

# **SOCIAL IMPACT ASSESSMENT STUDY**

## **DRAFT REPORT**

Entrusted by Revenue (B) Department, Government of Kerala

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

**5-11-2020**

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BRIDGES  
DEVELOPMENT  
CORPORATION OF  
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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 has 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. An efficient road infrastructure is therefore 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 city has witnessed rapid growth in the last decade. 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 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.

The proposal for the Seaport - Airport 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 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 now the traffic volume is very high and four laining 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 2<sup>nd</sup> 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. On completion of Phase- II it will forms an extension of Seaport - Airport 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 Seaport - Airport 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 Seaport - Airport 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 Seaport - Airport 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 to whole of south Kerala towards Cochin International Airport.
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 7<sup>th</sup> 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 RFACTLARR Act 2013.

This is the Draft Report of the Social Impact Assessment Study conducted in Choornikara, Keezhmadu, Aluva West villages in Aluva Taluk and Thrikkakara North

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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 7<sup>th</sup> April 2020 reveals that approximately 30.3590 hectares of land belongs to Choornikkara, Keezhmadu and AluvaWest 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 put out in the 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, 58/p

The major part of the proposed new alignment passes through fallow paddy land. Land use pattern of the proposed road shows a mix up between agricultural, commercial and residential uses. Out of the 113 land properties of the 117 owners identified by the SIA unit 60 lands belong to “Wet land”, the land of 49 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 and also the impact of residences are less. The present alignment of the proposed road was finalized after

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several meetings and deliberations to solve the disputes. Also 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 2<sup>nd</sup> 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 2<sup>nd</sup> 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 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 117 land owners of the 113 affected properties. Out of the total 113 land properties, owners of the 71 properties acquired land from their ancestors and the remaining 42 were purchased the land in different periods.

#### *b. Impact on Residences*

The residential structures of 20 families will be fully/partially destroyed due to the project. Out of these 20 families 10 families will be displaced from the project area.

#### *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 etc. are included in it. The structures of the land properties of 43 land owners will have to be destroyed.

*d. Displacement of Families*

Out of the surveyed families it is understood that 12 families will be displaced from the project area. 7 families are using this land as residence only, 1 family is using as residence and worship place, 2 are using it for residential and business and the remaining 2 are using for business only.

*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 the 117 land owners surveyed 11 families shared that their major source of income will be affected due to the project out of which 5 families will lose their business, 4 families will lose the income from the agricultural land and 2 will lose the rent from the affected structures. Besides 8 tenants who have been done business in the affected land and 12 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 9 families will lose their coconut farm (10 and above trees). Banana cultivation of 16 families, tappiocca cultivation of 5 families and vegetable garden of 4 families will also be affected. During the survey 4 land owners shared that the income received from the agriculture of the affected land is their means of livelihood. Besides approximately 718 trees including fruit bearing and yielded trees may be destroyed for the project.

*g. Inadequate Land for Reconstruction*

Inadequacy of the remaining land after acquisition for the reconstruction of affected structures and for doing agriculture is also found to be an impact of the project. During the Social Impact Assessment study survey 9 families shared that the remainging land will not be sufficient to reconstruct the structures like house. And 1 family opined that their remaining land will not be sufficient for agriculture.

**Table 1.5.1 Impacts of the Project**

<b>Sl.No.</b>	<b>Impacts</b>	<b>Discription</b>
1	Loss of land	<b>117 land owners</b>
2	Displacement of Families	<b>12 families</b> (Residence : 7 Residence & shop : 2 Residence &worship place: 1 Business : 2)
3	Impact on houses (Fully/partially)	<b>20 land owners</b>
4	Structures affected	<b>43 land owners</b>

		(Boundary wall : 14 Gate : 16 Shop :5 Shed : 9 Toilet : 10 Well : 10 Staircase : 1 Water tank :1)
5	Loss of Livelihood	<b>31 individuals</b> (Owners : 11 Tenants : 8 Employees : 12)
6	Agriculture affected	<b>34 families</b> (Coconut farm : 9 Plantain : 16 Tapioca : 5 Vegetable garden : 4)
7	Loss of trees	Approximately 718 trees

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 will be taken before the evacuation of the houses to not 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 will 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.

- 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
- 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 shall be ensured

## 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. Seaport - Airport 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

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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 Seaport – Airport 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

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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 7<sup>th</sup> 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 Seaport - Airport 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**

Seaport - Airport 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 Seaport – Airport 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 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

### **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 7<sup>th</sup> 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 9 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



**Table 3.1.1. Study Team**

Sl.N	Name	Qualification & Position	Experience
1	Dr.Binoy Joseph	Ph.D.,M.A(HRM),LLB Consultant	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 Chairperson	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.	Gigin P.S	MSW Research Associate	2 years experience in developmental sector
9	Albin Noble	MSW Research Associate	2 years experience in developmental sector

### **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. Telephonic survey was conducted with the land owners who are not staying in the project area. Besides telephonic key informant interviews were conducted with the LSG representatives 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 the Draft Report of Social Impact Assessment Study was prepared and it will be presented in the public hearing which will be held on 5<sup>th</sup> November 2020 which includes the Social Impact Management Plan.

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 Tahsidar (L.A) No.III, Nedumbassery. SIA Study - Land Acquisition from Aluva and Kanayannur Taluks for the Construction of Seaport-Airport Road Phase II, Section A Package 2&3

- 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

### **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 117 land owners who are the title holders of 112 affected land properties. A socio-economic survey was conducted with these 117 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 was 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 explaining 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, Riquiring Body and SIA unit	18/06/2020
Socio-economic survey in the Project area	August & September 2020
Notice distribution for Public Hearing	31/10/2020
Public Hearing	5/11/2020

## **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 2<sup>nd</sup> 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 Seaport-Airport 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 Seaport-Airport 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 Seaport-Airport 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 International 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 Requiry 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**

There is no public utilized land in the project area.

#### **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 Mahilalayam

junction, ie the construction of Section A package 2 & 3 of the 2<sup>nd</sup> 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**

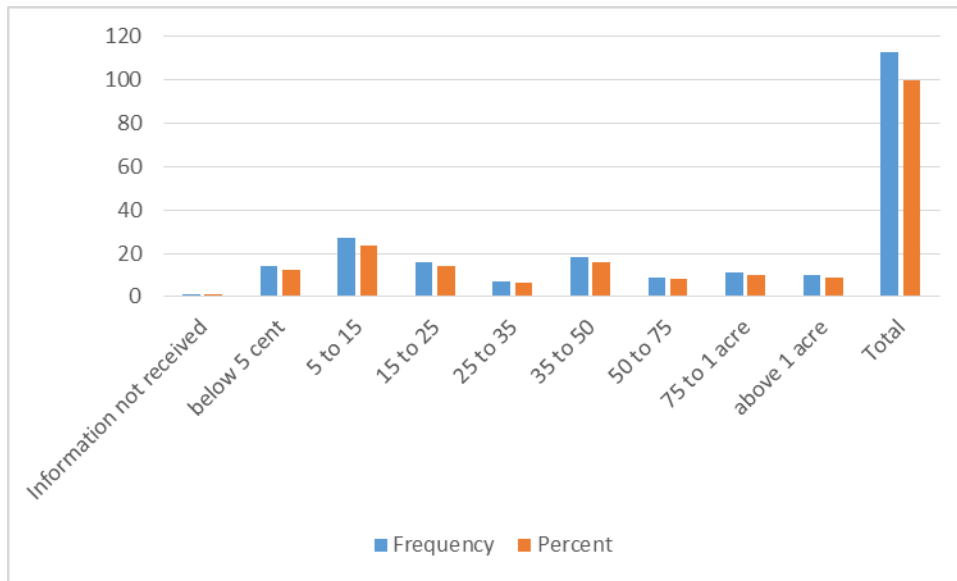
Out of the 113 land properties of the 117 owners identified by the SIA unit 60 lands belong to "Wet land", the land of 49 belong to "Dry land" and the remaining 4 land belong to "Nilam nikarthu" category. Land use pattern of the proposed road shows a mix up between agricultural, commercial and residential uses. Presently unused open land is 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 9 families are having coconut farm (10 and above trees), 16 families doing Banana cultivation, 5 families doing tapiocca cultivation and 4 families are having vegetable garden in the affected land.

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

The SIA unit could identify 117 land owners who belongs to 112 families. The figure 4.8.1. shows the total land holdings of that 112 families as they revealed in the survey.

**Figure 4.8.1. Size of Land Holding of the Families**



The figure above shows that out of the 113 affected families 14 families possess below 5 cents of land , 27 families possess 5-15 cents, 15 families possess 15-25 cents, 7 families possess 25-35 cents and 18 families possess 35-50 cents of land. 9 families are having land between 50 and 75 cents and 11 families are having between 75 and 100 cents. 10 families shared that they possess above 1 acre of land and the said information was not received from 1 family.

Among the 113 affected land properties identified by the SIA unit, 2 are under joint ownership.



The residential structures of 20 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 4 land properties no transactions have been done for the last 3 years. The existing land owners of these 4 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 112 land properties 41 are open land with no specific usage presently, 33 are using for agricultural purpose, 32 are using for residential purpose and 7 are using for business purpose.

## 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 2<sup>nd</sup> 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 7<sup>th</sup> April 2020. The Notification reveals that the total extend of land is approximately 30.3590 hectares. The SIA unit could identify 117 owners of the affected land who belongs to 112 families. The details of those families are given Table 5.1.1.

Table 5.1.1 Name and Address of the Land Owner & Survey Number

Sl.No.	Name, Address & Phone No.	Survey No.
1	Francis T A Therully House, Andi Company Asokapuram P.O. Pin-683 101, 9446839865	270/1
02	Pratheesh Iyp, Manjooran House, Andi company, Asokapuram P.O., Pin-683 101 9388615412	305/9, 305/4,5
03	Muhammed Kunj Kallungal House, Edayapuram, Aluva P.O., Pin- 683 101 9847125990	32/1-4
04	Premdas K.V, Kaipalathil House Near Co-operative Bank, Aluva-683 101 9447913469	22/1-4
05	Zainaba, Pazhangadi House, Thottumugham,	77/16

	Mahilayam Road, Aluva-683 105 9846522271	
06	Abdul Salam, Naduparambil House, Manakkapady, Aluva- 683 101 9947483280	499/9, 499/13-2,499/2, 499/5
07	Abdul Najeeb P.A Peringath House, Thottumugham, Mahilayam Road, Aluva-683 105 9846169900	67/2
08	Smitha K Balan Thaipalathil House, Edayapuram P.O, Aluva.- 683 101 9847996591	22/3-4
09	Hamsa Kallungal House, Thuruthy Line, Edayapuram P.O, Aluva.- 683 101 9895265446	32/1-6
10	K.A. Abdul Rasheed Kalikal House, Kalikal Line, Aluva East 8075713766	212/4-3, 212/9-2, 212/6-2
11	Sajeera Mahin Mavela House, Near Amala Bhavan, Asha Line, Aluva - 683 101 984704350	69/7
12	P.M Varghese, Pappil House,	264/1

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Airport Road Phase II, Section A Package 2&3

	Asokapuram, Aluva-683 101 8547120410	
13	Nelson, Pappil House, Asoka puram, Aluva-683 101 9567560654	264/1
14	Safiya Pallikkara House, Kallungaparambu, NAD P.O., Nochima,Aluva 9747708948	453/7, 453/6, 454/6-2, 454/10,
15	Khalid Kallungal House, Edayapuram P.O., Aluva-683 101 9846690406	213/7, 213/16, 213/5,213/8 28/12, 28/16
16	Muhammed, Kallungal House, Edayapuram P.O., Aluva-683 101 9846690406	213/7, 213/16,213/5, 213/8
17	P.N. Chandran Ushas, Nochima, NAD P.O., Aluva 9446217069	454/7, 451/1, 451/9
18	Rajan, Pappil House, Asoka puram, Aluva-683 101 9995144014	264/1
19	Mukundan Kalpalathil, House, Edayapuram P.O., Aluva-683 101	209/9

	9495045956	
20	Arifa Konnankulam House, Thottumugham P.O., Aluva-683 105 8547890693	55/13-3, 15/15-3
21	Jabbar Kallungal House, Aluva East, Kallungal Lane, Pin-683 101 9847219355	209/3, 209/16
22	M.K.Purushothaman, Mudoor House, Edayapuram P.O., Aluva-683 101 7012317200	217/12
23	Abdul Hameed Vilappilly House, Edayapuram P.O., Aluva-683 101 9495467866	69/5
24	Naseema Muhamed kutty Thattarakudy House, Zeemahal, Thottumugham P.O., Aluva-683 105 9946339979	
25	Sabi Joseph Urumbath House, Assissi Junction, Aluva-683 101 9495575857	263/2-2, 263/2-3
26	Joseph Urumbath House, Assissi Junction, Aluva-683 101 9495575857	263/1

27	A.P.Velu, Ankudy House, Near LIC, Aluva-683 101 9809439131	209/1, 209/2
28	Zeenath Ashraf W/o.Adv.NM.A. Ashraf, Mukkath House, Edayapuram P.O., Aluva-683 101 9497545600	23/36-5R
29	Subair Keril House, Vettukattil Parambu, Mahilayam Road, Thottumugham P.O., Aluva-683 101 7306779283	
30	Hassan Pilla Vaidyar Karotheukuzhi House, Hassan Villa, Asokapuram P.O., Aluva-683 101 9496453820	
31	Saly Papally Pappaly House, Pappaly Line, Asokapuram, Aluva-683 101 9072815913	59/96
32	Noufal khader, Afsal Khader, Ajmal Khader Ibrahimkutty & Faizal Tharakandathil House, Thottumugham P.O., Aluva-683 101 9847800492	305/5

33	Dany Joseph Flat No.11C, Kattikaran Residency K.K.Padmanabhan Road, Aluva 8157994191	60/105-2, 230/3
34	Sindu V 12 B Harmony Apartment, Old Desom Road, Thottakkattukara, Aluva 9946135135	262/6-2, 262/6-4
35	Eby Jose Karuthedath House, Nechima Road, Aluva-683 101 9020113334	441
36	Jalaja Chundathil House, Water tank Road, Koch-6 9497372476	22/part
37	Thomas T.A., Thadukal House, Asokapuram P.O.,Aluva 9446443770	506/1
38	Denny Pappaly House, , Asokapuram, Aluva-683 101	70/2
39	V.H Amir Taima House, Aram Lane, Keezhmad,Aluva- 683 101 9496044851	215/3, 215/4



40	Shiva raj Kunyathukulam, Kunamadathil House, Thrikkakara road 9388580503	22/part
41	Tommy Jose Manjooran House, Andi company, Asokapuram, Aluva 9447057228	305/4
42	Sunny Pappaly Pappaly House, Pappaly Line, Asokapuram, Aluva-683 101 9847669578	98
43	Premanandan Mundoor House, Edayapuram, Aluva 9895925081	27/12
44	Muhammed Hashim K.A Pazhayaparambil House, Thottumugham P.O., Aluva-683 105 9048880800	69/3
45	Sajeer C.A Cherattu House, Thottumugham P.O., Mahilayam Junction, Aluva-683 105 9447168662	69/7
46	Kochupilla Kallunkal House, Aluva East-683 101 9497367637	209/6-2,209/7,17R, (209/4,14R, (209/17.4.67), (209/5,8.80), 209/18,6R), 209/19-1.87), (209/6,) (209/6.8) ,(209/6.7)

47	Joy M.J Manjooran House, Asokapuram, Aluva 9895060295	305/4
48	Sadanandan Mudoor House, Edayapuram, Aluva 9995180754	528/11,
49	Pradheesh Kumar Mudoor House, Edayapuram Aluva 9995180754	528/11,217/5-2 , 213/12 213/13
50	Preethi Mudoor House, Edayapuram, Aluva -683 101 9036834587	217/5-2
51	Kanakamma Mudoor House, Edayapuram, Aluva-683 101 9995180754	213/13
52	Premanandan M S Mudoor House, Edayapuram, Aluva-683 101 9895925081	217/12
53	Abdul Gafoor Asokapuram, Manakkapady Junction, Aluva 7403811452	555/12, 555/13
54	Abdul Kareem Meentharakkal House, Kallungalparambu, NAD P.O.,	454/11,454/6,454/10-2,453/7-2,454/12

	Aluva 9747708948	
55	Abdul Gafoor Thuruthi Line, Erumathala P.O. Aluva-683 101 9249307006	32/9
56	Nalina Pothuvaal 8C DD West Wind Lissy Road, Kaloor, Cochin-682 018 9895688112	450/10
57	Safiya P A Peringattu House, Thottumugham P.O., Aluva-683 105 9846169900	67/2
58	Muhammed Ashraf Villappilly House, Thottumugham P.O., Aluva 9645937944	69/5-2
59	Basheer Kanjirathinkal House, Thottumugham P.O., Aluva 9995187962	68/5
60	Shiji Kaipalathil House, Edayapuram, Aluva-683 105 9496823418	22/3
61	Abdul Hakeem 8/434, Thaikkattukara Post, Kunnatheri, Aluva-6 9846083159	557/8-3,557/8-3
62	Pappachan (Late) Summi Jimmi,	59/94

	Pappali House, Pappali Line, Asokapuram, Aluva 9747943411	
63	Fr.Jacob Paul, Olickal House, Thottumugham P.O., Aluva-683 105 9544526565	73/8
64	Muhammed Ali Kallungal House, Thottumugham P.O., Aluva-683 105 8129835014	209/6-4
65	Najuma Nazar, Palupallath (H), Chanayil, Edayapuram, Aluva - 683101 9447977777	28/16,28/14, 28/15,29/16-2
66	Thomas.T.Lukose S/o.T.J Lukose, Flat No.C123, DLF New Town Heights Opp.T.V Centre Seaport Airport Road, CSEZ .P.O, Kakkanad-682037 9349161011	440/1, 443/7, 446/7, 443/5, 443/1, 446/2, 446/3, 446/3,442/10,442/11,446/9-2,440/1, 440/1, 440/10, 443/4, 443/12, 446/10, 443/7-2, 446/1, 443/15, 442/7, 446/1-2
67	Anish John Manjumaran (H) Ashokapuram, Aluva 9400520217	305/4-3
68	Dileep kumar No.87, Souparnika (H) Kakkanad.P.O, Pin-682030 8330899088	494/9, 494/10

69	Abdul Samad.P.A Peringattu (H) Thottumugham P.O, Aluva - 683105 9846169900	67/2
70	Shyla Rahman Manappurath (H) Edayapuram, Aluva - 683101 9400723284 (Abdul Rahman)	....
71	Pushpakaran Puliyampuram (H), Edayapuram, Aluva - 683101 9946339884	22/13-4
72	Ashraf Kallungal (H) Thuruthy Lane, Thottumugham, Aluva-683101 9645273400	859/7A
73	Abdul Salam P.A Peringattu (H) Thottumugham P.O, Aluva - 683105 9846169900	67/2
74	Gigi Lalu Valaparambil (H), Machur, Kalady : 683574 9446470884	22/1-5
75	Rajan.K.V Kaipalathil (H) N.Edayapuram Aluva-683101 8281564663	22/1-3
76	Prasannan Palliparambil (H) Thekkumbhagam,	22/1-5

	Thripunithura 9446013796	
77	Usman.P.aA & Mahinkutty.PA Puthanpura (H), Kunnatheri Thaikkaattukara.p.o 9745505447	460/11-6
78	Prijukumar Kaipalathi (H) , N.Edayapuram , Aluva-683101 9447291912	22/3-3
79	P.K.Anilkumar Puthapurayil (H) Asha lane, Aluva - 683101 9847074184	215/3-2, 215/4-2
80	Rajan Pillai.P.R 6/239C, Green Hill Rd., Kollamkudimugal, Thrikkakara, Kochi 9446140767	450, 448, 439, 442
81	Abbas.T.M Thachavallathu, Aluva East-683101 9447187801	69/6
82	Dr.Faizal Kareem Vellukuzhi )H) Perumbavoor Rd., Aluva - 683101 9895864100	68/8
83	Nissar K.P.Aboobakker (late) Kanjirathingal (H), Mahilayam Jn. Thottumugham Aluva 9072477666 (Zaina)	68/5-6

84	Krishna Lal Mariyath Parambu Kallumadathil (H) Pachalam, Ernakulam Kochi - 682012 9037838665	22/1-5
85	Paulson.P.Joseph Pulickal (H), A shokapuram Aluva-683101	101
86	Rashida Hashim Meentharakal (H) Kunnatheri, Thaikkattukara.P.O Aluva 9656220281	435//6-5
87	Mehrunisa Mehra, Alappaat Cross Rd., Nr.Cochin Shipyard, Ernakulam Kochi - 682015 9847715567	449/10
88	Jafar Manakkadan Manakatt (H), Kunnatheri Thaikkattukara.P.O, Aluva 9656172474	
89	Abdul Rahman Thoppil (H), Thaikkattukara.P.O , Aluva 7306192728	450/9-7, 450/9-6, 450/9-5
90	Subair Hajir Meentharakal (H) Kunnatheri , Thaikkattukara.P.O Aluva - 683806 9961427600	451/2-2

91	Illiyaas Meentharakal (H) Kunnatheri, Thaikkattukara.P.O Aluva 9633253808	437/7-4,
92	Basheer Meentharakal (H) Kunnatheri, Thaikkattukara.P.O Aluva 9633253808	432/4,
93	Salmath Meentharakal (H) Kunnatheri, Thaikkattukara.P.O Aluva 9633253808	451/2
94	Avukkaru kutty & Ramla Manimpura (H), Neduvannur, Chovara.P.O Aluva - 683571 9400688309	450/8-2-2
95	Vasu Konatu (H), Manakkappady Ashokapuram , Aluva 9961707132	557, 8-6
96	Ajmal Thamarachalil (H), Manakkappady Ashokapuram, Aluva 7025925054	557/5, 2, 1-3, 1, 1
97	Thalhath Manakkaat (H), Kunnatheri, Thaikkattukara.P.O Aluva	456/3



	9847098184	
98	Hasan Pilla N.M Nedumparambil (H) Ashokapuram.P.O, Aluva - 683101 9961212548	556/7-2, 15
99	Biju Edavanaparambil (H), Ashokapuram.P.O, Aluva - 683101 9961168835	498/2
100	Anilkumar Pulickal (H) Manakkappady Ashokapuram, Aluva 9747151037	557/8-7
101	Omana Palakkaattil (H) Manakkappady Ashokapuram.P.O, Aluva 9061412331	557/8, 2, 3
102	P.K.Sasi Palapurath (H) Manakkappady Ashokapuram.P.O, Aluva 9048748770	557/10
103	Sanoj.P.K Pariyarath (H), Thaikkattukara.P.O Aluva - 683106 9995610682	559/1-6
104	Sumathi Narayanan Panamparambil (H) Snehadweep, Manakkappady Ashokapuram.P.O, Aluva 9961548196	559/7

105	Abdul kareem Naduparambil (H), Ashokapuram.P.O, Aluva-683101 9744493668	556/7-3  15-2
106	Velayudhan Parathikkaattil (H), Ashokapuram.P.O, Aluva-683101 9544818831	557/8-8
107	Basheer Thamarachalil (H), Manakkappady Ashokapuram, Aluva - 683101 9961445347	557/3,  6
108	P.J Paul Pallithura (H) Manakkappady Ashokapuram, Aluva - 683101 9447055666	499/6-1
109	Aliyar Mezhukkathil (H) Ashokapuram P.O Manakkappady 9446744468	557/4
110	Ajmal Muttatchalil (H) Edathala P.O Aluva-683516, 9961961762	557/5-2
111	Noushad.S.S Srambickal (H) Chnangampuzha Nagar.P.O Cochin - 33 9846054271	450/2-3-2
112	Rabiya Mukalath (H),	450/9-3

	Pallilamkara Nr.Pipeline Rd., HMT Colony P.O Kalamassery 9895602033	
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**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 and agricultural land. The land owners who are doing business in the affected structures and those who are given for rent revealed in the survey that the income from the project area is the major income of their family.

Out of the 117 land owners surveyed 11 families shared that their major source of

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income will be affected due to the project out of which 5 families will lose their business, 4 families will lose the income from the agricultural land and 2 will lose the rent from the affected structures. Besides 8 tenants who have been done business in the affected land and 12 employees working in the affected shops/firms will lose their livelihood.

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

SIA unit could identify 8 tenants who have been done business and 12 employees who have been working in the project area for 3 and more years.

Table 5.6.1.1 Name and Address of the Tenants Depending on the area for 3 and more years

Sl.No.	Name & Address
1	Nadirsha Pallikuzhy House Thottumugham P.O. Aluva
2	Jency Erelithara House Papali 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 Cement Godown

### 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 9 families are having coconut farm (10 and above trees), 16 families doing Banana cultivation, 5 families doing tapioca cultivation and 4 families are having vegetable garden in the affected land. Besides the above, the trees in the project area may be cutdown 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	62
Arecanut	5

Teak	57
Coconut	214
Mango tree	21
Mahagani	1
Nutmeg	139
Mangostin	5

## **CHAPTER 6**

### **SOCIAL ECONOMIC AND CULTURAL PROFILE**

#### **(AFFECTED AREA AND RESETTLEMENT SITE)**

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

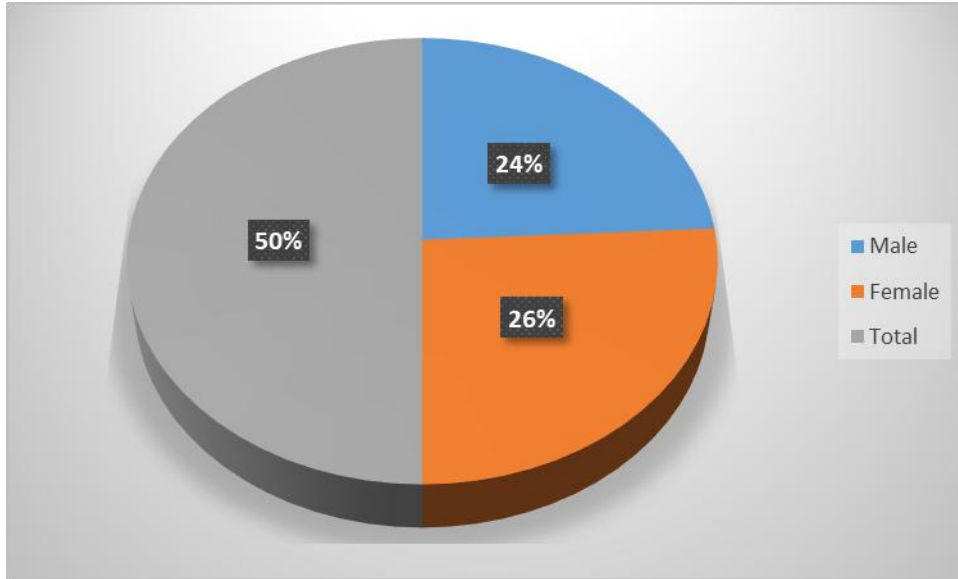
This chapter contains information about the socio-economic and cultural aspects of the affected families. It includes the demographic details, economic status, vulnerability among the affected families, local economic activities in the area, enumeration of the livelihood affected families and other related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

Social Impact Assessment Unit could identify 117 project affected land owners belong to 112 families through the survey conducted in the affected area. The SIA unit studied the socio-economic background of all families through a socio-economic survey by using a specific questionnaire. This chapter analyzes the socio-economic background of the 112 families of the project affected land owners.

### **6.1 Demographic details of the population in the project area**

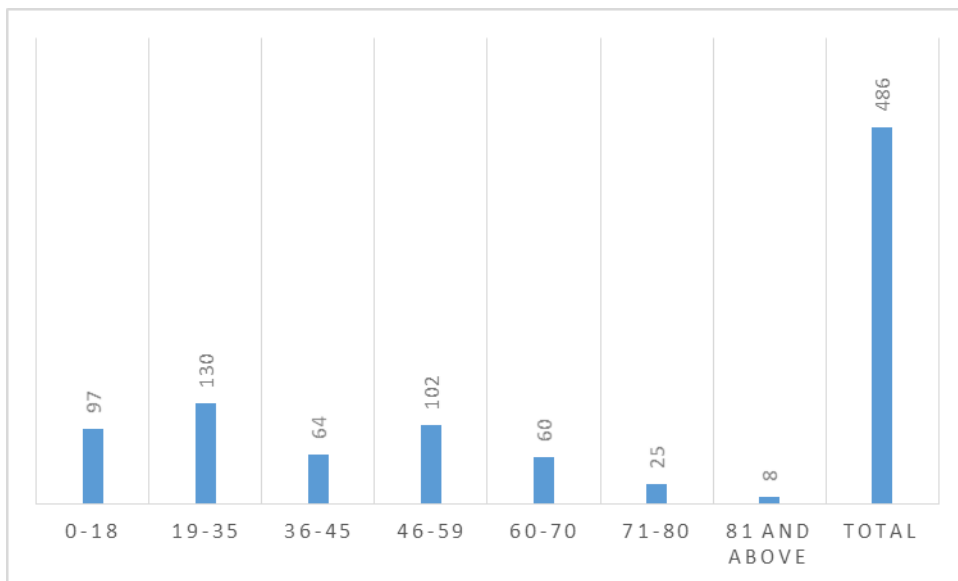
Among the project affected families only 10 are staying in the land proposed to be acquired for the construction of Section A package 2 & 3 of the 2<sup>nd</sup> phase of Seaport-Airport road project. The following details are about the demographic situation of the 112 families of the project affected land owners.

#### **Figure 6.1.2 : Demographic details of the project affected families**



Out of 486 total population of the affected families 235 (24%) are male members and 251 (26%) are females.

**Figure 6.1.3.: Age of the Project Affected Family Members**



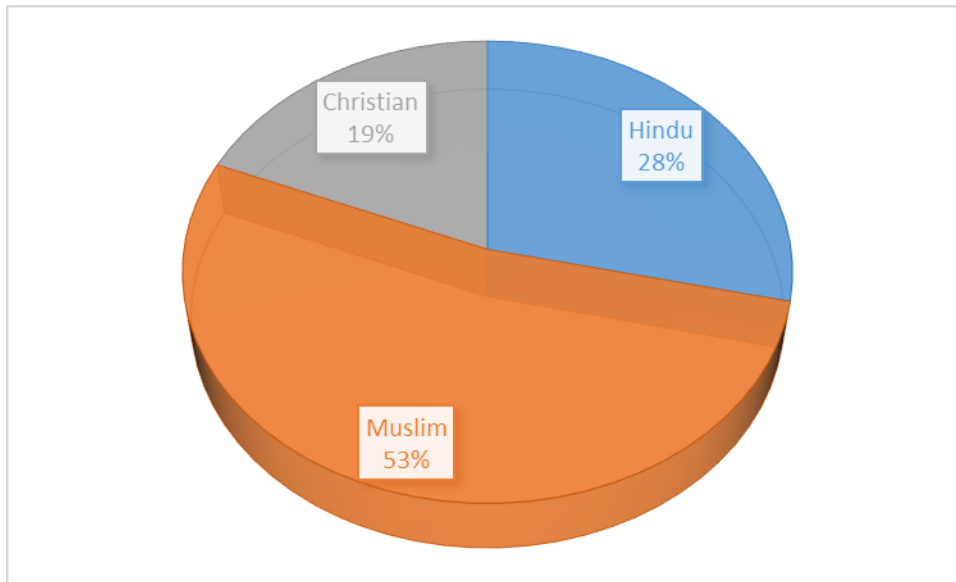
Among the total 486 project affected family members 97 are in the age group of 0-18 and 130 are in the age group of 19-35. 64 family members are in the age group of 36-45 and 102 are in the age group of 46-59. 60 family members are in the age group of 60-70, 25 are in the age group of 71-80, and 8 are in the age group of 81 and above.



102 members are in the age group of 46-59. There are 93 elderly members in these families out of them 60 are in the age group of 60-70, 25 members are in the age group of 71-80 and the remaining 8 members's age is 80 and above.

### Social Background of the Project Affected Families

**Figure 6.1.3: Religion of the Project Affected Families**



The figure 6.1.3. depicts that majority of the project affected families is 59 (53%) families belong to Muslim religion, 32 (28%) families belong to Hindu religion and the rest ie 21 (19%) families belong to Christian religion.

**Figure 6.1.5 : Social Group of the Project Affected Families**

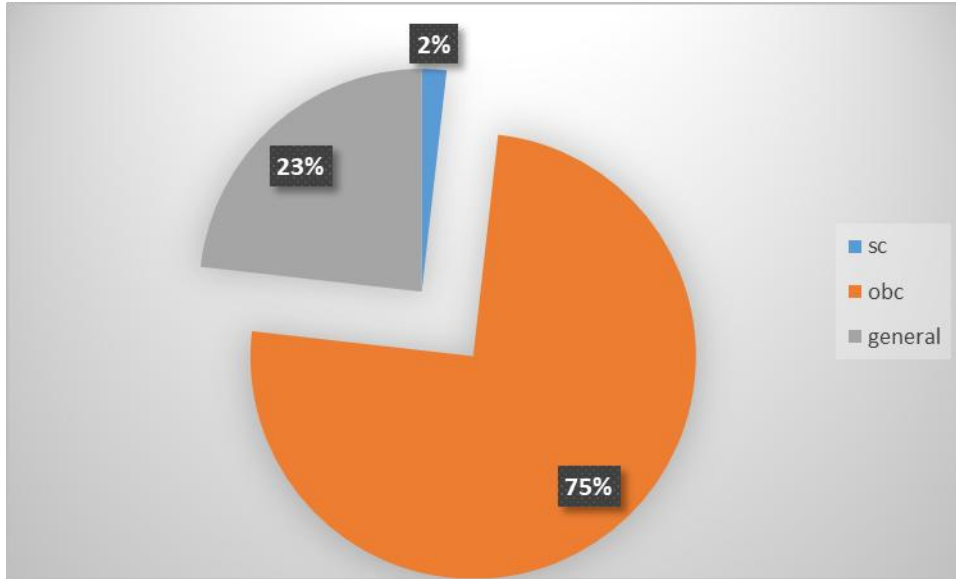


Figure 6.1.4 shows that majority of the affected families ie 84 (75%) are belong to Other Backward Community, 26 (23%) affected families belong to General category and the remaining 2 (2%) families belong to Scheduled Caste Community.

## 6.2. Income and poverty levels

Based on the Public Distribution System it is understood that out of the 112 project affected families 9 families possessed pink colour ration card, 54 families possessed blue colour ration card, 45 families possessed white colour ration card and 2 families possessed yellow colour ration card.

**Figure 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	9	11
5001-10000	24	39
10001-15000	13	20
15001-25000	31	22

25001-30000	7	5
30001-40000	8	7
40001-50000	87	1
50001-75000	7	2
75001-1 lakh	1	1
2 lakhs and above	2	1

The figure 6.2.1. does a comparison about the families' monthly income and expenses. 9 families revealed that they earn in between Rs.1000-5000 only and 11 families shared that their monthly expenses come in that range. 24 families having the monthly income between Rs.5001 and Rs.10,000/- and 39 families spend the same amount. While 13 families earn in between Rs.10001-15000, 20 families spend the said range of amount. Rs.15001-25000 is the earning of 31 families and expenses of 22 families. Rs. 25001-30000 is the earning and expenses of 7 families and 5 families respectively. Number of families comes under the range of Rs.30001-40000 as the earning and expenses are 8 and 7 respectively. While 8 families get a monthly income of Rs.40001-50000, one family is having the expenses in that range. The number of families is 7 and 2 are in the range of Rs.50001-75000 as earning and expenses. 1 each family is in the range of Rs.75001-1 lakh as their earning and expense. There are 2 families earn Rs. 2 lakhs and above and 1 family spends that much amount.

### **6.3 Vulnerable groups**

97 members of the directly affected families are below 18 years of age and there are 93 elderly i.e. in the age of 60 and above among the affected population. There are 27 widows and 2 widowers among the affected family members. 2 project affected families belong to Scheduled Caste community. The survey also reveals 35 family members are suffering from major diseases like cardiac, kidney failure, cancer etc.

### **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. Among the 117 land properties and 112 land owners 41 are open land with no specific usage presently, 33 are using for agricultural purpose, 32 are using for residential purpose and 7 are using for business purpose. Out of the 117 land owners surveyed 11 families shared that their major source of income will be affected due to the project out of which 5 families will lose their business, 4 families will lose the income from the agricultural land and 2 will lose the rent from the affected structures. Besides 8 tenants who have been doing business in the affected land and 12 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 lands in which coconut, tapioca, nutmeg etc are cultivated. 5 shops and the agriculture of 34 families 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. Agricultural activities are undertaken in few land properties. Most of the affected families are not staying in the said land. It is understood that the business of 5 families is only affected due to the project.

#### **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 organizations 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 organisations 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 2<sup>nd</sup> phase of Seaport-Airport road construction ie 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 is 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 4 Public Hearings are proposed to be held in different timings as per covid 19 protocol 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 is expected to be present. After presenting draft report, the project affected families and stake holders get opportunity to suggest additions and deletions required in the report. The anxieties raised by the project affected families regarding the project and land acquisition will be e replied by the Land Acquisition Officer and requiring body. It will be a venue for the affected families to share their anxieties and views about the project and land acquisition. The Draft Report of SIA which was prepared on the basis of the scientific assessment of the data received through the various stages of study will be presented in the public

hearing. The affected families and the stake holders will get an opportunity to suggest additions or deletions to the 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:

- 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 RFLTLARR 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 will be taken before the evacuation of the houses to not 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 will 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.
- 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
- 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 shall be ensured



### **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. Nobody has suggested any alterations or additional measures during the SIA study.

### **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

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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 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**

<b>Sl. No.</b>	<b>Impacts</b>	<b>Impact Management</b>	<b>Time Plan</b>	<b>Monitoring Indicators</b>
1	Loss of land	Provide compensation as per the 1 <sup>st</sup> schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government	<b>Time frame as per the Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.</b>	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 <sup>st</sup> 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	Provide compensation and R&R package as per the 1 <sup>st</sup>		Speedy

	including displacement	&2 <sup>nd</sup> schedule of RFCTLARR Act 2013 and the related policies of Kerala State Government		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/in come	Provide R&R package as per the 2 <sup>nd</sup> 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 <sup>st</sup> &2 <sup>nd</sup> schedule of RFCTLARR Act 2013 and		Resettlement procedures

		the related policies of Kerala State Government		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 <sup>st</sup> & 2 <sup>nd</sup> 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		Undisturbance of environment of the area
7	Insufficient 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	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

	affected			project construction period
9	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
10	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, Nedumpassery is

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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

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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 20<sup>th</sup> 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

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

which reveals that the total extend of land requires for the project is 30.3590 hectares approximately. The SIA unit could identify 117 owners of the affected land who belongs to 112 families. Through the Social Impact Study, the SIA unit could understand that the project requires rehabilitation and resettlement as it causes displacement of 10 families (7 residence only, 2 Residence &shop, 1 Residence & worship place), evacuation of 2 shops, livelihood loss of 31 individuals, lose of agriculture of 34 families and lose of properties attached with the land. 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

# **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
- 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**

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The proposed project is the land acquisition for section A package 2 & 3 of the 2<sup>nd</sup> phase of Seaport-Airport road construction ie from NAD junction to Mahilalayam Junction. On completion of Phase- II it will forms an extension of Seaport-Airport 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 Seaport-Airport 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 Seaport-Airport 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 117 owners (112 families) of 113 affected land properties. Out of these families 10 families have to be displaced (7 residence only, 2 Residence &shop, 1 Residence & worship place) from the affected land. Besides evacuation of 2 shops, livelihood loss of 31 individuals, lose of agriculture of 34 families and lose of properties attached with the land are been identified as impacts. All the families surveyed have a favourable attitude towards the project as it causes the development of the region.

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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 will be taken before the evacuation of the houses to not 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 will 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.
- 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

- 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 shall be ensured

## 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