

**Social Impact Assessment Study  
Of  
Kochi Metro Rail Extension Additional  
Acquisition**

**Kakkanad Village  
Kanayannoor Taluk  
Ernakulam District  
(0.0380 Hectares)**

**Final Report**

**Requisition Authority**

**KOCHI METRO RAIL LIMITED**

By  
**KERALA VOLUNTARY HEALTH SERVICES**  
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**ABBREVIATIONS**

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

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## **CHAPTER 1**

### **EXECUTIVE SUMMARY**

#### **1.1. Introduction – Project and Public purpose**

The Kochi metro rail project is the first metro rail project in the state. After one year of its operation, assessments show that it brings a new traffic and travel culture to the city and to the State. The volume of passengers using metro rail for their daily travel is increasing day by day. Kochi Metro Rail Corporation and Government of Kerala are expecting a jump in passenger's volume

by establishing full capacity operation after COVID prevention lockdown. For availing Metro rail facility to more people especially those who are working in Government offices, Public limited Companies and Special Economic zone in Kakkanadu Government has a plan to extend Metro Rail to Kakkanadu from JLN stadium Kallor. As a first step Government decided to widen the existing Palarivattom – Kakkanadu road (civil line road). Through the first phase of notification land acquisition process of 0.9398 hectare of land in Kakkanadu Village is in progress. The proposed additional acquisition aimed to fill the missing gaps in the first phase acquisition. The requisition agency claimed that the proposed additional acquisition is for strengthening the road safety measures and establishing smooth access to sub roads and approach roads. After assessing the socio-economic benefit of the Kochi Metro rail extension project and its' present progress the Government of Kerala notified the additional acquisition for land acquisition process of public purpose.

## **1.2 Location**

The project location is defined for the study is both sides of Media Academy to Info park reach of Seaport-Airport road consisting of about 7 km length coming under Thrikkakkara Municipality. The project area is in Kakkanadu village. The estimated land for acquisition for the proposed project is 0.0380 Hectares. For the social impact study, the whole villages are considered as the buffer zone of the impact and directly affected areas and structures are considered as key impacted zone.

The population of study area is 5000- 6000 as per Census 2011 figures. The study area population has been estimated as 7,000 for the year 2018 assuming growth rate of 1 % per annum.

The proposed project aimed to widening the existing road in selected areas in Media Academy to Info Park reach of Seaport Airport Road to ensure smooth road traffic, road safety, and free access to sub roads and effective use of approach roads during and after construction of Kochi Metro rail extension from JLN stadium to Info Park. The road in which the acquisition is proposed is one of the most important roads and going through the densely



populated area of the city. The project location is 3 km from Ernakulam North Railway station and 23 km from Kochi International Airport. The project area is totally commercial in nature and having private, government and Cultural properties. The demography of the population shows that an almost equal proportion of Hindus, Muslims and Christians. The middle-Income population is the dominant socio-economic community of this location.

### **1.3 Size and Attributes of Land Acquisition**

#### **Land Acquisition Authority**

Land acquisition Special Tahsildar office (Kochi Metro) - 2 prepares the acquisition details including land sketch and extent of acquisition etc. Boundary stones were laid for proposed acquisition lands. Deputy Collector (LA), Ernakulam is Monitoring the Acquisition process for District Collector.

#### **Details of project affected families**

Eleven Title holders and four Non- title holder (tenet) affected by the project. All are economically middle or upper class. All social indicators show that the affected people are socially and economically in middle and upper middle-class status. All are having commerce and trade as their occupation. The monthly income ranges from Rs.25000-1,00,000. The literacy status show that all are above 10<sup>th</sup> standard. No one belongs to socially vulnerable cast. The average family size is 4.3.

Four non-title holders are affected by the project. Shops and establishments are the non-title properties affected. The demographic details of the project affected non-title holders' shows that all are male and having marital status. The educational qualification details show that all are having better education qualification i.e. Bachelor's degree and above. The religious distribution shows that all are Hindus.

#### **Details of the acquiring land**

The total land acquiring for the project is 0.0380 Hectare in Kakkanad village. One residential land and ten commercial lands

are affected. But considering the commercial importance 100% land is commercial. No agricultural land affected by the project.

### **Socio Economic and Cultural Profile**

The Socio Economic and Cultural profile of the area shows that all title holders are holding the affected land more than 15 years. The occupational distribution shows that all title holders are doing own business economic status shows that all title holders are having a monthly income of more than Rs 25,000. The land holding pattern shows that 35% title holders are having total holdings less than 50cents. 45% are having 50cents -1acre. 20% THs is having more than 1 acre of land. No scheduled cast or tribe family holding land in the project affected area.

Economic distribution of the Non-Title holders shows that all of them are having a monthly earning of more than Rs.25, 000 per month. Fifty two percent of non-title holders are holding their business in the affected structure in more than 25 years. All NTHs are residing within 5 KM radius of their business establishments or work places. The age distribution shows that 25% of NTHs are having age of more than 60 yrs. 25% are in 51- 60 years. 50% are in the age of less than 25years.

### **1.4 Alternatives**

Sl.no.	Alternatives	Remarks
1	The proposed additional acquisition is an integral part of the previous acquisition for the Metro rail extension project; therefore, scope for alternative suggestions are very limited except the cancellation of the additional acquisition or minimize the area of acquisition.	The requisition agency claimed that the proposed project is developed based on the technical study after the first phase of acquisition. No alternative suggestions received except the request of cancellation of the project.

Table 1.1

## 1.5 Social Impact

Loss of land of eleven title holders and safety thread of a residential house are the major impact of the project. Due to the very close excavation of frontage portion of the residential House, the safety of the structure is in high risk. Due to this the residential house categorized as partially affected. Four commercial establishments may face business loss during the project implementation. In the case of Business establishments, it is very early to assess the actual impact. None of the title holder displaced from the area due to the project. But one of the title holders who is having commercial establishment in the affected holding is facing multi loss. Apart from the loss of his land many of the essential facilities attached with his commercial building like parking area, drinking water lank, fire safety corridors etc. All this loss may affect the grading of the commercial establishment (Hotel) also. The acquisition will widen the existing approach roads and it may strengthen the access to neighboring holdings.

## 1.6 Mitigation Measures

Sl.No	Risk Assumed	Approach	Mitigation Strategy
1	Safety of Residence after excavation.	Rehabilitation/ Compensation	Compensate the loss. Develop a special rehabilitation package. Conduct technical study and incorporate the plan to ensure safety of the residential building.
2.	Loss of land	Compensation	Compensate the loss.
3	Loss of Building	Compensation and Resettlement	Compensate the loss. Case by case approach in resettlement. Eg Relaxation in municipal Act etc. Grievance regarding the valuation and missing of structure will redress in time bound manner.
4	Loss of part of Building	Compensation and Resettlement	Compensate the loss. Case by case approach in resettlement. Eg Relaxation in municipal Act etc. Grievance regarding the valuation and missing of

			structure will redress in time bound manner.
5	Loss of structures	Compensation	Compensate the loss. Grievance regarding the valuation and missing of structure will redress in time bound manner.
6	Loss of Part of structure	Compensation	Compensate the loss. Grievance regarding the valuation and missing of structure will redress in time bound manner.
7	Loss of Business	Compensation	Minimize the loss and Compensate the loss.
8	Loss of Employment	Compensation	Minimize the loss and Compensate the loss.
9	Loss of Parking Areas	Compensate	Compensate the loss. Location based common parking area/pay and park complexes etc. can be considered in resettlement package.
10	Loss of access to properties	Control	Prepare a resettlement plan in consultation with Project Affected Families. The plan for resettlement of access will include it in the final Detailed Project Report. Case by case plan will be informed well in advance before starting project construction.
11	Loss of Access/Roads	Control	Prepare a resettlement plan in consultation with Project Affected people.
12	Loss of access to sub roads.	Control	Prepare a resettlement plan in consultation with Project Affected Families. The plan for resettlement of access will include it in the final Detailed Project Report. Case by case plan will be informed well in advance before starting project construction.

13	Loss of drinking water source.	Control/Avoided	Protect as possible.
14	Loss of essential Amenities	Control	Control/Compensation
15	Loss of community properties	Control	Resettlement
16	Loss of Government Properties	Control	Resettlement
17	Formation of un useful land or bit lands	Control	Acquire and compensation.
18	Loss of Livelihood	Resettlement	Compensation
19	Involved in land acquisition process	Control	Ensure PAP participation in the whole process and maintain sustainable and efficient communication channels between Requisition and Land acquisition authorities between PAPs
20	Grievance	Control	Functional grievance redressal committee at village and district level.

### **Gravity of Impact and level of mitigation Possible**

**Table.1.3**

Sl. No	Impact	No. of Properties	Level of Possible Mitigation	Level of Impact
1	Displaced Parking Area	2	Minimum	High
2	Affected Parking Area	1	Medium	Moderate
3	Affected Residential Building	1	High	Low
4	Affected Building	1	High	Low
5	Displaced Structures	6	Minimum	High
6	Affected Access	1	High	High

### **1.7 Assessment of Social Costs and Benefits**

Since no economically vulnerable title holders identified as project affected and only one residential property affected the impact of the project seems to be minimum. Maximum total hectares of land are required from different spots of both sides of the Media Academy - INFO Park reach of Seaport-Airport road. From Kakkanad village 0.0380 hectares of land are needed to be acquired.

The social Impact Assessment Survey finds that one residential house may affect by the necessary excavation for the proposed project. Others are losing land. But one commercial establishment is losing their prime frontage which is inevitably attached to its grading and safety. Another commercial establishment is partially losing their frontage. Others are losing their land only. For the rehabilitation of the affected residence technical advice is necessary. (i.e. Building retaining wall may protect the residence).

The road widening and extension of metro rail to INFO Park area will reduce travel time and ease traffic jams in the project area. The road widening and establishing of metro rail will reduce the risk of accidents because this area is accident prone area. The reduction of traffic jams will improve the access of public to the

location and it will improve commercial activities. The project will not have any significant adverse impact on the existing residential area.

Since they own the land in the side of an important public road with a calculated risk of widening of the road and other development initiative, they were mentally prepared to face the consequences of the acquisition of land whenever required by the govt.

Resettlement of the access will get the priority while planning mitigation. The affected title holders are aware about the importance of the project and willing to surrender their land if an acceptable mitigation plan is implemented. No visible impact noticed in Lifestyle, Culture and Quality of life, Cohesion and Health of Title Holders and Community in the project area due to the project.

The residents in the project area are organized under residence association and shop owners have their organizations like Vapari Vyavasayi Ekopana Samithi and Vapari Vyavasayi Association. These organizations are strong enough to bargain for the rights of their members and actively involved in addressing the grievance of the project affected people. District administration is having better rapport with all these organizations. This will already formulate a supportive environment to mitigate the impact through participatory rehabilitation and resettlement strategies. These organizations are also supporting Government in channelizing communication regarding the project. Strengthening the communication, involvement and collaboration of these organizations in the land acquisition and project implementation will further strengthening the mitigation efforts of Government.

After careful examination of various positive and negative impacts it has been found that the proposed project would be beneficial for local community at large and the traffic system of the city of Kochi. The positive outcomes of the proposed plan of road widening and extending the metro rail to Info Park far outweigh the possible negative impacts.

Special resettlement packages will be formulated for those who have partially affected buildings and losers of parking area.

A minimum duration of project implementation will minimize the impact of the project and maximize the mitigation. A comprehensive plan to protect the drinking water sources coming under the acquisition area will also reduce the impact of acquisition.

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

The proposed acquisition does serve public purpose. There was an overwhelming consensus among people, people's representatives, residents' associations, trade associations too with regard to the benefits accruing due to the proposed project.



## **CHAPTER 2**

### **DETAILED PROJECT DESCRIPTION**

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

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

Kochi, the commercial hub of Kerala, is already experiencing signs of urban growth pressures. As per World Bank, Kochi is recognized as one of the seventeen major industrial cities of India and an easy city to start business in India. This decade is witnessing huge investments in the region like International Container Transshipment Terminal at Vallarpadam, Info Park at Kakkanad, Special Economic Zone by NEST, LNG terminal, Electronic hardware park. Among the districts, Ernakulum district contributes the highest portion (14.47) of Kerala's GDP. Being a

center of excellence of education and a destination for major industries and establishments like High court, Stock exchange, Kochi shipyard, Spice board etc. attract significant floating population from the neighboring districts for their livelihood. In addition to this, Kochi has been emerged as a major tourist destination to domestic as well as international tourists. Recently opened mall by Lulu group has multi folded the number of visitors in the city. Urbanization has been observed as a new phenomenon with a quickening pace in the last 15 to 20 years. Kochi Corporation with a population of 602046 in 2011 (Census 2011) will grow at an annual growth rate of 1.0 during 2011- 2031 (Development Plan for Kochi city region Draft (2031)). Kochi city region comprising two municipalities and surrounding local bodies with an area of 369.72sq.km will carry a population of 22.73 lakhs by 2031(Development Plan for Kochi city region {Draft (2031)). Roughly 68 percentage of the population, compared to about only 48 percentage in 2001, lives in urban areas in the Ernakulam district which is far beyond the state average. The urban population in Ernakulam is presently estimated to increase 4.2 percentages annually.

Rapid growth of India's urban population has put enormous strain on transport systems. The vehicle population in metropolitan cities is increasing tremendously in recent years leading to congestion in urban areas Construction of public transport facilities, especially Metro rail, Mono rail are under progress in many major cities.

Smooth and safe traffic is an indicator of a nations' sustainable development. Rapid growth of India's urban population has put enormous strain on our transport systems. The vehicle population in the country especially in metropolitan cities is increasing tremendously in recent years. This leads to heavy traffic congestion in urban areas and it is considered as one of the major causes of slow economic growth of nations. This is also termed as a potential cause of road accidents. Inability to forecast travel time accurately, leading to drivers allocating more time. Wastage of fuel due to increased idling, acceleration and braking increasing air pollution and emissions. All these lead to heavy economic lose and public health issues. Widening of existing roads and adopting new generation traffic system like metro rail are the best solution for

traffic problems due to heavy volume of vehicles in cities and urban areas. But major widening of existing roads in cities is not possible due to large volume of displacement of residents and business establishments. This compelled Government's to go for Construction of viable public transport facilities, like Metro rail, Mono rail. India is having one of the fastest growing countries in the world. Studies are shows that the next two years of growth in traffic has made India become the second largest Rail and Road Traffic network after China. The state of Kerala also shows the same trend in Road and Rail traffic. The Kochi metro rail project is the first metro rail project in the state. After one year of its operation, assessments show that it brings a new traffic and travel culture to the city and to the State. The volume of passengers using metro rail for their daily travel is increasing day by day. Kochi Metro Rail Corporation and Government of Kerala expecting a jump in passenger's volume after completion of the expansion project up to Petta, Thrippunithura. For availing Metro rail facility to more people especially those who are working in Government offices, Public limited Companies and Special Economic zone in Kakkanadu Government has a plan to extend Metro Rail to Kakkanadu from JINI stadium Kalloor. The proposed project aimed to widening the existing road in selected areas in Media Academy to Info Park reach of Seaport Airport Road to ensure smooth road traffic, road safety, and free access to sub roads and effective use of approach roads during and after construction of Kochi Metro rail extension from JLN stadium to Info Park.

### **2.1.1. Implementing Agencies**

#### **2.1.1.(a). Kochi Metro Rail Ltd (KMRL)**

Kochi Metro Rail project has been planned by Government of Kerala. Special Purpose Vehicle called Kochi Metro Rail Ltd. (KMRL) is formed for the implementation, operation and maintenance of the Metro Project. Around 25 km length metro line with Maintenance Depot at Muttom will be developed between Aluva to Vadakkekotta.

#### **2.1.2. Land Acquisition Authority**

Land acquisition Special Tahsildar office (Kochi Metro) - 2 prepares the acquisition details including land sketch and extent of acquisition etc. Boundary stones were laid for proposed acquisition lands. Deputy Collector (LA), Ernakulam is Monitoring the Acquisition process for District Collector.

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

The proposed additional acquisition aimed to fill the missing gaps in the first phase acquisition. The requisition agency claimed that the proposed additional acquisition is for strengthening the road safety measures and establishing smooth access to sub roads and approach roads. After assessing the socio-economic benefit of the Kochi Metro rail extension project and its' present progress the Government of Kerala notified the additional acquisition for land acquisition process of public purpose.

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

Sl.No.	Risk Assumed	Approximate Quantity
1.	Loss of Part of land	11
2.	Loss of Structures	1
3	Loss of Part of Structures	2
4	Loss of Parking Area	3
5	Loss of access/roads	1
6	Loss of part of access/roads	6
7	Loss of Access to sub roads	1
8	Loss of drinking water sources	1
9	Loss of Government properties	2

### **2.3.1. Project Location**

The project location is defined for the study is both sides of Media Academy to Info park reach of Seaport-Airport road consisting of about 7 km length coming under Thrikkakkara Municipality. The project area is in Kakkanadu village. The estimated land for acquisition for the proposed project is 0.0380 Hectares. For the social impact study, the whole villages are considered as the buffer zone of the impact and directly affected areas and structures are considered as key impacted zone.

The population of study area is 5000- 6000 as per Census 2011 figures. The study area population has been estimated as 7,000 for the year 2018 assuming growth rate of 1 % per annum.

The proposed project aimed to widening the existing road in selected areas in Media Academy to Info Park reach of Seaport Airport Road to ensure smooth road traffic, road safety, and free access to sub roads and effective use of approach roads during and after construction of Kochi Metro rail extension from JLN stadium to Info Park. The road in which the acquisition is proposed is one of the most important roads and going through the densely populated area of the city. The project location is 3 km from Ernakulam North Railway station and 23 km from Kochi International Airport. The project area is totally commercial in nature and having private, government and Cultural properties. The demography of the population shows that an almost equal proportion of Hindus, Muslims and Christians. The middle-Income population is the dominant socio-economic community of this location.

#### **2.4. Phase of project construction**

Process of Land Acquisition started and boundary stones fixed.

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

Not Applicable

#### **2.6. Need for ancillary infrastructural facilities.**

Not Applicable

#### **2.7. Work force requirements (temporary and permanent).**

Not Applicable

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

Not Applicable

**2.9. Applicable law and policies.**

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

## CHAPTER 3 STUDY APPROACH AND METHODOLOGY

### 3.1 Background

As per the Notification C12-735/2019 Dated, 20/12/2020 Government of Kerala has entrusted Saju.V.Itty, Executive Director Kerala Voluntary Health Service and his Team as the SIA Unit to study the Social Impact Assessment on the land acquisition of Development of Sea Port Air Port Road for Kochi Metro Rail Project

### 3.2. Social Impact Assessment Team – Profile of Team Members

Sl. No	Name & Address	Designation in the SIA Team	Profile
1	Saju V. Itty	Team Leader	27 years experiences in social work, social survey including R&R experience in KSTP & Tsunami Rehabilitation. Conducted social research study on health child rights and rehabilitation & resettlement. Conducted SIA study for five sub projects of Kannur International Airport and Kanjirappally Bypass etc.
2	Rakesh R Nair	R & R Specialist & Social Investigator	12 years experiences in social work including social research, R & R activities and community mobilization.
3	Smitha R	R & R Specialist & Social Investigator	17 years experiences in social work including social research, R & R activities and community mobilization.

4	M.Ibrahimkuty	Sociologist	Rtd. Joint Director, Social Welfare Board.35 years of experience in social work.
4	Sheeba Johnson	Data Analyzer & Data entry	27 years experiences in social work and data entry operation.
5	N.VijayakumaraPilla	L.A. Consultant	Rtd. Revenue Inspector
6	O.C.Chandi	L.A. Consultant	Rtd. Village Officer

### **3.3. Study Approach**

The land which proposed to be acquired for the project is 0.0380 hector owned by 11 Tittle Holders of Kakkanadu village. Stake holder analysis was conducted and find out key stake holders and their interest and involvement in the proposed acquisition process. After the secondary data collection Social Impact Assessment Unit developed a questionnaire for social survey and visited all Tittle Holders and collected opinion, family details, Socio-Economic details and suggestions. Apart from this SIA team has conducted discussion and consultation with Local Body Representatives and local public and recorded their suggestions and opinion. Special Case studies were prepared for selected cases. The study also used transit walk and observation visit to crosscheck the suggestions and grievance which were recorded. After that the public hearing was conducted on July 13, 2020.

### **3.4. Methodology& Tools**

The study team reviewed the relevant and available documents in Special Thahasildar (LA-Metro) office, Kakkanadu. SIA unit had also examined the records and documents and made a site visit along with the land revenue officials for area identification and information dissemination. SIA team had also conducted a one to one discussion and consultation with all Tittle Holder. Although SIA team had collected details by using pre prepared questionnaire. SIA team also had discussion and consultation with Members of Legislative Assembly, Local Body Representatives and



local public. Special Case studies were prepared for selected cases. The study Team also used transit walk and observation tools to crosscheck the Suggestions and grievance which were recorded.

### **3.5. Sources of data collected**

- a) Office of the Special Tahsildar (LA-Metro) Kakkanadu
- b) Trikkakkara Municipality.
- c) Taluk Office - Kanayannoor
- d) Village office - Kakkanadu.
- e) KMRL Office, Kochi.
- f) Project Affected Families and Tittle Holders.
- g) Local body Leaders

### **3.6. Process and Schedule of Activities**

- 03/01/2020 – Government of Kerala entrusted Mr.Saju.V.Itty, Executive Director, Kerala Voluntary Health Services to conduct the SIA study
- 25/01/2020 to 28/01/2020- Secondary Data Collection.
- 30/01/2020 to 03/02/2020 – Mapping of Stake Holders
- 05/02/2020 to 07/02/2020 - Social Survey for Social Impact Assessment Study.
- 12/02/2020 to 14/02/2020 - Transit Walk, Observational Study and Case Studies
- 16/03/2020 - Draft Report Submission.
- 13/07/2020 – Public Hearing
- 17/07/2020 – Final Report

### **3.7. Points Raised during Individual and Group Discussion with Tittle Holders on 12/02/2020**

- 1) Time bound acquisition process will mitigate the impact.
- 2) The present level of Access to be resettled during and after the implementation of the project.
- 3) Community Properties like waiting sheds will be resettled.
- 4) Reasonable compensation will provide for land, property and business loss.

- 5) Regular information will provide on progress of acquisition.
- 6) Alignment will reexamine and save buildings and structures as much possible.
- 7) Rehabilitation and Resettlement process will be well informed and ensure community participation and consultation.

### **3.8 Public Hearing -Hotel Park Residency, Kakkanadu on 13-07-2020**

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

SIA Unit took special care to inform the affected people in the area about Public Hearing by taking various steps like Notification for conducting public hearing as per Form 5 Rule 14 (1) of the RTFCTLARR Act, 2013. The notification was published in two Malayalam News Papers Kerala Koumudi and Janayugam on 28/06/2020. A notice has been served directly for informing about the public hearing. In continuation of this all project affected title holders contacted through phone calls. The copy of notice was served to Grama Panchayat Office, Ward Members, Village Office, Deputy Collector (LA, Eranakulam). Adequate copies of the SIA draft report and summaries were made available on the day of the public hearing. The major highlights of the study were presented in local language by Chairman, SIA Unit.

<b>SL. No.</b>	<b>Points Raised</b>	<b>Remarks</b>
	Mr. George kutty, Palal expressed his opinion that the proposed acquisition is no necessary. He complained that due to the acquisition in his property increases the curve in the proposed	The representative of the requisition agency explained the importance of the proposed additional acquisition. He

	alignment. He requested to stop the acquisition process in his land.	claimed that the proposed additional acquisition will widen the approach road and strengthen the access facilities to neighboring plot. In his view the proposed additional acquisition may benefit the tittle holders near by the approach road including the project affected tittle holder.
	Sri Jine Joseph (Aryas Hotel) expressed solidarity towards the concerns and points raised by Mr. George	Same as above
	Mr. Arjun Kuruvila, Hotel Park Residency list out the impact on his commercial establishment due to the proposed additional acquisition. He complained that because of the acquisition the grade of the commercial establishment (The Hotel) is going down and it may affect the business. He also requested necessary relaxation in building rules to maintain his property.	The affected commercial establishment is situated very close to the seaport airport road. The proposed metro extension project suggesting the area is for metro station. Therefore, the project may increase the commercial value and commercial importance of the property own by the title holder.
	Sri. K K Krishnan, Kannankery explained the safety threat faced his house due to the acquisition. He requested compound wall to mitigate the impact.	The present excavation going on his land is part of the first face acquisition. Kochi

		Metro Rail Limited will give technical support to strengthen the safety.
	Sri PK Vijayan, Sahara Group requested a time bound completion of the project and minimize the business loss	Report also recommended the same.

## **CHAPTER 4 LAND ASSESSMENT**

### **4.1. Description of the land**

The total land acquiring for the project is 0.0380 Hectare in Kakkanad village. One residential land and ten commercial lands are affected. But considering the commercial importance 100% land is commercial. No agricultural land affected by the project.

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

The proposed project aimed to widening the existing road in selected areas in Media Academy to Info Park reach of Seaport Airport Road to ensure smooth road traffic, road safety, and free access to sub roads and effective use of approach roads during and after construction of Kochi Metro rail extension from JLN stadium to Info Park. The road in which the acquisition is proposed is one

of the most important roads and going through the densely populated area of the city. The project location is 3 km from Ernakulam North Railway station and 23 km from Kochi International Airport. The project area is totally commercial in nature and having private, government and Cultural properties. The demography of the population shows that an almost equal proportion of Hindus, Muslims and Christians. The middle-Income population is the dominant socio-economic community of this location.

#### **4.3. Total land requirement for the project.**

The total land acquiring for the project is 0.0380 Hectare. Eleven holdings will expect to be affected.

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

Not Applicable.

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

Not Applicable

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

The total land acquiring for the project is 0.0380 Hectare. 11 land holdings or structures and Government lands are affected. 100% land is commercial and the remaining is religious and cultural properties. No agricultural land affected by the project.

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

Not Applicable

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

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

Size of Holdings	No. of Holdings
10 cents $\leq$	3
10- 20 cents	5
20 – 30	2
30 – 40	0
40 – 50	0
50- 1acre	1
1 acre above	0
Total	11

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

Not Applicable

### **Chapter 5**

#### **Estimation and Enumeration of affected family and assets**

##### **5.1. Families which are directly affected.**

Eleven Title holders and four Non- title holder (tenet) affected by the project. All are economically middle or upper class. All social indicators show that the affected people are socially and economically in middle and upper middle-class status. All are having commerce and trade as their occupation. The monthly income ranges from Rs.25000-1,00,000. The literacy status show that all are above 10<sup>th</sup> standard. No one belongs to socially vulnerable cast. The average family size is 4.3. Four non-title holders are affected by the project. Shops and establishments are the non-title properties affected. The demographic details of the project affected non-title holders' shows that all are male and having marital status. The educational qualification details show that all are having better education qualification i.e. Bachelor's degree and above. The religious distribution shows that all are Hindus.

##### **5.2. Families which are indirectly affected by the project.**

The road widening and extension of metro rail to INFO Park area will reduce travel time and ease traffic jams in the project area. The road widening and establishing of metro rail will reduce the risk of accidents because this area is accident prone area. The reduction of traffic jams will improve the access of public to the location and it will improve commercial activities. The project will not have any significant adverse impact on the existing residential area.

### **5.3. Inventory of productive assets and no significant lands.**

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

## **Chapter 6 SOCIO ECONOMIC AND CULTURAL PROFILE**

### **6.1. Demographic Details**

The Socio Economic and Cultural profile of the area shows that all title holders are holding the affected land more than 15 years. The occupational distribution shows that all title holders are doing own business economic status shows that all title holders are having a monthly income of more than Rs 25,000. The land holding pattern shows that 35% title holders are having total holdings less than 50cents. 45% are having 50cents -1acre. 20% THs is having more than 1 acre of land. No scheduled cast or tribe family holding land in the project affected area.

Economic distribution of the Non-Title holders shows that all of them are having a monthly earning of more than Rs.25,000 per month. Fifty two percent of non-title holders are holding their business in the affected structure in more than 25 years. All NTHs are residing within 5 KM radius of their business establishments or work places. The age distribution shows that 25% of NTHs are having age of more than 60 yrs. 25% are in 51- 60 years. 50% are in the age of less than 25years.

### **6.2. Age wise distribution of TH**

Age of THs	No of THs
20-30	0
31-40	0
41 – 50	5
51 – 60	2
61 – 70	2
Above 70	1
NA	1
Total	11

### 6.3. Family size of THs

Family Size of THs	No of Families
1-2	2
3-4	6
5-7	2
Above 7	0
NA	1
Total	11

### 6.4. Educational Qualification of THs

Educational Qualification	No of THs
SSLC	1
PDC	1
DEGREE	3
PG	1
Professional	1
Others	3
NA	1
Total	11

### 6.4. Religious Distribution

Religion of THs	No. of THs
Hindu	2
Muslim	4



Christian	4
NA	1
Total	11

### **61.5. Economic Distribution of THs**

Economic Status of THs	No. of THs
APL	10
BPL	0
NA	1
Total	11

### **6.6. Occupational Distribution THs**

Major Occupation of THs	No of THs
Agricultural	0
Business	6
Government service	0
Private	0
Other	4
NA	1
Total	11

### **6.7. Income distribution of THs**

Monthly Income of THs	No of THs
10,000 -25,000	1
26,000 -50,000	3
51,000 - 75,000	3
76000- 1,00,000	2
Above 1 lakh	1
NA	1
Total	11

### **6.9. Socio Economic Profile of Project Affected Family Members.**

### 6.9.1. Age wise distribution of PAF Members

Age of PAF Members	No of PAF Members
<10	6
11-20	11
21-30	6
31-40	9
41 – 50	16
51 – 60	9
661 – 70	8
Above 70	6
Total	55

### 6.9.2. Educational Qualification of PAF Members

Educational Qualification	No of PAF Members
Below 10 <sup>th</sup>	13
10 <sup>th</sup>	7
+2	11
Degree	10
PG	4
Professional	4
Other	6
Total	55

## CHAPTER 7

### SOCIAL IMPACT MANAGEMENT PLAN

Loss of land of eleven title holders and safety thread of a residential house are the major impact of the project. Due to the very close excavation of frontage portion of the residential House, the safety of the structure is in high risk. Due to this the residential house categorized as partially affected. Four commercial establishments may face business loss during the project implementation. In the case of Business establishments, it is very early to assess the actual impact. None of the title holder displaced from the area due to the project. But one of the title holders who is having commercial establishment in the affected holding is facing multi loss. Apart from the loss of his land many of the essential facilities attached with his commercial building like parking area, drinking water lank, fire safety corridors etc. All this loss may affect the grading of the commercial establishment (Hotel) also. The acquisition will widen the existing approach roads and it may strengthen the access to neighboring holdings.

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

Sl.No	Risk Assumed	Approach	Mitigation Strategy
1	Safety of Residence after excavation.	Rehabilitation/ Compensation	Compensate the loss. Develop a special rehabilitation package. Conduct technical study and incorporate the plan to ensure safety of the residential building.
2.	Loss of land	Compensation	Compensate the loss.
3	Loss of Building	Compensation and Resettlement	Compensate the loss. Case by case approach in resettlement. Eg Relaxation in municipal Act

			etc. Grievance regarding the valuation and missing of structure will redress in time bound manner.
4	Loss of part of Building	Compensation and Resettlement	Compensate the loss. Case by case approach in resettlement. Eg Relaxation in municipal Act etc. Grievance regarding the valuation and missing of structure will redress in time bound manner.
5	Loss of structures	Compensation	Compensate the loss. Grievance regarding the valuation and missing of structure will redress in time bound manner.
6	Loss of Part of structure	Compensation	Compensate the loss. Grievance regarding the valuation and missing of structure will redress in time bound manner.
7	Loss of Business	Compensation	Minimize the loss and Compensate the loss.
8	Loss of Employment	Compensation	Minimize the loss and Compensate the loss.
9	Loss of Parking Areas	Compensate	Compensate the loss. Location based common parking area/pay and park complexes etc. can be considered in resettlement package.
10	Loss of access to properties	Control	Prepare a resettlement plan in consultation with Project Affected Families. The plan for resettlement of access will include it in the final Detailed Project Report. Case by case plan will be informed well in advance before starting project construction.
11	Loss of Access/Roads	Control	Prepare a resettlement plan in consultation with Project Affected people.

12	Loss of access to sub roads.	Control	Prepare a resettlement plan in consultation with Project Affected Families. The plan for resettlement of access will include it in the final Detailed Project Report. Case by case plan will be informed well in advance before starting project construction.
13	Loss of drinking water source.	Control/Avoided	Protect as possible.
14	Loss of essential Amenities	Control	Control/Compensation
15	Loss of community properties	Control	Resettlement
16	Loss of Government Properties	Control	Resettlement
17	Formation of un useful land or bit lands	Control	Acquire and compensation.
18	Loss of Livelihood	Resettlement	Compensation
19	Involved in land acquisition process	Control	Ensure PAP participation in the whole process and maintain sustainable and efficient communication channels between Requisition and Land acquisition authorities between PAPs
20	Grievance	Control	Functional grievance redressal committee at village and district level.

**7.2 Measures those are included in the terms of Rehabilitation and Resettlement**

Not Applicable

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

Not Applicable

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

Not Applicable

**7.6 Detailed Mitigation Plan**

Potential Impact	Positive/ Negative	Likely hood	Magnitu de	Pre- Mitigatio n Level of	Post – Mitigatio	Mitigatio n Measure s
Safety of Residence after excavation.						Compensate the loss. Develop a special rehabilitation package. Conduct technical study and incorporate the plan to ensure safety of the residential building.

Loss of land	Negative	Possible	Maximum	Maximum	Medium	Compensate the loss.
Loss of Building	Negative	Possible	Moderate	Medium	Medium	Compensate the loss.
Loss of part of Building	Negative	Possible	Moderate	Medium	Medium	Compensate the loss.
Loss of Structure	Negative	Possible	Maximum	Maximum	Medium	Compensate the loss.
Loss of part of Structure	Negative	Possible	Maximum	Maximum	Medium	Compensate the loss.
Loss of Business	Negative	Possible	Major	Minimum	Low	Minimize the loss and Compensate the loss.
Loss of employment	Negative	Possible	Moderate	Minimum	Low	Compensate the loss.
Loss of Parking Areas	Negative	Possible	Low	Medium	Low	Compensate the loss. Location based common parking area/pay and park complexes etc can be

						considered in resettlement package.
Loss of access to houses and lands	Negative	Possible	Medium	Minimum	Low	Prepare a resettlement plan in consultation with Project Affected Families.
Loss of access / roads.	Negative	Possible	Medium	Minimum	Low	Prepare a resettlement plan in consultation with Project Affected people.
Loss of access to sub roads.	Negative	Possible	Low	Minimum	Low	Prepare a resettlement plan in consultation with Project Affected Families. The plan for resettlement of access will include it in the final Detailed Project Report. Case by case plan will be informed well in



						advance before starting project construction.
Loss of drinking water source.	Negative	Possible	Low	Minimum	Low	Protect as possible.
Loss of essential Amenities	Negative	Possible	Low	Minimum	Low	Control/Compensation
Loss of community properties	Negative	Possible	Low	Minimum	Low	Resettlement
Loss of Government Properties	Negative	Possible	Low	Minimum	Low	Resettlement
Formation of un useful land or bit lands	Negative	Possible	Moderate	Minimum	Low	Acquire and Compensation
Loss of Livelihood	Negative	Possible	Very High	Low	Low	Compensation
Involved in land acquisition process	Positive	Possible	Minimum	Minimum	Low	Ensure community participation in the whole process.

Grievance	Positive	Possible	Minimum	Minimum	Low	Functional grievance redressal committee at village and district level.
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## **CHAPTER 8**

### **SOCIAL IMPACT MANAGEMENT PLAN AND INSTITUTIONAL FRAMEWORK**

#### **8.1- Institutional structure for key personal**

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

## **CHAPTER 9 SOCIAL IMPACT MANAGEMENT BUDGET AND FINANCING OF MITIGATION**

### **9.1 Costs of all resettlement and rehabilitation costs**

Not Applicable

### **9.2 Annual budget and plan of action**

Not Applicable

### **9.3 Funding sources with breakup**

Not Applicable

## **CHAPTER 10 SOCIAL IMPACT MANAGEMENT PLAN MONITORING AND EVALUATION**

### **10.1. Key Monitory and Evaluating Indicators**

- Participation of TH in DLPC meeting
- Number of direct purchases happened.
- Methodology of fixing compensation
- Formation of Grievance Redressal Committee
- Time span of completion of La

## **10.2. Reporting mechanisms and monitoring roles**

Not Applicable

## **10.3. Plan of Independent Evaluation**

Not Applicable

## **CHAPTER 11**

### **ANALYSIS OF COSTS AND BENEFITS ANDRECOMMENDATION ON ACQUISITION**

Since no economically vulnerable title holders identified as project affected and only one residential property affected the impact of the project seems to be minimum. Maximum total hectares of land are required from different spots of both sides of the Media Academy - INFO Park reach of Seaport-Airport road. From Kakkanad village 0.0380 hectares of land are needed to be acquired.

The social Impact Assessment Survey finds that one residential house may affect by the necessary excavation for the proposed project. Others are losing land. But one commercial establishment is losing their prime frontage which is inevitably attached to its

grading and safety. Another commercial establishment is partially losing their frontage. Others are losing their land only. For the rehabilitation of the affected residence technical advice is necessary. (i.e. Building retaining wall may protect the residence).

The road widening and extension of metro rail to INFO Park area will reduce travel time and ease traffic jams in the project area. The road widening and establishing of metro rail will reduce the risk of accidents because this area is accident prone area. The reduction of traffic jams will improve the access of public to the location and it will improve commercial activities. The project will not have any significant adverse impact on the existing residential area.

Since they own the land in the side of an important public road with a calculated risk of widening of the road and other development initiative, they were mentally prepared to face the consequences of the acquisition of land whenever required by the govt.

Resettlement of the access will get the priority while planning mitigation. The affected title holders are aware about the importance of the project and willing to surrender their land if an acceptable mitigation plan is implemented. No visible impact noticed in Lifestyle, Culture and Quality of life, Cohesion and Health of Title Holders and Community in the project area due to the project.

The residents in the project area are organized under residence association and shop owners have their organizations like Vapari Vyavasayi Ekopana Samithi and Vapari Vyavasayi Association. These organizations are strong enough to bargain for the rights of their members and actively involved in addressing the grievance of the project affected people. District administration is having better rapport with all these organizations. This will already formulate a supportive environment to mitigate the impact through participatory rehabilitation and resettlement strategies. These organizations are also supporting Government in channelizing communication regarding the project. Strengthening the communication, involvement and collaboration of these

organizations in the land acquisition and project implementation will further strengthening the mitigation efforts of Government.

After careful examination of various positive and negative impacts it has been found that the proposed project would be beneficial for local community at large and the traffic system of the city of Kochi. The positive outcomes of the proposed plan of road widening and extending the metro rail to Info Park far outweigh the possible negative impacts.

Special resettlement packages will be formulated for those who have partially affected buildings and losers of parking area.

A minimum duration of project implementation will minimize the impact of the project and maximize the mitigation. A comprehensive plan to protect the drinking water sources coming under the acquisition area will also reduce the impact of acquisition.

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

The proposed acquisition does serve public purpose. There was an overwhelming consensus among people, people's representatives, residents' associations, trade associations too with regard to the benefits accruing due to the proposed project.

## **Annexures**

1. List of PAFs.
2. Photographs – Field Investigation
3. Newspaper Notification
4. Notice for Public hearing
5. Attendance Public Hearing

6. Gazette Notification regarding SIA study.