

SOCIAL IMPACT ASSESSMENT STUDY

DRAFT REPORT

09.10.2020

I.I.P. KANJOOR-THEKKUMBHAGAM BRANCH CANAL

**Submission
District Collector, Ernakulam**



**Youth Social Service Organization
Social Service Centre**
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Social Impact Assessment Study

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District : Ernakulam

Taluk : Aluva

Village : Angamaly

Submission

District Collector, Ernakulam

Special Tahasildar (LA) No.3, K.I.A, Nedumbassery

Executive Engineer, I.I.P. Division No.1, Angamaly

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Summary	

Name of the Project	I.I.P.Kanjoor-Thekkumbhagam Branch Canal
State	Kerala
District	Ernakulam
Taluk	Aluva
Revenue Village	Angamaly
Municipality	Angamaly
Land to be acquired	1.9995 Hectare
Arthana Official	Executive Engineer, I.I.P Division No.1, Angamaly
Acquiring Officer	Special Thahasildar (L.A)No.3, K.I.A, Nedumbassery

Chapter 1

SUMMARY OF THE STUDY

1.1 INTRODUCTION: PROJECT AND ITS OBJECTIVES

This report contains details of the study conducted on the social impact on the stakeholders who are to surrender their properties for the construction of the I.I.P. Kanjoor - Thekkumbhagam Branch Canal, in Ernakulam district. The said canal is an increasingly navigable necessity in a setting of ever-worsening water scarcity.

Angamaly has been the gateway to Malayattoor, a holy place believed to have borne the foot prints of St. Thomas and Kalady that is renowned as the birthplace of Adi Shankaran. Angamaly has a history to boast that its citizenry had accorded a grand reception movement, Vinoba Bhave, when he was on his way Kalady with the slogan of Land Donation Movement in the 1950's.

M/S Telk Company is the key to the present day development of Angamaly. It began to grow into a town with the opening of the National Highway in 1966. M.C. Road joins the highway at the heart of Angamaly, which accelerated its development.

The hitherto Village Union that had functioned during the decade of 1950, with Sri. Panjikkaran Kunjuthomman as its President was transformed into Panchayat Committee in May 1952. Later on, he represented Kothakulangara constituency including Angamaly area, in the Travancore-Cochin Legislative Assembly. Champannoor C.C.Devassy became the first president of Chennakkadan-Angamaly Panchayat succeeded by Sri.M.L.Paul and Sri.Garvasis Areeckal. Subsequently, Angamaly municipality was formed on 1 April, 1978 and an elected Municipal Council was officiated into authority on 1 October, 1980.

In the lexicon, 'Angamaly' has been explained as a 'place on the coast' or a 'public place'. In ancient dialect, 'mali' was a synonym for a harbor. Being well known for black pepper, there might have been export from here. References such as 'Pepper-growing Mali under the management of Christian bishops' found in the book 'Topographia

Indicia Christiana', written by Alexandrian merchant, Cosmos Indi Completus, who visited Kerala in Ad 522, could presumably be the present day Ankamali.

Idamalayar project has been envisaged with a view to providing water for agriculture in the eastern zones of Ernakulam district a Mukundapuram taluk in Thrissur district. The canal system comprises a 32-km-long main canal, a 270.25km-long low-level canal, a 7.575km-long link canal and 6 branch canals, of which the length of the L.L.C has been limited to 15km as per the instruction of the Planning Board. At present, only Kanjoor Thekkumbhagam branch canal is ready. The construction of this canal will ensure availability of water in Angamaly municipality, and the Gramapanchayats of Kalady and Kanjoor. As per the DPR of Idamalayar project, the length of the Kanjoor Thekkumbhagam branch canal is 7 kms. The catchment area is 2700 hectare. However, the current available catchment area is 1376 hectare only, as some farmland has been lost for the construction of the airport. Paddy, aracanut, nutmeg, coconut, pepper and vegetables are the cultivation.

Investigation work was done dividing Kanjoor Thekkumbhagam Branch Canal into 2 reaches. Investigation of the First Reach from 0 to 3.076km has been completed.

Idamalayar Irrigation Project (IIP) is situated at the Periyar estuary. The water reservoir is at the rear of Ennackal dam which is built across a tributary, Idamalayar that flows into Periyar. The water that is released in a controlled manner from this dam managed by KSEB is dammed by the artificial sand bund in Periyar at Bhoothathankettu. The water at the sand bund is streamed to two irrigation projects, to the Periyar valley irrigation project on the left bank and to the IIP irrigation project on the right. PVIP has capacity to water 32, 800 hectare and IIP has capacity to water 14,394 hectare. IIP's rainwater harvesting areas are Periyar river regions (Aluva and Paravoor taluks in Ernakulam district) and Chalakkudy river regions (Mukundapuram taluk in Thrissur district)

This project is enviable to solve problem of water scarcity and to meet the agricultural needs.

1.2 PROJECT AREA

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district. The project impacted area has 2 house as a whole, the Veranta of a house, a gate and wall, a rock wall, a water well, a bore well, pond, trees, a septic tank, farmlands, municipality road, a government land road and pond (Purampoke).

1.3 SIZE OF ACQUIRING LAND AND BENEFITS

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district. The project impacted area has 2 house as a whole, the Veranta of a house, a gate and wall, a rock wall, a water well, a bore well, pond, trees, a septic tank, farmlands, municipality road, a government land road and pond (Purampoke). This project is enviable to solve problem of water scarcity and to meet the agricultural needs.

Water- related demand will, indeed increase in the future due to ever rising population, urbanization, industrialization and so on. Also, it is expected that there will be increased growth in the repetition, severity and duration of climate change which will create problems related to availability of water, 2/3 of the Indian population lives depending on agriculture. This project helps compensating for the shortage of water in situations like drought.

1.4 ALTERNATE METHODS SUGGESTED

A better alternate route or location suitable for this project is not identified or suggested.

1.5 SOCIAL IMPACTS AND STEPS TO REDUCE THEM

When we analyze the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Re-settlement Act, 2013, it is concluded that social impacts can be managed through legal compensatory measures.

Sl. No.	Expected loss	Approach	Possible reduction measures
1.	Loss of houses	Re-settlement and compensation	Resettlement and compensation

2	Loss of entrance to rest of the land	Control	Reestablishment of entrances
3.	Loss of trees	Compensation and Control	Provide adequate compensation and plant same no. of trees in private or public land
4.	Sound, atmosphere pollution, dust etc.	Control	Include in the blueprint of impact reduction measures
5.	Delay in land acquisition and compensation distribution	Effective monitoring and control	Distribution of compensation before land acquisition
6.	Include the affected through land acquisition measures	Control	Ensure participation of the affected in proceedings
7.	Grievance redressal	Control	Functioning of efficient grievance redressal committees at district and panchayat level

Chapter 2

DETAILS OF THE STUDY

2.1 BACKGROUND AND LOGIC OF THE PROJECT

This chapter includes details related to I.I.P. Kanjoor-Thekkumbhagam Branch Canal. The projects public goals and expenditure are included in this chapter.

2.2 DETAILS OF LOCATION, SIZE, OBJECTIVES AND EXPENDITURE OF THE PROJECT

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district. The project impacted area has 2 house as a whole, the Veranta of a house, a gate and wall, a rock wall, a water well, a bore well, pond, trees, a septic tank, farmlands, municipality road, a government land road and pond (Purampoke).

Water- related demand will, indeed increase in the future due to ever rising population, urbanization, industrialization and so on. Also, it is expected that there will be increased growth in the repetition, severity and duration of climate change which will create problems related to availability of water, 2/3 of the Indian population lives depending on agriculture. This project helps compensating for the shortage of water in situations like drought.

IIP was started in 1981 with the initial approval of Rs.17.85crore. Later, govt sanctioned a cost of Rs.107 crore in November, 1994. However, the actual total cost upto 31 March, 2017 is Rs.433 crore.

IIP is the main 32.27km-long canal originating from the right side of Bhoothathankkettu sand bund. This canal runs 20.629 km through forest, 4.341 km through a region of forest land and revenue land, and 6.302 km through exclusive revenue land. Forest Department has handed over 115.046 hectare area to IIP on the condition that 117.75 hectare land would be fore stated in lieu.

Flowing 32, 278 km, the Main Canal divides into LLC and a link Canal. The flow capacity of LLC including 3 canals originating from Kanjoor South, Vappalasseri and

Nedumbassery, is 27.25km. The total area covered by LLC and its branches are calculated to be 4672 hectare. The 7.575km-long LC-Link Canal is linked to CLBC, part of CRDS.

2.3 RATIONALE OF THE PROJECT

2/3 of the Indian population depends on agriculture. Ever increasing population, urbanization, and industrialization will only add to the demand for water in future. It is expected there will be increased growth in the repetition, severely and duration of climate change and it will create problems related to the availability of water. The project is a dire need to compensate for water shortage and meet farming related water needs.

2.4 STAGES OF CONSTRUCTION

The construction has not started yet in the project area.

2.5 IMPORTANCE OF PUBLIC REQUIREMENT OF THIS PROJECT

The I.I.P.Kanjoor-Thekkumbhagam Branch Canal aims at providing basic infrastructure for economic development of Kerala.

2.6 ENVIRONMENT IMPACT ASSESSMENT

It is felt that as I.I.P.Kanjoor-Thekkumbhagam Branch Canal is for public utilisation, the minor environment impacts are negligible when compared to its benefits.

- Should ensure eco-friendly construction
- Should protect natural resources
- A committee should formed to prevent any harm to the environment during after construction

2.7 ACTS AND RULES AFFECTING THE PROJECT

Acts & rules listed below affect Land Acquisition, Transparency, Rehabilitation and Re-settlement related to the I.I.P. Kanjoor-Thekkumbhagam Branch Canal

Sl. No.	Acts and Rules	Affected area
1.	The Right to Fair Compensation and Transparency in land acquisition, Rehabilitation and Resettlement act and rules	Impact reduction

2.	Land Acquisition Acts & Rules Rehabilitation & Re-settlement act of the government Right to Information act 2005 Rights of Persons with Disabilities Act 2016	Land acquisition Rehabilitation and resettlement
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RIGHT TO INFORMATION ACT 2005

For the effective functioning of democratic processes in a nation, informed citizens are a prerequisite. The Right to information Act 2005 is aimed to strengthen the democratic process by public participation through citizens' empowerment, ensuring transparency and responsibility in governance and prevent corruption. This is an act giving information regarding activities of government to the citizens.

RIGHTS OF PERSONS WITH DISABILITIES ACT 2016

Rights of Persons with Disabilities Act 2016 came into being for socially and economically empowering persons with disabilities. On one hand it promotes equality and participation and the other hand it eradicates all discriminations.

Chapter 3

UNIT, APPROACH AND RATIONALE OF THE STUDY

3.1 BACKGROUND

As per G.O(P) No:DCEKM/8367/2018- C1 dated 10.03.2020, Youth Social Service Organization, Social Service Centre, College P.O, Kothamangalam is assigned to conduct Social Impact Assessment study on I.I.P. Kanjoor-Thekkumbhagam Branch Canal Project. This study unit is responsible to assess social impacts of the project.

3.2 SOCIAL IMPACT ASSESSMENT STUDY AND PREPARATION OF IMPLEMENTING PLAN:

Acquisition of land and properties affects social and economic sustainability, social impact study and properly planned rehabilitation programs should be done. Rehabilitation plans should establish livelihood programs of the affected people same as before the land acquisition. The study unit has conducted the preparations for the social impact assessment with these obligations as priority.

Figure 3.1 shows the approach and rationale of the study in a flowchart. And stages of the study are listed below.

Figure 3.1: Social Impact Assessment study design and method

Stage 1: Activities before study

Social Analysis and pilot meeting	Pilot survey and beginning of external works
<ul style="list-style-type: none">• Detailed project analysis• Preparation of the project blueprint• RFCT in LARR Act 2013• State laws on land acquisition	<ul style="list-style-type: none">• Pilot study• Preparation and checking of survey tools• Identifying the groups for data collection• Finalizing the pilot report

Stage 2 : Data collection methods and implementation

The affected families/people/society	Facilities required for the project
<ul style="list-style-type: none"> • Training for the field staff • Data collection from the affected family members • Discussions with officials of concerned departments 	<ul style="list-style-type: none"> • Analysis of legal rules and regulations • Analysis of rehabilitation programs with local officials • Data analysis • Draft of collected data, their analysis and impact assessment

Stage 3 : Activities after survey and blueprint of the analysis

Tabulation of the collected data and blueprint of analysis	Concerns on the Social Impact Assessment Study
<ul style="list-style-type: none"> • Integration, categorization of data • Finalization of the report • Analysis of the collected data • Preparation and submission of the draft report of the social impact assessment study 	<ul style="list-style-type: none"> • Organize public hearing • Meeting and discussions on study findings with affected people • Analysis and opinions of concerned officials • Integration of the opinions and submission of final report

3.3 DETAILS OF THE STUDY UNIT:

The data collection for the social impact assessment study and their integration was done under Team Director of Youth Social Service Organization by a group of 6 experienced members. Services of experts from development and legal sector have been availed for the study and report preparation. And, revenue official helped to identify the affected areas.

Sl. No.	Name	Designation, eligibility and experience
1.	Jose Paruthuvayalil	Director, MSW, 22 years experience in development sector

2.	Kuriakose George	Project Coordinator, LLB, 15 years experience in development sector
3.	Baiju PT	Research Associate, MSW, 10 years experience in development sector
4.	Savitha Sajeesh	Research Associate, BA, 2 years experience in development sector
5.	Jinu Joseph	Research Associate, B.Com, ICW, 2 years experience in development sector
6.	Mini Jibish	Research Associate, BA, 2 years experience in development sector

3.4 SECONDARY DATA:

Secondary data was prepared from the studies conducted earlier and concerned departments. The study unit could realize the social economic and cultural circumstances of the affected people through the social impact assessment study.

3.5 THE AFFECTED AREA VISIT AND PROJECT AWARENESS CAMPAIGNS

Field visit and pilot study of socio economic survey was conducted before the detailed study of social impact assessment. Responses of the affected people were documented while conversing with them. The unit made adequate additions and corrections in the interview schedule.

As the area of the study and affected people were identified, primary data was collected from the concerned in September, October 2020, and the report was prepared by integrated analysis of the collected data.

MEETING WITH I.I.P. OFFICER



MEETING WITH MUNICIPAL CHAIRPERSON



3.6 EVALUATION OF CIRCUMSTANCES

The data collected were analyzed and studied, and were modified as per new information was generated. The study unit has taken required measures before data collection to prevent errors.



PUBLIC HEARING

As per 14(1) form 5, public hearing has been scheduled to be held on 23rd October 2020 at Kottackal Family Trust Hall. Doubts and concerns of the people participating and responses from concerned officials will be included in the final report.

Chapter 4

EVALUATION OF THE LAND

4.1 INTRODUCTION

For acquiring land for I.I.P. Kanjoor-Thekkumbhagam Branch Canal, details of people losing land, the affected people, their socio economic information were collected through interview schedule prepared for it in September & October 2020. Details regarding the affected properties, their type, ownership, impacts on private properties, income and livelihood of people, and depth of impact due to project were collected. Authentic details obtained through a survey of the social impact related to land acquisition for the proposed IIP Kanjoor- Thekkumbhagam Branch Canal Project are given hereunder.

4.2 TOTAL IMPACT DUE TO INFLUENCE OF THE PROJECT

Table 4.1 includes socio economic impact of people who donates their land and need comp

Serial No	Address	Survey No	Problems/Demands Raised
1.	Varghese and Wife, Rosy Parekkattil House Josepuram	54/1	Impacted land, 54/1 as per BTR of village office, is in the name of Rosy, wife of Varghese. However, the owner does not know the full land details and more information could not be obtained
2.	Viji Santhosh Vallathery House Near J B School Angamaly	55/17-2 55/18	Impacted land contains coconut trees. Willing to surrender land for the project.
3.	Anthony K.T. Kizhakkedathu House Josepuram Vappalasserri P.O 683571	55/18	Loss of 3 coconut trees, water well, 1 Jack tree and pepper plants, willing to give land against fair compensation.
4.	Babu	57/5/2	Impacted land has Jack trees, Teak, Rosewood,

	Edassery Josepuram Angamaly-683572		Irumullu and other trees. Willing to surrender land for the project.
5.	Thressiamma Edasseri House E-colony, Angamaly	57/5-4	Willing to surrender land for the project.
6.	Varghese C.A Edassery House Via colony Angamaly	57/5-3	Impacted land contains 1 Teak wood, 2 Mahogany, 1 Jack tree and a wall. Owner is a bed ridden patient. Willing to surrender land against fair compensation.
7.	Krishnan (late) Parapurathu House Angamaly	57/6/3	Impacted land contains a mango sapling. Demanded fair compensation.
8.	Poly George and Naiji Paul Josepuram Angamaly	57/8	Loss of house as a whole. Currently let out on rent. Loss of 8 coconut tree and a back yard garden. Willing to surrender against fair compensation.
9.	Nalathu vazhi	57/9	Municipal road.
10.	Pavin Jose Mittathanickal House Puthuvassery Nedumbassery P.O	57-10-6	Impact land has coconut and Jack trees. Demanded takeover of remaining area too. As per this survey no, the land is in the name of Mary Manjaly at the village office. The land is not yet added to the asset register of Pavin Jose.
11.	Vijayalakshmy Vellimattathu House Near E-Colony Josepuram Angamaly	57/10-5	Project area contains a concrete wall, 1 Jack tree, 1 mango tree, 4 cashew nut, 1 Teak sapling and 3 Mahogany trees. Owner is the only resident. Willing to surrender land for the project.
12.	Parameswaran (Late) Girija Parameswaran Kaippasserri House Near E- Colony Angamaly P.O	57/12-2	Impact land has 1 coconut tree, 2 Jack trees and 1 mango tree. Willing to surrender land for the project.
13.	Vinod K.P Kaippasserri House Near E-Colony Angamaly P.O	57/12-2	Impacted land contains-2 Mahogany trees and 1- tamarind tree. Willing to surrender land for the project.

14.	Williams Thekkanathu Priya Nagar Kavaraparampu Nayathodu P.O 683572	67/1	Impact land contains 8 Mahogany trees, 1 Jack tree and a wall.
15.	Koruthu T.V. Mary Koruthu Thekkanathu Priya Nagar-13 Nayathodu P.O	67/5	Impact area is the entrance way to the house. Loss of mango saplings, coconut sapling, 2 Nutmeg trees, Marotti, Mahogany plants, pepper vines, wall, gate and pillar (will deed is registered in the name of Mary Koruthu) Uninterested to surrender land.
16.	Sheela Joji Kuzhippilli Hose Priya Nagar-13 Kavaraparampu Nayathodu P.O.	67/6-2	Impacted land contains 1 Coconut tree, 1 Jack Tree, 1 Mango tree, 3 Vatta, 20 banana plants, 1 Lakshmitharu, 10 tapioca plants. Willing to surrender against fair compensation.
17.	T. P. Poulouse (Late) Thekkanathu Nayathodu Kavaraparampu <u>Heirs</u> Saramma Elias, Anna	67/7	Landowner is deceased. Land ownership is as per will Deed. Land to be acquired contains 11 rubber trees, 2 coconut trees, 1 Jack tree, 2 Mango trees. Willing to surrender against fair compensation.
18.	Thomas Thekkanathu Nayathodu P.O.Angamaly	67/13-3	Impacted area is entrance way of the house, hence demanded alternative entrance way and fair compensation. Loss of wall, gate, 2 Jack trees, 1 Anjili tree, 3 Mahogany trees and a teak tree.
19.	Kuriakose Thomas Eldo Thekkanathu house Nayathodu P.O Angamaly	67/13-1	Impacted land is in the name of 3 heirs. It is empty area. Willing to surrender against fair compensation.
20.	Varghese V.O Vadakkineethu House Priya Nagar-7 Nayathodu P.O	67/1	Impacted area is the front yard of the house. Loss of wall, gate, 1 Cashew tree, 2 young teak trees, 1 big teak tree, 1 mango tree, 1 coconut tree, 1 Aracanut tree. Demanded project implementation avoiding entrance way to the house.

21.	Abraham P.T Samuel P.T Jacob Thomas Payyappilly house Priya Nagar-66 Nayathodu	69/8	Impacted property has 3 heirs. Loss of 22 rubber trees, 10 teak trees, 10 Mahogany. Willing to surrender against fair compensation.
22.	Jacob Thomas Payyappilli House Priya Nagar-66 Nayathodu P.O	69/3-2	Impacted area is farm land. 2 contain 20 rubber trees, 2 teak trees, 4 coconut trees. Demanded earliest implementation of project and fair compensation.
23.	P.G Thomas (Late) Kunjamma Thomas House No 23-3067 Punnamoothil Vennala Edappally South 682020	69/10/3	Loss of Teak, Anjili tree, some young trees and a wall. Willing to surrender against fair compensation.
24.	Divya Varghese Areecal House Karukutty P.O Angamaly	69/13	Loss of veranda adjoining the house, compound wall, gate, Tap, 1 mango tree, 1 curry tamarind, Banana plant, Mahogany. Willing to surrender against fair compensation.
25.	Nalathu vazhi	69/15	Municipality road.
26.	Anne Samuel Thudiyam House Nayathodu P.O. Priya Nagar-66 683572 <u>Communication Address</u> K. M Varkey Kottackal House Nayathodu P.O Priya Nagar-23 683572	69/23	Landowner lives abroad. Loss of 2 coconut trees and tapioca plants. Demanded fair compensation and tax exemption. Source of information Varkey Kunju.

27.	Daniel Thudiyyan House Nayathodu P.O. Angamaly <u>Communication Address</u> K. M Varkey Kottackal House Nayathodu P.O Priya Nagar-23 683572	69/24 69/25	Landowner lives abroad. Loss of house (in full) a water well. Bore well, motor, 5 nutmeg trees, 4 Jack fruit trees, 1 mango tree, pepper vines, 1 coconut tree, 3 Pongilliam and other trees. House is let out on rent. Source of information is Varkey.
28.	Joy Thundiyan House Nayathodu <u>Communication Address</u> K. M Varkey Kottackal House Nayathodu P.O Priya Nagar-23 683572	69/28-1	Landowner lives abroad. Loss of Jack fruit trees, pepper vines and a wall. Impacted area is land purchased for building house. Source of information is Varkey.
29.	Molly Jose Thundiyan House Priya Nagar-67 Nayathodu P.O	69/28-2 69/26-2	Willing to surrender land against fair compensation.
30.	K. O Varkey Kottackal House Nayathodu P.O Kavaraparampu	70/1-2	Front area of house, wall and gate are impacted. Demanded fair compensation.
31.	Poulose K.O Kottackal House Nayathodu P.O Kavaraparampu 683572	70/1	Impacted area is front side of the house/Loss of wall, gate, nut meg sapling, Jack tree, teak tree, mango tree, Mahogany, Rose wood tree, coconut tree, septic tank. Proposed slight change in alignment to avoid front side of house.

32.	Nalathu vazhi	70/2	Municipality road.
33.	Jinoy Menacherry House Priya Nagar -19 Nayathodu P.O 683572	70/34	Loss of concrete wall, gate, 1 teak tree, 1 jack tree, 2 mango trees, 1 coconut tree. Willing to surrender land against fair compensation. He opened that the project is highly useful to solve the problem of water shortage and to help the farmers.
34.	Molly and Motty Theikkanathu House Priya Nagar-21 Nayathodu P.O	70/3/1	Loss of a compound wall. Demanded fair compensation.
35.	Luice M. J Menacherry House Nayathodu P.O Kavarapparampu 683572	70/10	Land owner lives abroad. Loss of 1 mango tree, 1 tamarind tree, 1 coconut tree, a wall and a gate, source of information is Sebastian, his brother.
36.	Anthonykutty (Late) Achamma and Akhil Padayattil Nayathodu P.O Kavaraparampu 683572	70/11-1	Loss of a wall and tapioca plants. Demanded earliest execution of project and fair compensation.
37.	Road	70/12	Govt. left over land.
38.	Motty Theikkanathu House Priya Nagar-21 Nayathodu P.O 683572	70/13	Impacted area is front yard of house. Loss of a wall, gate 2 coconut trees and water. Authority water pipe. Willing to surrender against fair compensation.
39.	Pond	76/3	Govt Area.
40.	Savithryamma Pavithra Nivas Pazhampalakkodu Palakkad	76/5/2	Land owner lives overseas. Information not available.
41.	Pond	76/8	Govt Area.

42.	Jobby P.C Padayattil House Kavaraparampu Nayathodu P.O 683572	224/6-1	Land contains 4 teak trees, 6 mahogany trees, 2 cashew trees, 2 mango trees, 1 coconut trees, 4 Jack trees, pepper plants. Willing to give land for the project said project is useful to solve drinking and farming water shortage.
43.	P.C. Johnson Padayattil Nayathodu P.O Kavaraparampu 683572	224/6 224/2	Impacted area has shop rooms. Full loss of a Ration shop and park of a warehouse. In 224/2 loss of a bore well, a wall, gate, 30 banana plants, 1 coconut tree, 3 mango saplings, 1 Jack fruit tree, 1 Teak tree. Loss of rental income from shop. Land owner's both children are differently abled. Said that of livelihood meant for children would be lost. However he welcomed the project.
44.	George P.C Padayattil Nayathodu	224/6	Loss of ¾ of a warehouse and tapioca farming. Demanded fair compensation. Source of information is Johnson, his brother.
45.	Johny P.C Padayattil House Nayathodu P.O Kavaraparampu Keerthi Nagar	224/7 224/6	Loss of 1 coconut tree, 40 Banana plants, 4 teak trees, a wall and young trees. Willing to surrender land against fair compensation.
46.	John P Skaria and Beena John Panakunumpurathu Scaria John F-601 Manavsthal Heights CHSL Near Ashok Venue Military Road Marol, Andheri East Mumbai-72	<u>John</u> 224/6-4 224/6-6 224/6-7 <u>Beena</u> 224/6-2 224/6-11	Loss of compound wall, 4 coconut trees, gate. Demanded entrance way to the remaining property, and fair compensation.
47.	Eldho Aliamkunnu Mulanthuruthy P.O Ernakulam 652314	224/6-16 224/6/17	Impact area is banana plantation. Willing to surrender against fair compensation.

48.	Fr. Joseph Kottackal Nayathodu P.O	235/9	Loss of 12 coconut trees, 4 teak trees and 20 sap trees. Willing to surrender against fair compensation.
49.	Johnson K M Kottackal Nayathodu P.O Kavaraparampu	235/12-13	Impacted area is paddy and beans farming land. Demanded fair compensation.
50.	Paulo, Mathew (Late) Elsi Kottackal Nayathodu P.O Kavaraparampu	235/12	Impacted land has paddy farming banana plants, 6 coconut trees, 3 mango trees, 2 Jack trees, nut meg, stone well. Willing to surrender against fair compensation.
51.	Dr. Saju Johnjolly ManjummelKudiyil Palarivattom P.O Kochi-682025 Beeby Varghesekoshy Puthuppallythekkettil Kodukulanji P.O Chengannoor Allapuzha 689508 <u>Communication Address</u> Koshy Varghese Puthuppallythekkettil Kodukulanji P.O Chengannoor Allapuzha	235/12/15 235/12/16	Impacted area has coconut trees, mango trees, sap trees, stone wall and a pond for watering. Willing to surrender and demanded fair compensation. (Source of information is Koshy Varghese. The land is in the name of his son and son-in-law, both live abroad)
52.	Nalathu vazhi	236/1	Vazhi
53.	Francis and Mary	236/4-2	Land has 13 nut meg trees, 4 Jack fruit trees, a new 7-feet high wall, 4 coconut trees, 3 aracanut

	Anaparampil Moolamkuzhy Mattancherry P.O Kochi-682002	236/5 <u>Francis</u> 236/3-2 236/4-3	trees. Land is site for house. Willing to surrender against fair compensation.
54.	P.A Thomas Padayattil Kavaraparampu Nayathodu P.O	237/1	Impacted land has rubber trees, a bore well, pump set, jack tree and other trees. He said the project is helpful during water scarcity and he is not against development. Demanded fair compensation
55.	Cheriya Yacob Padayattil House Nayathodu	241/1	The impacted land, 241/1, in the name of Cheriya Yacob as per BTR in the village office. But he has no further information about the land and nothing could be collected.
56.	Eliya Kottackal, Nayathodu	241/2	Impacted area has paddy farming. Willing to surrender against fair compensation.
57.		70/4 54/6 71/2 236/2 237/9,11	Based on the site inspection done in the presence of officials it was informed by letter from the office of the Special Tahsildar (L.A.) that these survey numbers are included in the list. Moreover these survey numbers are not included in the gazette
58.		54/6 57/4 70/4 71/2 224/5 236/2 237/9 240/6	Concerned official shall check if these survey numbers are included in the alignment for the Phase1 construction of Kanjoor-Thekkumbhagam Branch Canal Project.

4.3 LAND REQUIRED FOR THE PROJECT

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district.

Sl. No.	Survey No	Description	Extent
1	54/1	Property	0.0015
2	55-17	Property	0.0300
3	55/18	Property	0.0444
4	57/5	Property	0.0225
5	57/6	Property	0.0300
6	57/8	Property	0.0905
7	57/9	Nalathu Vazhi	0.0137
8	57/10	Property	0.0961
9	57/12	Property	0.0846
10	67/1	Property	0.0546
11	67/5	Property	0.0481
12	67/6	Property	0.0412
13	67/7	Property	0.0626
14	67/13	Property	0.0325
15	67/17	Property	0.0150
16	69/3	Property	0.0487
17	69/8	Property	0.0630
18	69/10	Property	0.0646
19	69/13	Property	0.0596
20	69/15	Nalathu Vazhi	0.0551
21	69/23	Property	0.0482
22	69/24	Property	0.0225

23	69/25	Property	0.0894
24	69/28	Property	0.0668
25	70/1	Property	0.0084
26	70/2	Nalathu Vazhi	0.0010
27	70/3	Property	0.0096
28	70/10	Property	0.0060
29	70/11	Property	0.1500
30	70/12	Purampoke Land (Road)	0.0150
31	70/13	Property	0.0150
32	76/3	Purampoke Land (Pond)	0.0150
33	76/5	Farm Field	0.0412
34	76/8	Purampoke Land (Pond)	0.0082
35	224/2	Property	0.0180
36	224/6	Property	0.1590
37	224/7	Property	0.0150
38	235/9	Property	0.0430
39	235/12	Property	0.0800
40	236/1	Nalathu Vazhi	0.0061
41	236/3	Farm Field	0.0518
42	236/4	Property	0.0208
43	236/5	Farm Field	0.0099
44	237/1	Property	0.0600
45	241/1	Farm Field	0.0420
46	241/2	Farm Field	0.0375
Total			1.9995

4.4 ACQUISITION OF AFFECTED LAND

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district. The project impacted area has 2 house as a whole, the Veranta of a house, a gate and wall, a rock wall, a water well, a bore well, pond, trees, a septic tank, farmlands, municipality road, a government land road and a pond (Purampoke).

4.5 REQUIREMENT OF PUBLIC LAND

Land required for I.I.P. Kanjoor-Thekkumbhagam Branch Canal includes (Purampoke land, Pond) public land

4.6 LAND PURCHASED FOR THE PROJECT

No land is purchased for the project yet. Formalities for purchasing land will begin only after social impact assessment study.

4.7 GEOGRAPHY, CURRENT PURPOSE, AND LANDFORMS

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district. The project impacted area has 2 house as a whole, the Veranta of a house, a gate and wall, a rock wall, a water well, a bore well, pond, trees, a septic tank, farmlands, municipality road, a government land road and a pond (Purampoke).

4.8 NATURE OF OWNERSHIP

Type	No.	Percentage
Inherited	29	59.18
Purchased	16	32.66
No reply	4	8.16
Total	49	100

4.9 DURATION OF OWNERSHIP OF LAND

Table 4.3 Duration of ownership of land		
Year	No	Percentage
70 - 80	4	8.16
81 - 90	2	4.08
91 - 2000	12	24.49
2001 - 2010	11	22.45
2011 - 2020	12	24.49
No. Reply	8	16.33
Total	49	100

4.10 EARLIER BUSINESSES IN THE AFFECTED AREA

Informants told that there were no land transactions in previous 3 years.

(The above information was provided by informants during data collection. Documents related need to checked and verified.)

Chapter 5

NO. OF FAMILIES AFFECTED AND DETAILS OF LOSS OF LAND

5.1 INTRODUCTION

The depth of impact on people and their properties affected directly and indirectly is depicted in this chapter.

5.2 PEOPLE AFFECTED DIRECTLY BY THE PROJECT

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district. The project impacted area has 2 house as a whole, the Veranta of a house, a gate and wall, a rock wall, a water well, a bore well, pond, trees, a septic tank, farmlands, municipality road, a government land road and a pond (Purampoke).

5.3 PEOPLE AFFECTED INDIRECTLY BY THE PROJECT

Those who are not directly impacted by the project, but live or work in the area, are regarded as indirectly impacted persons.

2 houses are situated in the project area. Persons doing business in rented places or working in the shops are indirectly affected parties.

5.4 FAMILIES OF SCHEDULED TRIBE AND FOREST DWELLERS WHO LOSE RIGHT ON FOREST

Yes, one family belonging to the Schedules Caste lives in the land to be acquired for the proposed project.

5.5 DID THE FAMILIES DEPEND ON THIS LAND FOR LIVELIHOOD IN PAST 3 YEARS ?

The project area has shops. Workers in the shop lose their means of income and hence loss of livelihood. As 2 houses are let on rent, landowners suffer loss of income.

5.6 WAS THE LAND AVAILED THROUGH ANY WELFARE PROGRAMS OF STATE-CENTRE GOVERNMENTS ?

The affected land was not availed through any welfare programs of state-centre governments.

5.7 WERE THE AFFECTED FAMILIES, INHABITANTS OF CITY FOR 3 YEARS OR MORE ?

The affected families are inhabitants of city.

5.8 ARE THE AFFECTED FAMILIES DEPENDING ON PUBLIC LAND AFTER ACQUIREMENT?

The affected does not have any families depending on public land after acquirement.

5.9 DETAILS OF FRUITFUL PROPERTIES

It has been learnt that landowners in the project impacted areas will lose trees of teak, mango, Jack fruit, coconut and mahogany and other trees.

Chapter 6

SOCIO ECONOMIC BLUEPRINT

6.1 BACKGROUND

This chapter includes socio economic cultural details of affected families and the situation of these factors. Demographic details, situation, livelihood affected families and additional information of the affected people are also enlisted.

6.2 FAMILY DETAILS

Table 6.1 Family income

Monthly Income	No.	Percentage
Upto 5000	10	20.41
5001 - 10000	9	18.37
10001 - 15000	0	0
15001 - 20000	9	18.37
20001 - 25000	0	0
25001 - 50000	5	10.20
Above 50000	5	10.20
No reply	11	22.45
Total	49	100

Table 6.2 Age wise categorization

Age	No.	Percentage
0 -10	20	11.77
11 - 20	20	11.77
21 - 30	23	13.53

31 - 40	19	11.18
41 - 50	22	12.95
51 - 60	33	19.41
61 - 70	15	8.82
71- 80	7	4.11
Above 80	8	4.70
No reply	3	1.76
Total	170	100

Table 6.3 Married/unmarried/widows

	No.	Percentage
Married	89	52.36
Unmarried	31	18.24
Widow	14	8.24
Children	29	17.05
Widower	4	2.35
No reply	3	1.76
Total	170	100

Table 6.4 Education of the affected

Education	No.	Percentage
Primary	46	27.06
SSLC	32	18.83
Secondary	24	14.12
Degree	29	17.05

Master's degree	9	5.29
Others	23	13.53
Illiterate	4	2.36
No reply	3	1.76
Total	170	100

Table 6.5 Employment related data of the affected

Employment	No.	Percentage
Self employed	2	4.08
Business	4	8.16
Government job	2	4.08
Doctor	1	2.05
Gulf	5	10.20
Private job	18	36.74
Agriculture	5	10.20
Coolie	4	8.16
Trade	1	2.05
Others	2	4.08
No reply	5	10.20
Total	49	100

Table 6.6 Category of ration card

Type	No.	Percentage
Below Poverty Line	8	16.33
Above Poverty Line	23	46.94

No	4	8.16
No reply	14	28.57
Total	49	100

6.3 RELIGION

The affected people comprise 87% of Christians, 13% of Hindu communities.

(The above mentioned information is provided by the concerned parties during data collection. Documents proving these should be checked.)

Chapter 7

REDUCTION OF SOCIAL IMPACT

7.1 APPROACH TO REDUCE IMPACT

The affected individuals are demanding compensation amount and job for family members in order to reduce the impact of land acquisition. Hence, in order to reduce the impact, compensation of land acquisition needs to be decided through discussions with the affected families and distribute them before land acquisition.

7.2 MEASURES TO ERADICATE IMPACT OR LOSS

The compensation should be decided and distributed as per ‘The Right to Fair Compensation and Transparency in land acquisition, Rehabilitation and Re-settlement act, 2013 (RFCTLARR Act 2013) in a timely manner.

7.3 COMPENSATION FOR TREES AND OTHER PROPERTIES

An adequate compensation should be provided for trees and other properties in the land.

7.4 MEASURES TO FULFILL THE PROJECT SUGGESTIONS

A special budget needs to be identified for distribution of compensation.

7.5 MEASURES TO REDUCE IMPACT

Sl. No.	Expected loss	Approach	Possible reduction measures
1.	Loss of houses	Re-settlement and compensation	Resettlement and compensation
2	Loss of entrance to rest of the land	Control	Reestablishment of entrances
3.	Loss of trees	Compensation and Control	Provide adequate compensation and plant same no. of trees in private or public land

4.	Sound, atmosphere pollution, dust etc.	Control	Include in the blueprint of impact reduction measures
5.	Delay in land acquisition and compensation distribution	Effective monitoring and control	Distribution of compensation before land acquisition
6.	Include the affected through land acquisition measures	Control	Ensure participation of the affected in proceedings
7.	Grievance redressal	Control	Functioning of efficient grievance redressal committees at district and panchayat level

Chapter 8

SOCIAL IMPACT MANAGEMENT

8.1 INSTITUTIONAL SYSTEMS AND RESPONSIBLE PERSONS

Administrator appointed by government as per RFCTLARR Act 2013 will be responsible for developing Re-settlement scheme for affected families. Under the supervision and guidance of government and Commissioner of Rehabilitation and Re-settlement, Administrator of Rehabilitation and Re-settlement will be responsible for the formulation, implementation and monitoring of scheme for Rehabilitation and Re-settlement.

Provision of adequate compensation to the affected, as per RFCTLARR Act 2013, will not reduce impact.

As per the laws of state government, the district level committee on adequate compensation, Rehabilitation and Re-settlement should include following persons.

- District Collector
- Administrator of Rehabilitation and Re-settlement
- Land acquisition officer
- Finance officials
- Representatives of Arthana officials for taking financial decisions
- Representatives of Local Self Government

Chapter 9

SOCIAL IMPACT ERADICATION BUDGET

9.1 EXPENDITURE FOR REHABILITATION AND RE-SETTLEMENT

The expenditure for Rehabilitation and Re-settlement is not calculated.

9.2 ANNUAL BUDGET AND PLANNING

Not applicable

9.3 CATEGORIZATION OF FINANCIAL SOURCE

Financial source of the affected area is not categorized.

Chapter 10

Social Impact Eradication Program- Monitoring & Evaluation

10.1 MONITORING & EVALUATION – IMPORTANT INDICATORS

- Participation of land owners in District Level Purchasing Committee
- Land was purchased directly from how many land owners
- Indicators used to calculate compensation
- Re-settlement of blocked entrances
- Formation of grievance redressal committee
- Time required for Rehabilitation and Re-settlement

10.2 METHOD OF REPORTING, MONITORING AND RESPONSIBILITIES

Not applicable

10.3 INDEPENDENT EVALUATION- MODEL

Not applicable

Chapter 11

ANALYSIS OF ADVANTAGES AND DISADVANTAGES: SUGGESTIONS ON LAND ACQUISITION

11.1 FINAL CONCLUSION: ANALYSIS OF POPULAR OBJECTIVES

The project area is 1.9995 hectare at Angamaly village in Aluva taluk in Ernakulam district.

I.I.P. Kanjoor-Thekkumbhagam Branch Canal will have considerable impact on agriculture, small scale industries etc. Water- related demand will, indeed increase in the future due to ever rising population, urbanization, industrialization and so on. Also, it is expected that there will be increased growth in the repetition, severity and duration of climate change which will create problems related to availability of water, 2/3 of the Indian population lives depending on agriculture. This project helps compensating for the shortage of water in situations like drought.

The study and public opinion reveals that the project is requirement.

The land to be acquired is in private ownership and can be acquired by providing compensation as per 2013 act. The affected are ready to provide land for the project.

11.2 NATURE & EXTREME OF IMPACTS

The project impacted area has 2 house as a whole, the Veranta of a house, a gate and wall, a rock wall, a water well, a bore well, pond, trees, a septic tank, farmlands, municipality road, a government land road and a pond (Purampoke). This project is enviable to solve problem of water scarcity and to meet the agricultural needs.

But as it is a public development program, individuals need to provide their private land. Many people get affected adversely when land is acquired for public purposes. For protecting such person's rights, the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 was enacted. 4th section of this act rules that if land is acquired for the nation's development, public interest and social impact needs to be assessed.

SUMMARY

In terms of the scarcity of water in the city & villages, the Kanjoor-Thekkumbhagam Branch Canal Project is a milestone. The proposed project requires 1.9995 hectare area of land. This study helps awarding fair compensation to the impacted on per RECTLARR Act, 2013.

Many individuals shall need give up own properties for the realization of any project. In this context, in connection with land acquisition for the project, 2 houses as a whole, the veranda of a house, walls, gates, stone walls, wells, bore wells, pond, trees, septic tanks, farmlands, municipality roads, roads and ponds in govt. lands are to the lost. Nevertheless, the project will indeed be a boon to the people as a whole.

The affected people should get their compensation as per RFCTLARR Act 2013. Hence the study unit has assessed social impact and has included suggestions to reduce impact in this report.

While analyzing the beneficial side of the project, land acquirement for the project is highly essential. RFCTLARR Act 2013, has enough provisions to acquire land and provide compensations.

