

SOCIAL IMPACT ASSESSMENT STUDY

DRAFT REPORT

LAND ACQUISITION FOR THANOOR - THEYYALA RAILWAY OVERBRIDGE IN MALAPPURAM DISTRICT

REQUIRING BODY

Roads and Bridges Development Corporation of Kerala
(A Government of Kerala Undertaking)



SIA Unit



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ABBREVIATION

<i>ROB</i>	<i>Railway Over Bridge</i>
<i>TVU</i>	<i>Train Vehicle Unit</i>
<i>IRC</i>	<i>Indian Roads Congress</i>
<i>LC</i>	<i>Level Crossing</i>
<i>BIS</i>	<i>Bureau Of Indian Standards</i>
<i>AQI</i>	<i>Air Quality Index</i>
<i>SIMP</i>	<i>Social Impact management Plan</i>
<i>PAF</i>	<i>Project Affected Family</i>
<i>PAP</i>	<i>Project Affected Person</i>

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CHAPTER 1

EXECUTIVE SUMMARY

1.1. Introduction - Project and Public Purpose

A state is said to be developed with the increase in the infrastructural facilities for the people in the community. The infrastructural facility does not simply mean the production of enough goods and services but the development of the facilities which results in the production of goods and services. The development in transportation and communication are very necessary for a state or community to develop socially, economically, culturally etc.

Transport infrastructure is the integral part of the transport system in any state or city. With the intensification in the international relations and with the advent of globalization, the transportation is now considered to be the important factor for the economic and social development. The transportation system of the states and cities reflects the economic activity of the area.

The Government of Kerala by recognizing this need for development has initiated the infrastructural development in the transportation of various districts in the state of Kerala.

Thanoor- Theyyala Railway Over Bridge

Availability of a good infrastructure is an essential factor for the growth and development of the region. The proposed project aims at the expansion of the transportation facilities that are lagging behind the economic growth and to degenerate the factors which causes imbalance in society or causing hindrances in the provision of basic infrastructure for the community. The project is to enhance the transportation facilities for the people travelling to different areas. It aims to reduce the traffic jams and the long waiting of the people near the railway cross

for the train to pass. The transportation facilities are provided to the community by constructing ring roads, fly over's, bridges, and railway over bridges, etc. These bridges and roads can ease the travelling of the people by reducing their stress and time for travel. The proposed project aims to reduce the traffic blocks and the various kinds of pollutions in the proposed area.

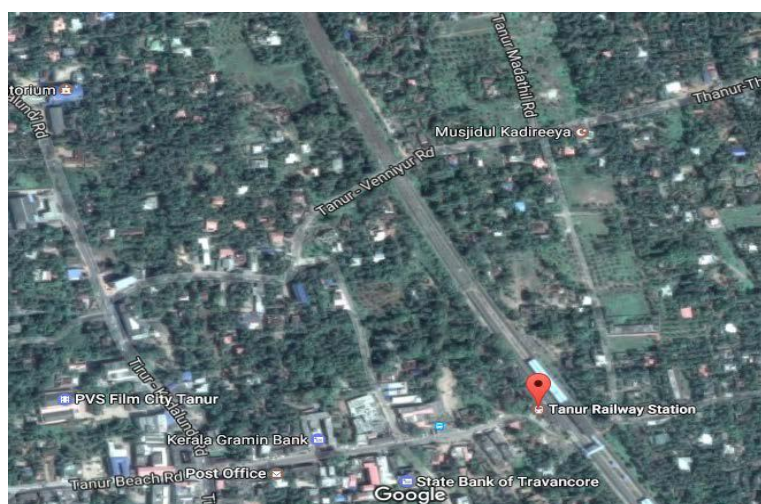
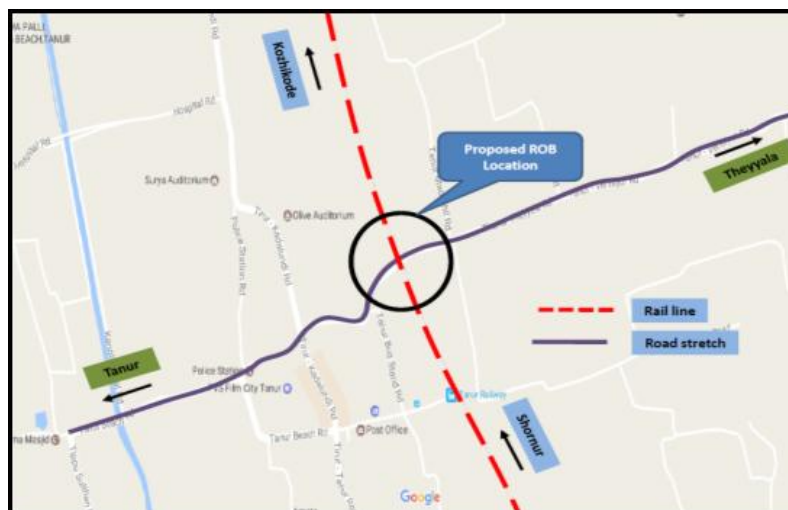
Considerable time is lost during the closure of the gates near railway tracks. This causes difficulty for the passengers as they loss their time and feeling physical tiredness as well as the excessive loss of fuels in the vehicle causing the depletion in the natural resource. The only solution identified for this issue is the construction of Railway Over Bridge in the affected area. It can save both the valuable resources such as time and fuel.

The Government of Kerala has issued Administrative Sanction for the construction of Railway Over Bridge (ROB) in lieu of LC No.172 A at km 632/0-100 Thanoor Town- Theyyala in Malappuram district vide Go (Rt)No.1324/2016/PWD dated 27.09.2016. The proposed Railway Over Bridge is at Thanoor- Theyyala in Malapuram district.

1.2 Location

The proposed ROB is at Thanoor town and Theyyala in Malappuram district. It is between the Thanoor town and Parappanangadi Railway Stations. The Railway Over Bridge connects the Thanoor- Theyyala road and Kozhikode-Shornoor road. The LC has a Train Vehicle Unit (TVU) worth 3.22 lakhs during 2016, which is more than the norms of the Railway and hence the LC to be replaced with ROB.

Images of the proposed project area



Location of the Thanoor- Theyyala Railway Over bridge

1.3 Size and Attributes of Land Acquisition

The proposed project of constructing Thanoor- Theyyala Railway Over Bridge will involve acquisition of 49.50 Ares of land. The proposed land will be acquired from the landowners in the survey number, 42, 43, 186, 187 and 188. There are 13 families whose land is acquired for the project.

- 0.0783 Hectares of land is acquired from the land of a family with the survey number 42/26 and 42/29.
- 0.056 Hectare of land is acquired from the survey number 43/1, 43/03 and 43/4.
- 0.0285 Hectares of land is acquired from the survey number 186/3.

- 0.1625 Hectares of land acquired from the survey number 187/55, 187/59, 187/59, 187/56/187/60, 187/80, 187/61, 187/62
- 0.096 Hectares of land from the survey number 188/5, 188/26, 188/27.

1.4 Alternatives considered

As there is no other suitable place for the proposed construction no alternatives to be considered.

1.5 Social Impact and Mitigation Measures

It appears from the analysis and overview of the act that the provisions of compensation for land acquisition under RTFCTLARR Act, 2013 will be sufficient to manage the social issues. Speedy disbursement of compensation is preferred

Analysis of the various possible social impacts and their proposed mitigation measures

Table number 1.5.1 Social impact and mitigation measure

S. No	Type of Impact	Survey Number	Status	Proposed Mitigation Measure
1	Loss of Land	42,43, 186,187, 188	13 Land would be affected – Direct Impact	Compensation as per RTFCTLARR Act, 2013
2	Loss of Built-up Property	42/26, 42/29, 43/03 187/55, 187/56, 187/60, 187/80, 186/3, 187/59	20 properties are affected. Out of this, 5 are Owned by the land owner itself and the rest 12 are rented property and 3 properties remain unused from long time.	Compensation as per RTFCTLARR Act, 2013
3	Loss of Productive Assets	42/26 42/29 43/03 43/4 186/3 188/26	The productive assets from 8 plots are affected like Coconut- 44 Curry Plant-1	Compensation as per RTFCTLARR Act, 2013

		188/27 187/61 188/5	Palm Tree- 1 Tamarind Tree- 2 Gulmohar- 1 Golden shower Tree- 1 Jackfruit tree- 2 Tapioca- 2 Chamba- 1 Sheema konna Mahagony- 1 Mango Tree - 1 Other -10	
4	Loss of Livelihood	187/55 186/3 187/56 187/60 187/80	The source of income for the family is lost. And all the tenants in the proposed land also face loss of livelihood.	
5	Loss of public utilities lines	187/62 43/03	2 Public roads and an unauthorized area which belongs to railway are acquired.	Compensation as per RTFCTLARR Act, 2013
6	Loss of common property	187/62 43/03	2 Public roads used by few families in the area.	Compensation as per RTFCTLARR Act, 2013
7	Loss of Access to civic Services and common property Resources	-----	Nil	-----
8	Loss of Cultural Properties or religious structure	-----	Nil	-----
9	Displacement of Vulnerable Groups	-----	Nil	-----

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

CHAPTER 2

DETAILED PROJECT DESCRIPTION

2.1. Background and Rationale of the Project

Kerala, comparing with other States in India is densely populated and the major issue that the state faces is lack of space to accommodate these large numbers of people. This can be the reason why the land faces too many deficits in the infrastructural facilities such as power, transportation etc. The government of Kerala has always focused on to fill up these deficits by concentrating on the major thrust areas transportation, communication, economic infrastructure, etc. regardless of all the deficits the Kerala Government had always shown a keen interest in providing a safe and secured life to the people. This is the reason why Kerala Ranks high status in the infrastructural development and ranks in equal status with many other developed countries. Government of Kerala is taking up projects on priority basis in the areas of agriculture, infrastructure, health, housing, entrepreneurships etc.

a) Development of Transport infrastructure

The State of Kerala has a good network in the matter of transport. The State is well connected with all modes of transportation such as road, rail, air and water. Kerala is one among the commercial and travel hub in India and over the world.

The Good transport in the state is mainly carried out by the road transport in the State. Majority of the people opt for road as the means of transportation compared to others as it is the cheapest and easily accessible medium of transportation to the people, but there have been a tremendous increase in the traffic blocks and the road accidents with the increase in the size of population and with the increase in number of vehicles. The under developed roads and the lack of alternatives for the passengers to deviate from the traffic blocks make the situation worst.

Even though Kerala is graced with a good network of transportation, the lack of a reliable and efficient road transport system which is the feeder service to all other systems, has adversely affected the growth prospects of the State. The inability to develop good quality transport infrastructure has stagnated both industrial and service sector and the same resulted in the GDP growth.

Kerala State has got nearly 3% of the country's population, but it has recorded nearly 12% of country's road traffic accidents. The increasing trends of road accidents are a matter of great concern. The accident rate of Kerala is the highest in the country with 15 accidents per 1000 vehicles, twice that of all India average.

b) Results of low quality infrastructure in Transportation

- Traffic blocks
- Depletion of Non Renewable Resources (Petrol, diesel and other Fuels)
- Pollutions (Air, water, sound)
- Loss of time
- Strain in Passengers and pedestrians
- Road accidents and death.
- Difficulty for the Ambulance and the fire force teams to reach in destination in case of emergency



c) Transport System in Malappuram

Malappuram is situated 11° 41' North latitude and 76° 83' East longitude. Malappuram district is located in the mid land area of the Kerala State. This district in Northern Kerala is bounded on the Northeast by Wayanad and Northwest by Kozhikode districts, on the Southeast and South by Palakkad District, on the Southwest by Thrissur District and on the West by the Arabian Sea.

Malappuram is well connected with the other districts and the state. The transportation in Malappuram district includes road, rail, air, and mass transit.

Road- Malappuram has a good road network with all the cities of district and other district of the state. On NH 213 there is a bus terminal of KSRTC and buses are available to all the major cities of Kerala, Tamil Naidu, and Karnataka. NH 17 also passes through the district which is 12 km from Malappuram city.

Railways- Angadipuram railway Station is located about 17km, Parappanangadi Railway Station and Tirur Railway Station both at a distance of 26 km from Malappuram city. It connects to various cities of the State as well as rest of India.

Airways- Calicut International Airport is located about 25 km away from Malappuram City.

d) The need for railway over bridge in Thanoor- Theyyala

Thanoor railway station is one of the oldest railway stations in Kerala. Almost all the trains have stop here. This station is situated in the heart of the town. The Calicut international airport is just 25 km from the town and the town is situated in Tirur – Kadalundi road and it is connected to various parts of the state. Theyyala is also a nearby place to Thanoor with nearly 4 Km distance.



The unsafe journey through LC's

The construction of the Railway Over Bridge is considered to be very necessary in the present condition where there are number of on road and off road vehicles going to different parts of the state and country. It is also an important aspect in ensuring the safety and security of the people who cross the railway tracks in hurry especially the students and the elderly people. There has been a considerable increase in the rail accidents due to the unsafe level crossings in rail tracks. Many lives have been lost due to this careless travel through the LC's.

The proposed project aims to ease the flow of traffic across the state and to do away with the dangers of unmanned level crossings. This is an alternative for the people to pass through the railway crosses which are extremely dangerous. The project also aims in developing safe measures for commutation of the pedestrians.

2.2 Details of Project - size, location, production targets, cost and risks

Thanoor is a small coastal town located in Malappuram district of Kerala. Thanoor railway gate is located on Thanoor - Theyyala route. Thanoor is a built up area and it generates high vehicular traffic near the railway level crossings and junctions.

Due to the progressive increase in vehicles and vehicular movement, the roads near the Thanoor railway station are not able to bear the load of traffic smoothly especially near the railway crosses. It leads to many adverse impacts in different parameters in terms of time, maintenance of road; pollution etc. This proposed project will facilitate people to have faster and comfortable movement. The ROB also integrates different modes of transport to provide seamless mobility.



The images of Thanoor railway gate, taken by RBDC

There are many tourist destinations in Thanoor like Thanoor Beach, Ancient Mosque, etc. The project is designed by keeping in mind the people who commute to these religious places, educational institutions, hospitals, railway station, shopping mall present in the near vicinity of the project area. The proposed project will reduce the time spend by the passengers in the busses, personalized vehicles and intermediate public transport mode like taxi and auto and even the pedestrians.

The requiring body has conducted the traffic surveys on the project corridor. This was to identify the present scenario and the likely future scenario. The study aimed at developing some remedial measures and to develop an effective design for the construction. The traffic movement across the railway gate was studied well and the alternatives were planned according to that study. The mobility of the people, safety and quality in the service was ensured in the designing.

Design Standards and material specifications have been evolved, primarily from IRC publications and MoRT&H specifications. The Design Standards evolved for the project have covered all aspects of detailed design including the design of geometric elements, pavement design, design of ROB and structures, traffic safety, drainage system, arboriculture and materials.

The requirement of road side drainage system are considered and the , traffic control mechanism with suitable traffic safety features and road furniture

including traffic signals, signs, markings, overhead sign boards, crash barriers, delineators etc. are designed. The pavements are constructed by keeping in mind the pedestrians in the road.

a) Location of the project

The proposed project of Thanoor- Theyyala Railway Overbridge is constructed in Malappuram district, Tirur Taluk in Thanoor village. The Railway Over Bridge connects the Thanoor- Theyyala road and Kozhikode- Shornoor road.

b) Project cost

A general Abstract estimate of the construction of Thanoor- Theyyala railway over bridge is given below. The total amount comes around Rs 34.16 Crores including the cost of construction, utility shifting, land acquisition, preliminary expense etc.

Table number 2.2.1 Estimated cost of the project

SI no	Heading Description	Amount
1	Cost of Construction (cost of railway Portion, Approach road, service roads, stair case, electrical work)	25,20,82,646.75
2	Utility Shifting	30,00,000.00
3	Land Acquisition	8,54,37,600
4	Preliminary expenses and taxes	10,00,000
5	Total	34,15,20,306.75

Structural Components of the work

- Site Clearance and Earth works
- Granular Pavement Courses
- Bituminous Courses

- Pile foundation
- Substructure and super structure
- Embankment for approach portion with RCC retaining wall
- Culverts.
- Kerbs, Drainage and Protective works
- Road Furniture and Safety Works
- Land and Structure acquisition
- Relocation of Utilities
- Rehabilitation and Social costs

The total length of the ROB including Railway Portion will be 406.69 m.

2.3 Examination of Alternatives

The alternatives depend on the rehabilitation and resettlement of the people who are affected of the land acquisition, as there is no one who is in need of Rehabilitation no alternatives are considered. (Shops replaced)

2.4 Phases of the Project Construction

The Government of Kerala has issued Administrative Sanction for the construction of Railway over Bridge (ROB) in lieu of LC No.172 A at km 632/0-100 Thanoor Town- Theyyala in Malappuram district vide Go (Rt)No.1324/2016/PWD dated 27.09.2016. The proposed Railway Over Bridge is at Thanoor- Theyyala in Malapuram district.

The proposed project is constructed in different phases,

- 1) Site clearance including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm,
- 2) Dismantling of existing structures like culverts, bridges, retaining walls and other structure
- 3) Excavation for roadwork in soil
- 4) Construction of embankment with approved materials.
- 5) Bituminous courses

- 6) Pile foundation
- 7) Protective works
- 8) Safety works
- 9) Land acquisition
- 10) Relocation of utilities
- 11) Social cost

2.5 Details of Environment Impact Assessment Study

The proposed project is considered to be necessary for the reduction of environmental pollution such as air, water, sound etc. In air pollution the Air quality Index up to 50 is good and 51 to 100 is moderate whereas above 100 is extremely critical for the people with various respiratory diseases. The increase in number of vehicle and stoppage due to railway cross has hazardous impact on the environment and the people who survive in the environment. The proposed project aims at the seamless flow of the vehicles and thereby decreasing the chance of the unhealthy condition.

The noise pollution is also the other side of the same coin where the vehicles continue to give louder and high frequency horns due to the traffic blocks.

There is a chance for these pollutions to occur during the phases of construction of ROB but the chances of people getting benefit after the project implementation is much higher. The pollution can be controlled to two fold the earlier.

2.6 Work force requirements

The work force is equipped with modern machineries and planned man power in various range in terms of skilled, semi- skilled and un-skilled labors.

2.7 Applicable legislations and policies

The applicable laws on land acquisition, rehabilitation and resettlement for the proposed “Thanoor- Theyyala Railway Over Bridge”, Malappuram district.

- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013

- Government of Kerala - Revenue Department -State Policy for Compensation and Transparency in Land Acquisition
- Right to Information Act, 2005

CHAPTER 3

TEAM COMPOSITION, STUDY APPROACH AND METHODOLOGY

3.1 Background

As per the Kerala Gazette Notification No. 26 dated 26th June 2018. RAJAGIRI outREACH has been selected as the SIA Unit to study the Social Impact Assessment for the construction of Thanoor- Theyyala Railway Over Bridge.

The objective of Social Impact Assessment (SIA) is to enumerate affected land and structures, affected families and persons, to identify social impacts, and to prepare Social Impact Management Plan (SIMP). In order to capture data for the present exercise, both primary as well as secondary sources were systematically tapped. As a part of SIA, census socio-economic survey has been conducted by experienced members of SIA Unit in the area of Thanoor – Theyyala Railway Over Bridge to list out the adverse impacts of the project.

3.2 SIA and SIMP Preparation Process

Social Impact Assessment and Resettlement Action Plan are required when the project results in either physical or economic displacement of the people. Resettlement plan must ensure that the livelihoods of people affected by the project are restored to levels prevailing before inception of the project. While preparing draft SIA and SIMP, the study team followed some essential components and steps which are

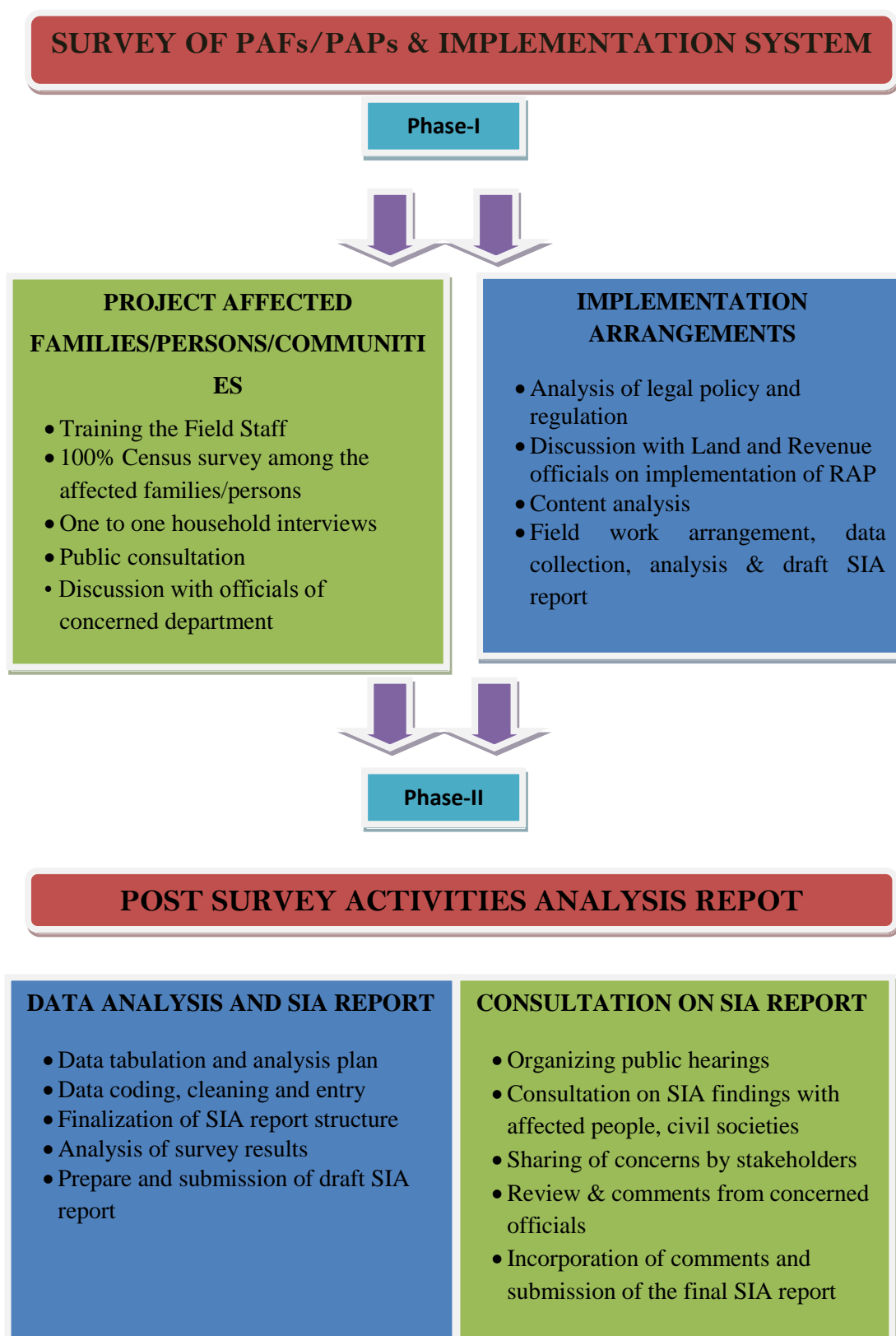
- (i) Identification of socio-economic impacts of the project
- (ii) Legal framework for land acquisition and compensation (RTFCTLARR Act 2013)
- (iii) Organizational responsibilities.

A public/community consultation (Public Hearing) is scheduled on August 2nd 2018, the Remarks and clarifications would be incorporated in the final report.

Figure 3.2.1 presents approach and methodology of SIA study in the form of flow chart and various steps involved in the study have been described in detail in the following paragraphs.

- a) Study of relevant documents, reports and project alignment drawing.
- b) Site visits and information dissemination about the project
- c) Enumeration of affected properties
- d) Analysis of socio-economic survey data
- e) Consultations and meetings with PAFs, PAPs
- f) Community/Public Consultations

FIGURE 3.1
APPROACH AND METHODOLOGY FOR SIA



3.3 Desk Research

The study team reviewed the relevant documents, reports and project alignment drawing.

3.4 Reconnaissance

The study team is headed by Project Director of RAJAGIRI outREACH who is the Chairperson of SIA Unit. A team of 6 members having experience in conducting Social Impact Assessment Study and Socio Economic Surveys were assigned for field level data collection, monitoring of data collection and co-ordination of the study. The service of Gender Expert, Consultants from Development Sector and Law was also utilized in conducting the study and preparation of the report. Representatives from Revenue Department also supported the investigators to identify the affected families.

Table no 3.4.1 Staff details

Sl.No	Name	Qualification and Designation	Experience
1.	Meena Kuruvilla	MSW, Project Director and Chairperson - SIA Unit in RAJAGIRI outREACH	30 years in development sector
2	Biju C.P	BA – Research Associate	23 years in development sector
3	Maria Tency	MA, DSS, Research Associate	25 years in development sector
4	Deepu K Utthaman	MSW, Social worker	2 Years in development sector
5	Ranjith K U	DSS, Research Associate – SIA Unit	23 years in development sector
6	Chippy Baby	MSW, Research Associate	1 year in development sector

3.5 Data from Secondary Sources

The information were collected from secondary sources such as various concerned departments, and a host of other literatures. Thus, the secondary sources information complemented the primary data elicited through field survey from the affected people and other stakeholders. Understanding was created about the physical, social, economic, and cultural set-up of the project area before undertaking detailed field investigations.

3.6 Site Visits and Information Dissemination

Before starting the detailed Social Impact Assessment study, field visits and Pilot Study of the Socio Economic Survey was conducted where few respondents were administered the Interview Schedule and their feedbacks were collected. The team then inculcated the necessary addition and deletions in the interview schedule. After identifying the affected areas SIA unit consulted with different stakeholders and organized meetings with them to generate awareness about the study. The survey team collected the data in the month of May and June 2018.

3.7 Socio Economic Survey

Before the actual household Socio Economic Survey, all the properties that were likely to be affected by the project were identified with the support of Revenue Department staff. The survey interview schedule was pre-tested. The survey was conducted through door-to-door personal interview. In this interview, size and nature of land were recorded. The details of affected families, possession of legal documents (if any, towards the claim of property), data related to social profile, occupation, source of income, family expenditure, self employment activities, employment pattern were collected. Most part of the interview schedule has been pre-coded except those reflecting the opinion and views of PAFs, which have been left open-ended. Before filling the questionnaires, the affected families were asked to have a copy of the necessary documents they need to produce as proof of their ownership on property. So documents like- Aadhar Card, Ration Card, Voter's Identity Card and other documents were verified whichever made available.

3.8 Compilation and Verification of Data

Survey forms duly filled were consolidated and entered into a database. This information was updated on a regular basis as and when data for incomplete forms were filled in.

3.9 Data Analysis and Report Writing

Once the data were collected and finalized with all the necessary changes, analysis of collected data was done.

3.10 Community and Public Consultation

Discussions were conducted by SIA unit with various primary and secondary stakeholders in order to obtain their views and suggestions of the potentially affected persons to minimize adverse social impacts. The methods which were adopted for conducting public consultation were (i) Informal personal consultation (ii) In-depth individual interviews.

The primary data were collected through the face to face home visits in the affected family. The interaction with the stakeholders regarding the project and its consequences were studied using the questionnaire. The questionnaire included both the closed and the open ended questions. Their basic demographic details, the after effects of land acquisition, were collected in the field work study.

a) Public Hearing

As per Form 5 Rule 14 (1) of the RTFCTLARR Act, 2013, a public/community consultation (Public Hearing) is scheduled on 2nd of August, 2018. The Remarks and clarifications would be incorporated in the final report.

CHAPTER 4

LAND ASSESSMENT

Background

A socio-economic survey covering all affected families was carried out in the months of June and July 2018. A structured interview schedule was used to collect detailed information on affected property, impacts on private assets, income and livelihood for a full understanding of impacts. The objective of the survey was to assess social impacts on the people affected by the project, their socio-economic profile, and type of property, ownership of property, type of impact and its magnitude and details of affected property. The major findings and magnitude of impacts are discussed in the following sections.

4.1 Entire area of impact under the influence of the project

Table 4.1 indicates overall project impacts. Total of land shall be acquired for the project is 49.50 Ares from the 13 land owners in the area. There are households, and other building in the proposed site.

Table 4.1.1 Area of Impact

Acquisition of Land (in Ha)		
Total Properties acquired = 13		
	Number of properties	Acquired area in hectares
Company ownership	1	
Individual Property (in Ha)	9	0.1045 Hectare
Jointly owned (in Ha)	4	0.3168 Hectare
Total (in Ha)	13	0.4213 Hectare
Impact on properties		
Impact on Properties (no)		20
Total PAFs (no)		27
Total PAPs (no)		143
Total PDFs (no)		nil
Titleholder (no)		13
Non Titleholder (no)		17
Loss of Residence (no)		nil

Loss of Business (no)	20
Loss of Livelihood (No)	17

4.2 Land Inventories (Map of site of Proposed Thanoor- Theyyala railway over Bridge)



The proposed site of constructing Railway Overbridge in Theyyala- Thanoor



The location Map of the proposed project

4.3 Land requirement for the project

The proposed project of construction of Thanoor- Theyyala Railway Over Bridge shall require 49.50 Ares land for the implementation of the project. The

affected area is under private possession and no Government properties are affected by of the project.

4.4 Use of Public Land

There is a land owned by the Railway in the west side of the railway gate. Two public roads are acquired for the proposed project one road is near the plot of Thitthiryakutty and another is near the land owned b Mohammad Ikbal.

4.5 Land Already Purchased

No Land has been purchased or compensated currently. The construction works are yet to begin.

4.6 Details of Land Proposed to be acquired

Table 4.6.1 shows the details of land Acquisition

Sl No	Survey No	Description	Approximate Extend Required (in hectares)	Name of Owners of Land/ Interested Persons
1	42/26 42/29	Dry Land With 4 shops in the plot are affected due to the project. One shop is run by the owner and the other 3 is given on rent. There is 11 coconut trees in the plot	0.0148 0.0635	Adiyaat kundil Vishwanadhan Janardhanan.
2	43/6	Dry Land with own shop	0.0025	Raphi W/o Suhara, Moolaykal, Chamravattam
3	43/03	Dry land with 6 shops in which 4 are given on rent. There is 2 Coconut trees, 1 Curry plant, 1 Palm tree in the plot	0.0060 0.0025 0.0035	Muhammad Ikbal, S/o Kunnumel Biran Haaji
4	43/4	Dry land with 1 Tamarind tree, and 11 coconut tree, 1	0.0415	Nellikaparambil Kunjumoideen Kutty, Amina Manzil

		Mahagony, 1 Sheema konna, 5 other trees, 1 Gulmohar tree			
5	186/3	Dry land with 4 rented shops and 5 coconut trees, 1 Golden shower tree,	0.0285	Karipaayi Parameshwaran, Kunjaadi	
6	187/55	Dry land with 2 rented shops	0.035	Mukrakaattil Gopalan s/o Arumughan	
7	187/59	Dry land with two own shops and 1 Rented shop	0.0045	Karipaayi Gireesh, S/o Parameshvaran	
8	187/56 187/60 187/80	Dry land with 2 rented shops in which one is closed and the other is rented	0.0035 0.0045 0.0040	Mukrakattil Balakrishnan, S/o Kunjutty	
9	187/61	Dry land with 2 coconut trees, 1 mango tree, 2 tapioca plant, 1 Champa plant.	0.0115	Haseefa W/o Faisal, Aashima manzil	
10	187/62	Dry land	0.1310	Machingal Thitthiriyakutty(Late)	
11	188/5	Dry land with 4 coconut tree	0.0790	Machingal Mohammad Ashraf, Abdul assez	
12	188/26	Dry land with 5 trees in the plot.	0.0125	Valiyakathu Puthiya Ottayil Abdul khader S/o Imbichivava	
13	188/27	Dry land with 2 Jackfruit Tree, 1 Tamarind tree	0.0047	Kunnatheri Mannathara Sidique	

4.7 Previous transactions in the area

As per the information given by the respondents, no transactions had been taken place in the affected area for the last three years.

CHAPTER 5

ESTIMATION AND ENUMERATION

Introduction

This chapter comprises of livelihood affected, scale of impact on families i.e., directly affected families and indirectly affected families. It also mentions about the loss of inventory in the affected.

5.1 Directly Affected

The proposed project of constructing the Railway Over Bridge acquires nearly 49.50 Ares. These proposed lands belong to 13 land owners and most of the land is used for commercial purpose. There are nearly 20 semi permanent and permanent shops which in which 5 of them are individually owned and 12 of them are given on rent to other people and 3 shops are closed. The 2 shops in the plot are in the form of Semi- permanent sheds. The project directly affects the land owners in the proposed area. The Social impacts on the directly affected people are given below.

Table number 5.1.1 Social impact on the directly affected

Si. No	Survey Number	Affected Individual/ family	Social Impact
1	42/26 42/29	Adiyatkundil Vishvanadhan Janardhanan Mohanam Theyyala Devaki Theyyala	The property is jointly owned by three people in the family, they are Mohanan, Janardhanan and Devaki. The land has not been divided yet. The proposed project will affects the 11 coconut trees, a hollow bricks production unit and a way to the production unit. There are 3 other properties in the plot which is given on rent. In this 2 properties are fully acquired for the project and the third property i.e. a car workshop is partially

			affected as it will lose its parking area.
2	43/1	Suhara W/o Raaphi	There is no one in this name residing in the land currently.
		Shakeena Abdhul Azeez w/o Abdul Azeez	The Parking area and the front portion of the newly build bakery will be lost.
3	43/03	Muhammad Ikbaal	There are 6 properties in this proposed land. These 6 shops, 1 staircase, , a compound wall, 2 coconut trees, 1 curry leaf plants are affected.
4	43/4	Nellikaparambil kunjumoideen Kutty	The proposed land, A gate, a 20m long compound wall, 30 Sq m. cemented floor, 11 coconut trees, 1 Mahogany, 1 Sheema konna, 1 tamarind tree, 1 Gulmohar tree, and 5 other trees are affected.
5	186/3	Karipaayi Parameshwaran	There are four properties in the proposed land. 2 highly buildup gate, a compound wall coming up to 60 meters, a temporary shed, floor tiles, a dog shed, 5 coconut trees are affected from the acquisition. The main source of income and the trees are affected.
6	187/55	Mukrakattil Gopalan	There are two properties in the proposed land which is given on rent. The main source of income for the family is the rent from the shop so the source of income of the family is affected.

7	187/59	Karippayi Gireesh	There are 2 shops in the plot. These 2 shops, sunshade and a Verandah is affected.
8	187/56 187/60 187/80	Mukrakattil Balakrishnan	2 properties are affected in which a gate and wall of one property and 2 shops in the other property is affected.
9	187/61	Haasifa w/o Faisal	A wall, Gate, 1 coconut tree, 1 coconut sapling tree, 1 Golden shower tree, 1 Chamba tree, 1 Mango tree, a piece of land in the front portion are affected.
10	187/62	Machingal Thitthiriyakutty and other 5 members, (details not readily available.)	20 meter fence and 5 coconut trees are affected.
11	188/5	Machingal Mohammad Ashraf, Abdul Azeez	15 meter fence 3 coconut trees are acquired.
12	188/26	Valiyakathu Puthiya Ottayil Abdul Khader	15 meter fence and 20 concrete pillars, 2 coconut trees 5 other trees are affected.
13	188/27	Kunnatheri MannatharaSidique s/o Muhammad Abdul Rehman	It is the East end plot for the proposed project. . A Fence, 2 Jackfruit Tree, 2 Coconut tree, 1 Tamarind tree is affected.

5.2 Duration of possession

The table given below shows the duration which the property is been posses by the owner.

Table 5.2.1 Duration of possession/ownership on property

Sl.No.	Survey No. of land	Average Duration of ownership
1	42/26 42/29	Above 10 years of ownership
2	43/1	Above 10 years of ownership
3	43/03	Above 25 years of ownership
4	43/4	Above 10 years of ownership
5	186/3	Above 10 years of ownership
6	187/55	Above 10 years of ownership
7	187/59	Above 10 years of ownership
8	187/56 187/60 187/80	Above 15 years of Ownership
9	187/61	Above 10 years of ownership
10	187/62	Above 10 years of ownership
11	188/5	Above 10 years of ownership
12	188/26	Above 10 years of ownership
13	188/27	Above 10 years of ownership

Type of Use of the property

There are altogether 13 properties which are acquired for the project. In that there are 20 build up properties in 8 plots of land. The shops are used for commercial purpose. The purpose as given below.

Table number 5.2.2 Type and use of property

Si No	Shop	Type	Owner	Property type	Survey Number	Frequency
1	Septic tank Making shed	Semi-Permanent Shed	Jose	Rent	42/26 42/29	1
2	Hotel	Semi permanent shed	Meenakshi	Rent	42/26 42/29	1
3	Car workshop	Semi permanent shed	- Shaijan	Rent	42/26 42/29	1
3	Hollow bricks production unit	Well roofed shed	Mohanana	own	42/26 42/26	1
4	Bakery	"	Shakeena	own	43/1	1
5	Electrical	"	Prasad	rent	43/03	1
6	Electrical and spare parts	"	Vaasu	rent	43/03	1
7	Tailoring shop	"	Rameshan	rent	43/03	1
8	Stationary	"	Muhammad	rent	187/55	1
9	Godown	"	Sudhakara	rent	187/55	1
10	Tailoring shop	"	Baalan	rent	187/55 186/3	2
11	Light and sound(taxi house)	"	Udayakumar	rent	186/3	1

12	Stationary	"	VP Rajan	rent	186/3	1
13	Scrap shop		VP rajan	rent	186/3	1
14	Cement shop		Gireesh Parameshwar an	own	187/59	1
15	Club		Gireesh parameshwar an	own	187/59	1
16	Closed shop	Damaged	Muhammad Ikbal	own	43/3	3
17	Total				20	

Out of 20 shops 5 shops are run by the property owner and the 12 are given out on rental basis and 3 shops remain closed. Some plants are trees are also affected due to the project. Some landowners have to lose their edible trees and plants like, coconut, tamarind, palm etc.

5.3 Indirectly Affected by the Project

As there is around 20 shops in the proposed plot the tenants in the shop and the labors working under them are affected indirectly. They are losing their means of livelihood. Some shops are only partially acquired so there will be not much problem. In some of the shops the way to the shop is going to be acquired for the project which may cause difficulty for the customers for entering the shop.

- Prasad
- V P Raajan
- Baalan
- Mohammed
- Sudhakaran
- Meenakshi
- Prasad
- Jose
- Rameshan
- Vaasu
- Udayakumar

The people who run their shops on rent from the land owners. Some of their shops are partially affected as they lose their way to the shop or-losing a portion of their shop. Few semi permanent shops are fully acquired. It indirectly affects the customers and results in low sales in the shop.

- Pranav
- Vishnu

They are the labors working in the shops in temporary or permanent basis. The shop are the means of income of income for them.

The two public roads are also acquired for the project. The person who uses the road for their movement gets affected indirectly.

5.4 Inventory of Productive Assets

Table number 5.4.1 Productive assets

Sl No	Crop	Quantity	Survey number of the plot
1	Coconut	41	42/26, 42/29 43/03, 43/4 186/3, 18826 188/27, 187/61 188/5
2	Curry Plant	1	43/03

3	Palm Tree	1	43/03
4	Tamarind tree	2	188/27, 43/4
5	Gulmohar Tree	1	188/27
6	Golden shower tree	1	188/27
7	Jackfruit Tree	2	187/61
8	Mango Tree	1	187/61
9	Tapioca	2	187/61
10	Champa	1	187/61
11	Sheema konna	1	43/4
12	Mahogany	1	43/4
13	other	10	188/26, 43/4
Total		65	

5.5 The affected buildings and unproductive assets

Si no	Assets	Number	Area number
1	Shops / shed	20	42/26,42/26,43/6,43/03,186/3, 187/55,187/59,187/56,187/60,187/80,
2	Wall	6	43/03,43/4, 186/3,187/56,187/60,187/80, 188/27
3	Fence	2	187/62, 187/26,188/5
4	Gate	5	43/4,186/3, 187/56/60/80
5	Tiled floor	2	43/4
6	Concrete pillar	20	188/26
7	Parking area	2	42/26 42/29 43/1



Pictures of the affected plots and properties



Construction of Railway Over Bridge in Thanoor- Theyyala, Malappuram District

July 2018

CHAPTER 6

SOCIO-ECONOMIC AND CULTURAL PROFILE

Introduction

This chapter elaborates the 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, livelihood affected details, socialization of the project affected persons and other related information.

6.1 Demographic Details

The demographic details includes the following,

- Age group and gender of the affected people
- Religious group of the respondents
- Marital status of the affected
- Educational attainment
- Family monthly income
- Occupational Pattern
- Vulnerable group

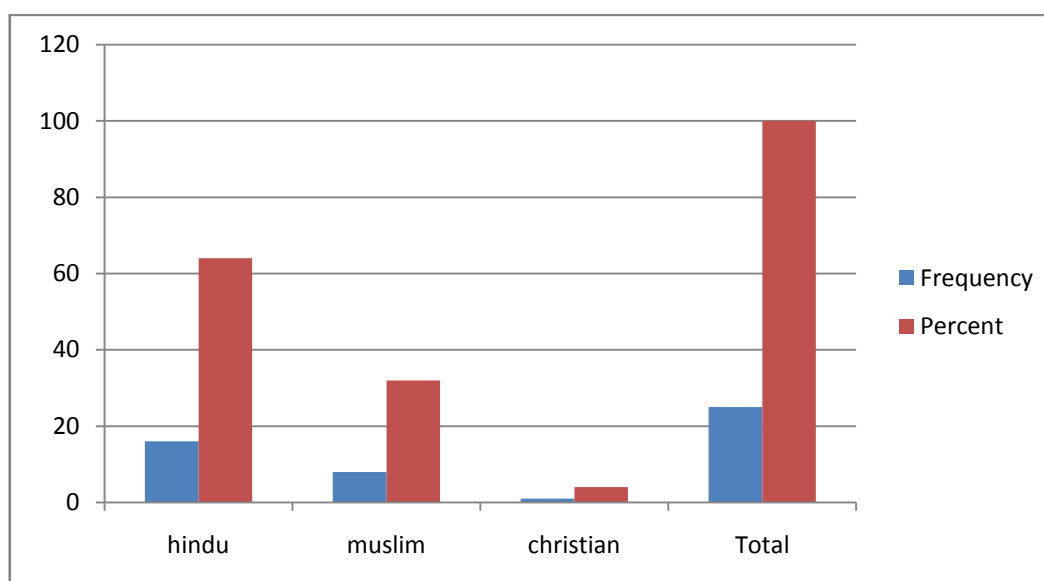
There are altogether 30 affected families due to the proposed project of Constructing Railway Over Bridge in Theyyala- Thanoor in Malppuram district. Information of 25 families is able to identify as some people refused to disclose their family details and information regarding the ownership and land possessions. There are people who have left the property long back so the information and details regarding them are also missing.

The following data's shown is only applicable for the families and individuals who are considered affected due to the proposed project.

Table 6.1.1 Age Group and Gender

Age in years	Gender		Total
	Male	Female	
0-18	16	19	35
19-30	9	18	27
31-45	10	13	23
46-59	11	10	21
60 and above	5	3	8
Total	51	63	114

The above data shows that there are 114 affected individuals in the project in that 63 of them are females and 51 are males. The female population is higher than that of male. (As per the data given by the respondents in the survey, the undisclosed data not included)

Fig 6.1.2 Religious Group

The major religious groups in the area are Hindus, Christians and Muslims. In the given area there are 16 Hindu families which is about 64% of the total population and 8 Muslim families which come up to 32% of the total population and one Christian family which contribute 4% of the total population.

Table no 6.1.3 Social Group

Social Group	Frequency	Percent
OBC	18	72%
General	7	28%
Total	25	100%

18 respondents and their family belongs to the reserved social category i.e. OBC (Other Backward community). It comes up to 72% of the total population and 7 respondents and their family belongs to general category which is 28% of the total population.

Table 6.1.4 Marital status of Project Affected Persons

Marital Status	Frequency	Percent
Married	60	68.4
Unmarried	49	55.86
Widow	1	1.14
Separated	Nil	0
Unknown	4	4.56
Total	114	100

The table no: 6.1.4 shows that there are 68% people are married couples, 55% comes to the unmarried group. There is no one living separated from each other. There is a single widow in the affected area and the marital statuses of 4 people are unknown

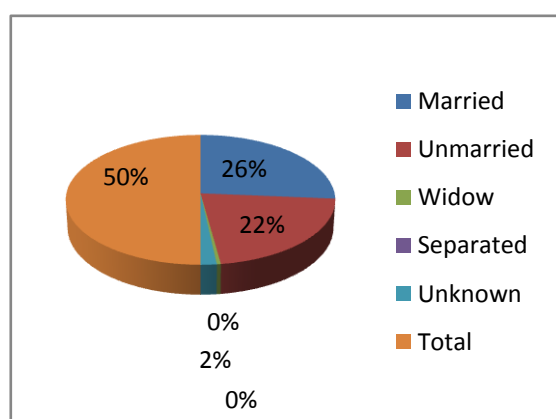


Table 6.1.5 Family Pattern of Project Affected Persons

Family Pattern	Frequency	Percent
Joint	5	20%
Nuclear	20	80%
Total	25	100%

The above given table shows that nuclear families are higher than the joint families. The 80 % of affected families belong to Nuclear family pattern whereas 20 % lives in a joint family pattern.

Table 6.1.6 Educational Attainment of Project Affected Persons

Description	Frequency	Percent
1 to 10	7	28%
SSLC	10	40%
Degree	4	16%
Unknown	4	16%
Total	25	100%

40% of the people have attained the educational level of SSLC and the 28% belongs to the category that passed primary education. 16% then having degree and the education of other 16% is unknown.

6.2 Income and Poverty Level

The economic status of the family

Table number 6.2.1 the type of ration card

Type of ration card	Frequency	Percent
APL	19	76%
BPL	6	24%
Total	25	100%

The table depicts that 76% of family is above poverty line and the rest of the 24% comes under below poverty line.

Table number 6.2.2 Family Monthly Income

Description (Amount in Rs)	No of families	Percent
5000- 10,000	4	16.0%
10,000- 20,000	7	28.0%
Above 20,000	14	56.0%
Total	25	100.0%

The table depicts that 56% of the family have a family monthly income above 20,000/-. The 28% of family has the family have a monthly income in between 10,000/- and 20, 000/-. 16 % of the family have a monthly income less than 10, 000/-

Table number 6.2.3 the major source of income

Source of income	Frequency	Percent
Agriculture	1	4.0%
Shop in the affected land	19	76.0%
Affected Land	1	4.0%
Others	4	16.0%
Total	25	100.0%

The above given table shows the source of income for the project affected families. 76% PAP says that the major source of income was from the shops they run in the proposed project implementing area. There are nearly 20 shops in the land. In that 12 are given on rent 5 are used by the owners and the 3 shops are closed. The 4 % PAP states that they also depend on the affected land by taking the rent from the tenants. 16 % family has other source of income such as income from other business or from abroad.

6.3 Vulnerable Group

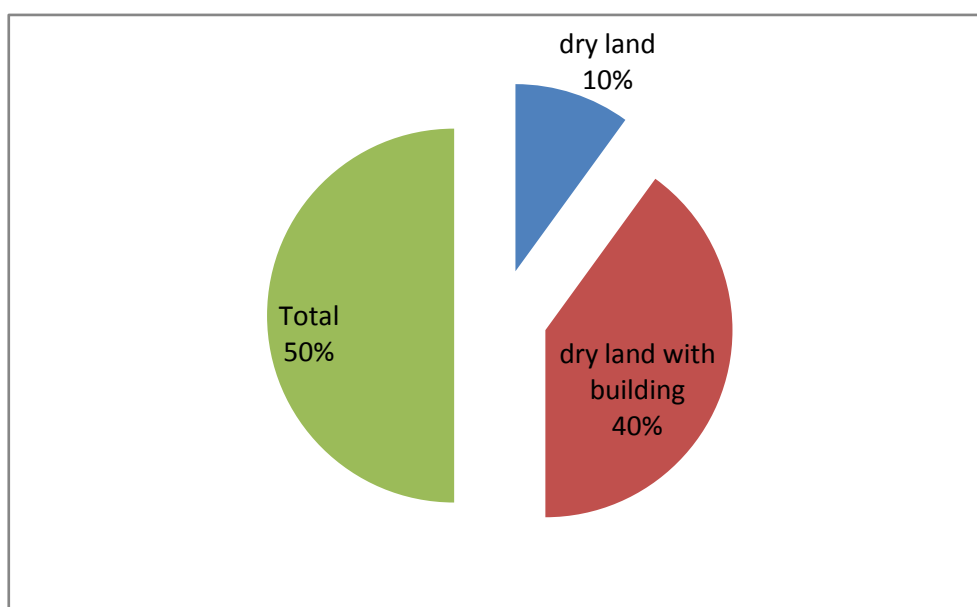
Table number 6.3.1 vulnerable group

Description	Total
Children	35
women	63
Elderly	8
Widow	1
Total	107

The children, women, elderly and a widow are the vulnerable group among the affected people. Children are defined as the individual who comes under the age of 18. Here are 35 children, 65 women 8 elderly including both male and female and 1 widow. All together there are 107 vulnerable people in the affected area.

6.4 Land Use and Livelihood

Figure number 6.4.1 the type of land

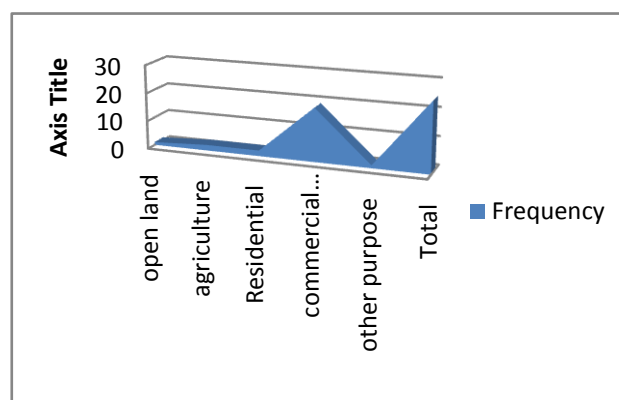


The figure above shows the type of property owned by the people in the affected area. 40% of people have dry land with building and the rest 10 % have dry land with some crops and trees in it.

Table number 6.4.2 the type of use of land

Type of use of land	Frequency	Percent
Open land	1	4.0
Agriculture	2	8.0
Residential	2	8.0
Commercial purpose	19	76.0
Other purpose	1	4.0
Total	25	100.0

The above table depicts the use of land by the PAF's. 76% of people use it for commercial purpose, i.e. some business and trades. Few others use it for agriculture and allied purpose.



The table given below depicts whether the acquisition of the proposed land affects their source of income.

Table 6.4.3 impact on family income

Major source of income affected	Frequency	Percent
Yes	20	80.0
No	5	20.0
Total	25	100%

The 80% of the family is going to be affected by the proposed project as they face loss in their main source of income. The 20 % of the people have other means of income than this from proposed land, but the majority depends on the land for livelihood.

CHAPTER 7

SOCIAL IMPACT MANAGEMENT PLAN

7.1 Framework and Approach to Identifying Impact

SIA seeks to assess, in advance, the social repercussion that is likely to follow from projects undertaken to promote development. It is a tool that can help decision makers to foresee the likely negative impacts of their actions so that steps necessary to prevent or at least to contain them could be taken in time. As an aid to the decision making process, SIA provides information on social and cultural factors that need to be taken into account in any decision that directly or indirectly affects the lives of people in the project area.

Category of Stakeholder:

1. Primary Stakeholders – Land Owners in the affected area.
2. Secondary Stakeholders – The Roads and Bridges Corporation, Kerala, Revenue Department

7.2 Opinions of the Stakeholders

Acquisition Process: Most of the respondents were favorable for the project but they expect a speedy acquisition and settlement. The affected families shared their grievance that whether their land was acquired for the project before a decision arises on compensation.

Table 7.2.1 opinion regarding the project

Opinion about the project.	Frequency
The project will reduce the traffic block in the area and will help the people in various ways so whole support to the project.	17
Support the project but there are lots of losses associated to its implementation.	8
Total	25

The table above shows the opinion of the people regarding the project. Surveys and interactions with the primary stakeholders revealed that all of them have positive response for the project. They believe that the project is for the development of their own place and it will help in various ways to reduce traffic block, pollution, wastage of fuels etc. some of them are also concerned about the acquisition of land and their properties. They fear that they may face huge loss by giving their land or property.

7.3 Measures stated by the Requiring Body in Project Proposal

Table 7.3.1 Analysis of the various possible social impacts and their proposed mitigation measures.

S. No	Type of Impact	Proposed Mitigation Measure
1	Loss of Land	Compensation as per The Right to Fair compensation and Transparency inland acquisition, rehabilitation, and resettlement act,2013
2	Loss of Built-up Property	
3	Loss of Productive Assets	
4	Loss of Livelihood	
5	Loss of public utilities lines	
6	Loss of common property	

7.4 Measures to Avoid, Mitigate and Compensate Impact

The implementation of the project should be done without delay in any of its procedures. The mitigation measures should be met on time. There should be a fare and real price as per the RTFCTLARR act, 2013 for each project affected families.

7.5 Awareness on the Project

Table 7.5.1 Awareness on the project

Awareness about the project	Frequency	Percent
Yes	24	96.0%
No	1	4.0%
Total	25	100

The above given table reflects the awareness of the people about the project. Almost all the people are aware about the project i.e. 96% of them have information about the construction of ROB and the related land acquisition.

Table 7.5.2 Source of Information

Source of Information	No. of families acquired awareness about the project	Percent
News paper	15	60
Internet/Social media	nil	nil
PWD/Government Official	3	12
Community Members	6	24
SIA Team	nil	nil
No information	1	4
Total	25	100

The table shows that 60% of the people have acquired information through the news papers and 12 % acquired information from the government notices or the PWD department. The 24% of people acquired information from the community members

Rehabilitation Package Preference.

Table 7.5.3 Views regarding acquisition of land

Views of the people.	Frequency
Fare compensation considering all the losses in the affected property	23
Resettlement of the affected shop	1
A job should be given due to loss of livelihood	1
Total	25

All the respondents demand a reasonable compensation related to the market value for land acquisition.

CHAPTER 8

SOCIAL IMPACT MANAGEMENT PLAN INSTITUTIONAL FRAMEWORK

9.1 Institutional Structures and Key Persons

RTFCTLARR Act, 2013 defines 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 and control of the appropriate Government and the Commissioner for Rehabilitation and Resettlement, the formulation, execution and monitoring of the Rehabilitation & Resettlement Scheme shall vest in the Administrator.

In the proposed project of constructing Railway Over Bridge in Thanoor-Theyyala in Malppuram district, the major mitigation measures from the acquisition can be handled by providing the appropriate compensation under the RTFCTLARR Act, 2013.

As per G.O. (Ms) No.485/2015/RD, dated 23/09/2015, The Kerala State Policy for Compensation and Transparency in Land Acquisition,

The District Level Fair Compensation, Resettlement and Resettlement Committee comprising

- District Collector, Administrator for resettlement and rehabilitation,
- Land Acquisition officer,
- Finance Officer,
- Representatives of the requiring body to take financial decisions on its behalf,
- Representatives of Local Self Government Institution to monitor the Rehabilitation Action Plan.

CHAPTER 9

SOCIAL IMPACT MANAGEMENT PLAN MONITORING AND EVALUATION

10.1 Key Monitoring and Evaluative indicators

Not Applicable

10.2 Reporting mechanisms and monitoring roles

Not Applicable

10.3 Plan of independent evaluation

Not Applicable

CHAPTER 10

ANALYSIS OF COSTS AND BENEFITS AND RECOMMENDATION ON ACQUISITION

11.1 Analysis of costs

The capital cost includes the cost of construction of bridge, retaining wall works, road works, staircase, electrical works, and cost of traffic diversion and supervision charges during construction etc. These are estimated in financial terms i.e. at market prices. The total project cost worked out is amounting to Rs.3, 416.00 lakhs.

11.2 Analysis of benefits

Some of the non-monitory benefits, which are difficult to be expressed in monitory terms through development of ROB, are reduction in air pollution and noise pollution as described below;

The growing number of vehicles and stoppage due to rail cross causes considerable ecological damage through emissions from internal combustion engines. Aggregation of vehicles at rail crosses at the time of gate closure leads to high quantum of air pollution and thereby causes various health issues for the people in the nearby areas. The proposed ROB will reduce the air pollution in the area due to seamless flow of vehicles.

The noise pollution in the rail cross area is at an alarming rate. As there are congestion during the opening of rail cross gate, honking of horns by the vehicles is high and there by the noise pollution in the area is also high. Through the introduction of ROB, there will have seamless flow of vehicles and hence can avoid the noise pollution in the area.

In addition to the above said benefits there are also other merits through provision of ROB which include social benefits such as savings in time of travel, reduction in accidents due to congestion during railway cross gate opening, etc. The benefits (which are converted in to monetary terms) considered from the replacement of Railway Level Crossings by ROB are as under:

- Travel Time savings of passengers for the duration of the closure of the gates and immediately after opening of the gates.
- Value of commodity in transit detained for the duration of closure of the gates and immediately after opening of the gates.
- Savings in the cost of maintenance of the level crossing (wages of gateman etc).
- Savings in idle fuel consumption (*RBDC, P- 70*)

11.3 Recommendation

Considering the benefits over the costs, the proposed project implementation is recommended provided fair compensation is provided to the affected families.