, consider the land to upgrade the category from wet land to dry land.
- While demolishing the affected houses and structure, if owners demand, the remains of the buildings shall be given to the owners by charging a certain percentage of the price decided by PWD, which will be useful to construct a new house sustaining an

emotional bond. The reuse of these materials will be helpful to minimize the wastage issues and exploitation of natural resources.

- Sufficient ramp facilities should be provided for the houses, shops and lands if it became under when the bridge constructs in height from land area.
- Since there is confusion among the project affected people regarding the finalization of the project alignment, it should be cleared to them before the implementation of the project.

REFERENCES

1. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013
2. Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.
3. Kerala State Policy issued by Revenue (B) department G.O.(MS)No. 485/2015/RD dated 23.09.2015 for fair compensation and transparency
4. Kerala State Policy for Rehabilitation and Resettlement Package for acquisition of Land in the State in lieu of RCFTLAAR Act, 2013 G.O. (Ms) No. 448/2017/RD dated 29/12/2017
5. Detailed Project Report Prepared by Roads and Bridges Development Corporation Kerala Limited