

Social Impact Assessment Study

Draft Report

Entrusted by District Administration, Wayanad



16.10.2019

Land Acquisition for Karappuzha Irrigation Project, Wayanad

Requiring Body



Irrigation Department
Kalpetta, Wayanad

SIA Unit

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List of Abbreviations

OBC	Other Backward Communities
RFCTLAAR Act	The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013
SC	Scheduled Caste
SIA	Social Impact Assessment
ST	Scheduled Tribe
DPR	Detailed Project Report

Chapter 1

Executive Summary

1.1 Project and public purpose

Karappuzha irrigation project (Kabini Scheme) is being implemented, in the Kabini sub – basin of the interstate river Cauvery. This is the first project to be taken up in the Kabini sub – basin. The project is to construct an earthen dam at Vazhavatta across Karappuzha Rivulet with an objective to create a reservoir of 76.50 Mm³ storage capacity and to irrigate a net area of 5221 hectares of land in Vythiri, Sulthan Bathery and Mananthavadi Taluks of Wayanad District through a network of canal system. The Karappuzha irrigation project reservoir is spread in Ambalavayal, Muppainadu and Thomattuchal village of Vythiri and Sulthan Bathery taluk of Wayanad district.

The irrigation project was cleared by planning commission vide No. II 20 (4) 77 I & CAD dated 19/4/1978 and Administratively sanctioned vide G.O. (MS) No. 67/78/W&T dated, 28/7/1978. Revised DPR of the project was prepared based on 2014 DSR and sanction to this DPR was obtained vide G.O. (Rt) 988/2017/WRD, Thiruvananthapuram, dated 11/12/2017 of the Water resources department (MP). Accordingly, 0.4000 Hectares of Land from Thomattuchal Village have been identified in Sulthan Bathery Taluk to acquire for the project.

1.2 Location

The project is at Sulthan Bathery Taluk in Wayanad District is being planned in 0.4000 Hectares of Land in Thomattuchal village covering Survey Nos. -606/1A, 606/1A1, 82/4B, 83.

The region is known for its serenity and yielding from the paddy fields. The land to be acquired is under cultivation of crops and land have been classified as wet land.

1.3 Size and attributes of land acquisition

The project is mapped to acquire a total extent of 0.4000 Hectares of land and most plots are used by the owners for farming and classified as wet land. Accordingly, 0.4000 Hectares of

Land from Thomattuchal Village have identified in Sulthan Bathery Taluk to acquire for the project. The project site is located near the reservoir area of the Dam.

6 affected persons have been identified, whose land (Mostly Wet Lands) will be affected for the development of Dam. The affected persons are staying in Thomattuchal Village. Agriculture land is reported to be affected due to the project. Land acquisition is expected to be with minimum objections and public including affected persons are generally affirmative for the project. However, a fair compensation and other measures to mitigate impacts are to be adopted as per concerned Act and Policies.

1.4 Alternatives considered

The proposed land is closely attached to the project area. So no other alternatives shall be considered for the project area.

1.5 Social impacts

All among the affected families responded during the survey and are very cooperative with the survey. From the survey it is clear that the earning assets of 6 families were affected. Despite the negative impacts, the proposed project is expected to be beneficial for the people in the region because they loss their crops and cultivation during the swelling of water in the reservoir.

1.6 Mitigation measures

- Compensation as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.
- Resettlement procedures as per the Policies vide G.O.(P)No.470/2015/RD dated 19/09/2015 and G.O.(MS) No.448/2017/RD dated 29/12/2017 issued by Revenue(B) Department, Government of Kerala for the rehabilitation and resettlement package for acquisition of land in the state in lieu of RFCTLAR&R Act 2013.

Chapter 2

Detailed Project Description

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

Karappuzha dam is located in the Wayanad District of Kerala is one of the biggest earth dams in India. It is located in the greenish and natural regions of Wayanad on the Karappuzha river, a tributary of the Kabini river. Construction of the dam began in 1977 and it was completed in 2004. The purpose of the dam was irrigation and its left and right bank canals are still under construction. Despite more than Rs.300 crore have been spent on the Karappuzha irrigation project over the past three decades, still the total completion is not over.

The Karappuzha irrigation project requires 0.4000 hectares of land belonging to 6 landholdings in Thomattuchal village of Sulthan Bathery Taluk in Wayanad district. The completion of the project will increase the reservoir capacity of the Karappuzha dam enabling irrigation of larger area for agriculture.

As per the letter *No. DCWYD/2479/2019-B1* dated 30.08.2019, of the district collector, Wayanad Rajagiri outreach Kalamassery has entrusted to conduct Social Impact Assessment Study and to prepare a Social Impact Management Plan as per section 4 (1) of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013.

2.2 Rationale of the project including how the project fits the public purpose criteria listed in the act

Karappuzha Medium irrigation Project is being implemented, in the kabini sub-basin of the inter-state river Cauvery. Karappuzha dam and reservoir are owned and operated by the irrigation department, Kerala. It is the first irrigation project taken up in the Wayanad district, Kerala with an average elevation of 780 mM above the sea level, lying on the eastern slope

of western ghats. The dam is 13 KM away from the district headquarters of Kalpetta town and 5.40 KM away from Kakkavayal junction on NH 766.

Considering the project as public purpose, the district collector Wayanad published a notification on 27/02/2019 to acquire 0.4000 Hectares of land in Sulthan Bathery Taluk for the project. Further, as per Section 2 b (iv) of The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 (RFCTLARR Act), the project fits in for public purpose.

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

The proposed acquisition of land is aimed to increase the capacity of the karappuzha reservoir. The project at Sulthan Bathery Taluk in wayanad District is being planned in 0.4000 Hectares of Land in Thomattuchal village covering Survey Nos : 606/1A, 606/1A1, 82/4B, 83.

The Karappuzha irrigation project is to construct an earthen dam at Vazhavatta across Karappuzha rivulet with an objective to create a reservoir of 76.50 Mm³ storage capacity and to irrigate a net ayacut of 5221 hectares of land in Vythiri, Sulthan Bathery and Manathavady Taluks of Wayanad District through a network of canal system.

Over the years, the project has transformed into a multipurpose project viz ; Drinking water supply scheme to Kalpetta municipality is commissioned and certain other schemes supplying drinking water to adjoining panchayaths in Vythiri and Sulthan Bathery Taluks also are under implementation from the Karappuzha reservoir. As the Karappuzha Project is located in the vitally important interstate river basin of the river Cauvery and is allotted to 2.80 TMC of water by the Cauvery Water Disputes Tribunal (CWDT) in its final award all efforts are taken by the Kerala state Government to complete the project at the earliest by rising the water level to the full reservoir capacity by acquiring the balance land in the reservoir periphery and utilize the allotted share of water from the Cauvery basin to the benefit of the people.

2.4 Examination of alternatives

The proposed site is the periphery of the reservoir. The present site is identified for the project which is marked as a flood-plain, when the water in the reservoir increases. So no other alternatives shall be considered.

2.5 Phases of the project construction

The proposed Karappuzha irrigation project having no construction work to done and only land acquisition is needed for the project. The project is planned to complete in single stage involving Land Acquisition.

2.6 Core design features & size and type of facilities

The proposed project acquires land for reservoir area, hence construction or other facilities are not included in the project.

2.7 Need for ancillary infrastructural facilities

The proposed project area consist of acquisition of land only, hence there will be no need for ancillary infrastructural facilities.

2.8 Workforce requirements (temporary and permanent)

Hence acquisition of land is the only requirement, work force requirement is not needed.

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

As per the available information, no studies to assess social or environment impact of the project are conducted in the past. Existence of any technical feasibility reports with respect to the project are also not found in any possible sources.

2.10 Applicable legislations and policies

The applicable laws on land acquisition, rehabilitation and resettlement for the proposed land acquisition for Karappuzha irrigation project are:

- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
- Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.

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

Chapter 3

Team Composition, Approach, Methodology and Schedule of the Social Impact Assessment

3.1 List of all Team Members with Qualification

As per letter No. DCWYD/2479/2019-B1 dated 30.08.2019, of district collector, Wayanad the SIA Unit of Rajagiri outreach, Kalamassery was appointed to conduct Social Impact Assessment Study and to prepare a Social Impact Management Plan as per section 4 (1) of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013. Further, a team was constituted with experts who have engaged in similar projects and deployed them into the project with a set of definite roles and responsibilities.

Table (3.1) Details of the study team

Sl. No	Name	Qualification and Designation	Experience
1.	Dr. Binoy Joseph Principal, Rajagiri College of Social Sciences	MA (HRM), LLB, Ph.D. Consultant	23 years in teaching, research and training sector
2.	Meena Kuruvilla	MSW Chairperson	30 years in development sector
3.	Maria Tency V S	MA, DSS Research Associate	27 years in development sector
4.	Biju C P	AB Phi. Development Officer-SIA	24 years in development sector
5.	Albin Noble	MSW Research Associate	2 months in development sector

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

As per the Notification DCWYD/2479/2019-B1 and Schedule issued by District Collector, Wayanad dated 02/09/2019, 11 subdivision of land in Thomattuchal Village is reported to be

acquired for the reservoir area. Our researchers have identified 6 Affected Persons who own and hold land in the specified survey Nos. To infer crucial information required to assess the impact and to prepare Mitigation and SIA Management Plan, our field investigators have visited proposed lands in the region and collected information through a structured questionnaire.

Focus Group Discussion and Key Informant Interviews of Affected Persons, Administrators, Civil Officers and other important stakeholders were also held by the expert qualitative researchers of the SIA Unit to gather common, specific and perceived impact of the project. The published reports and designs from Water Authority Division , Wayanad was also referred in this study.

3.3 Sampling methodology used

As the size of land to be transferred for the project by the affected person and extent of impact due to latter is unique for each, a population Socio-Economic-Impact Survey was found to be appropriate over sampling method. Further, the respondent size was found to be 6 land owners and was possible to collect the information in the limited timeframe as per the scheme of the study.

3.4 Overview of information/ Data Sources used

Both primary and secondary information were collected and analysed through mixed method by the study team. Secondary information and published reports from concerned Irrigation/Revenue/Civil Stations were collected/ referred by the field investigators at multiple stages.

A structured questionnaire was prepared, tested and validated to collect information from affected persons through Socio-Economic-Impact Survey. All affected persons were participated in the survey and have responded to the questionnaire interview. Survey contained questions aimed to collect the information such as Demographic/ Economic/ Family/ Livelihood, details of performing/non-performing assets in the project land and the types/degree of impact. The response and data points were analysed through a statistical software and findings have reported along with recommendations.

3.5 Schedule of Consultations with key stakeholders and brief description of public hearing conducted

Table (3.5) Schedule of Consultation Meetings

Date	Activity/Event/Meeting	Venue
04-09-2019	Pilot Study and Key Informant Interviews	Nellarachal
04-09-2019	Socio-Economic Survey and Key Informant Interviews	Nellarachal
04-09-2019	Meeting with Land Acquisition Officer,	Kalpetta
09-10-2019	Distribution of Notice and broadcasting about Public Hearing Meeting	Nellarachal

Besides the above, a public hearing is proposed to conduct in Nellarachal Govt. H. S on 16th October 2019 at 11.00 a.m. and the notice are given to the affected families.

Chapter 4

Land Assessment

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

The proposed Karappuzha irrigation project would require 0.4000 Hectares of Land at Thomattuchal Village. The region is known for its serenity and yielding from the paddy fields. The land to be acquired is under cultivation of crops and land have been classified as wet land as per available land records.

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

The Karappuzha region is known for its serenity and yielding from the paddy fields. The Karappuzha Irrigation project Reservoir is spread in Ambalavayal, Mupainadu and Thomattuchal villages of Vythiri and Sulthan bathery Taluks in Wayanad District. The area is also home to many religious institutions, schools which contribute to the development of the place.

The project is mapped to acquire a total extent of 0.4000 Hectares of land and the plots are used for cultivation and classified as wet land. The reservoir area is adjacent to the proposed land. The proposed land acquisition is expected to result in increase in the reservoir area and there by irrigate in a large extent of area.

4.3 Total land requirement for the project

As per the Notification and Schedule released by District Collector, a total extent of 0.4000 Hectares of land (Mostly Wet Lands) from Sulthan Bathery Taluk of Wayanad district is mapped to be acquired from (Survey Nos. – 606/1A, 606/1A1, 82/4B, and 83).

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

As the proposed land is adjacent to the reservoir area, there will be any public or utilized land in the project area.

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

The concerned authorities have mapped to acquire 0.4000 Hectares of land for the proposed acquisition of Karappuzha irrigation project in Thomattuchal village. As per the available information from the concerned departments, no land has been either leased or purchased for the project yet.

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

The Karappuzha irrigation project reservoir is spread in Ambalavayal, Mupainadu and Thomattuchal Villages of Vythiri and Sulthan bathery Taluks in Wayanad district. The proposed project is mapped to acquire 0.4000 Hectares of Land. The proposed land acquisition will increase the reservoir capacity of the Karappuzha reservoir. Hence the project purpose is to acquire only land and there will not be any construction works to be done for the project.

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

The proposed acquisition of land in Thomattuchal village is for the irrigation project of Karappuzha dam. The acquisition increases the reservoir capacity of the proposed dam. 6 affected persons have been identified, whose land will be affected for the acquisition of the Karappuzha irrigation project. Agricultural land is reported to be affected due to the project.

While analysing the present use of land, it is found that the majority of the affected persons are using the land for agriculture. No residential plots were affected due to the project and no buildings are situated in the affected land.

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

Each affected persons are losing land in varying size. While 6 affected persons have reported in the Socio-Economic Survey that they own land as their hereditary property. Further one affected persons have bought the land in the year 1992. The remaining has owned the land more than 100 years ago. It is reported in the survey that no functional residential buildings will be affected.

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

As per the survey the market value of the land per cent is reported to be around INR 1 Lakh per are and will be varied based on the size of plots and value in the specific area. Five among the affected persons have inherited the proposed land for more than 100 years and only one person bought the land 27 years ago. As per the information given by the affected persons, no transactions had been taken place in the affected properties for the last three years.

Chapter 5

Estimation and Enumeration (Where Required) of Affected Families and Assets

5.1 Estimation of families

As per the information from Land Acquisitions Office, land plots of 6 persons are to be affected. These persons belongs to five families. This includes plots owned people living in Thomattuchal Village. The plots are owned by individuals and is used for agricultural purpose.

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

The list of 6 directly affected persons whose land is being projected to acquire for Karappuzha irrigation project is given in Table 5.1.1

Sl. No.	Name and Address of Land Owner/ Affected Person	Extent of Land to be Acquired (in Hectares)	Village
1	Kunjikrishnan, Kumilkandy, Nellarachal P O, Ambalavayal	0.4000	Thomattuchal
2	Lakshmi, Kumilkandy, Nellarachal P O, Ambalavayal		Thomattuchal
3	Gopalakrishnan, Kumilkandy, Nellarachal P O, Ambalavayal		Thomattuchal
4	Gangadharan, Kumilkandy, Nellarachal P O, Ambalavayal		Thomattuchal
5	K P Joseph, Kuncharath, Nellarachal P O, Ambalavayal		Thomattuchal
6	V A Ravindran, Bhayankarakuzhi, Nellarachal P O. Ambalavayal		Thomattuchal

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

The acquisition of land for Karappuzha irrigation project in Wayanad requires acquisition of Wet Land in Thomattuchal Village in Wayanad district. Neither any Scheduled Tribes, nor any other community with special forest rights are reported to be affected with the project.

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

No major common property and resources are found to be affected with the proposed acquisition of land for Karappuzha irrigation project.

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

No such families are residing in the project area.

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

Not applicable.

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

The families are getting income from the affected project area.

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

No indirect impact due to the project.

5.6.2 Inventory of productive assets and significant lands.

The project area largely covers agriculture land. Besides the impact on farming, some trees in the area has to cut down for the project and the details are given in the table below.

Table 5.6.2 Social impacts

Sl. No	Type of Farming / Tree / Cash crops	Units*
1	Pineapple	275
2	Plantain	40
3	Pepper	188
4	Cardamom	236
5	Coffee	399
6	Jack Fruit Tree	83
7	Coconut Tree	6
8	Areca nut	293
9	Padumaram	121

*Units mentioned is not the approximate number of crops

Chapter 6

Social Economic and Cultural Profile (Affected Area and Resettlement Site)

6.1 Demographic details of the population in the project area

Nellarachal in Thomattuchal village is known for the serenity and yield from the paddy fields. The proposed project area is blessed with the presence of water in a large area. Fishing has been the sole livelihood means of Scheduled Tribes in the region and as city grew in the last few decades.

The proposed Karappuzha irrigation project will have varied impact on the people and Socio-economic profile of 6 affected persons are given here.

As given in the (Figure 6.1.1) Five families follows Hinduism and One family follows Christianity.

While One family belong to Other Backward Community (OBC), 5 families fall in the General category. (Figure 6.1.2)

While analysing age of the affected population, it is found that adult in the age group of 26-40 outnumbered the rest with 8 of them followed by 5 persons falling in 41-60 age group. Similarly, presence of younger children (0-6) and elders (60-80) in the families are comparatively high with 3 and 6 numbers respectively. Number of children under age group of 6-17 and adults in 18-25 age group have counted as 4 and 1 each. (Figure 6.1.3)

(Figure 6.1.4) explains classification of population in terms of Gender. As per the primary information through questionnaire survey, population of male is 12 and of Female is 15.

As illustrated in (Table 6.1.1) detailing the marital status, 18 persons are married and 9 are reported as unmarried. Survey counts no person as widow or a widower.

With regards to the education background of the affected persons, survey reveals that Three (3) people in the affected families are college graduates. Number of individuals with High School, UP School and LP School qualification are 13, 6 and 5 respectively. (Table 6.1.2)

Figure (6.1.1)

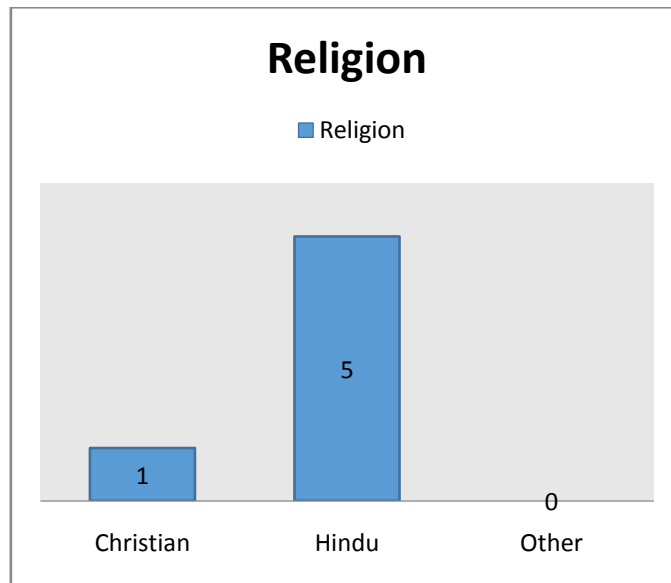


Figure (6.1.2)

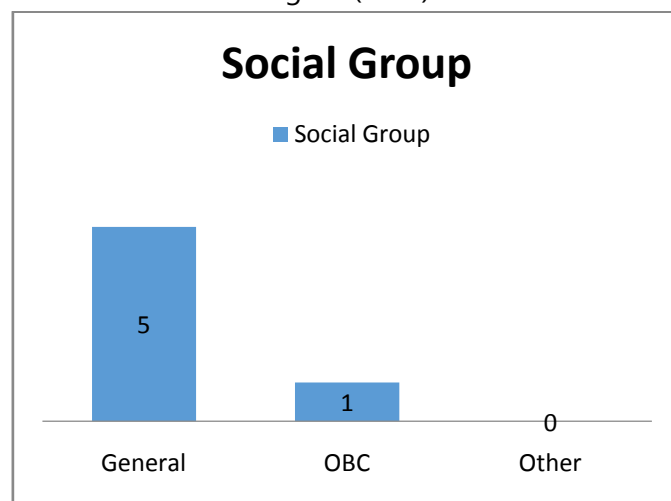


Figure (6.1.3)

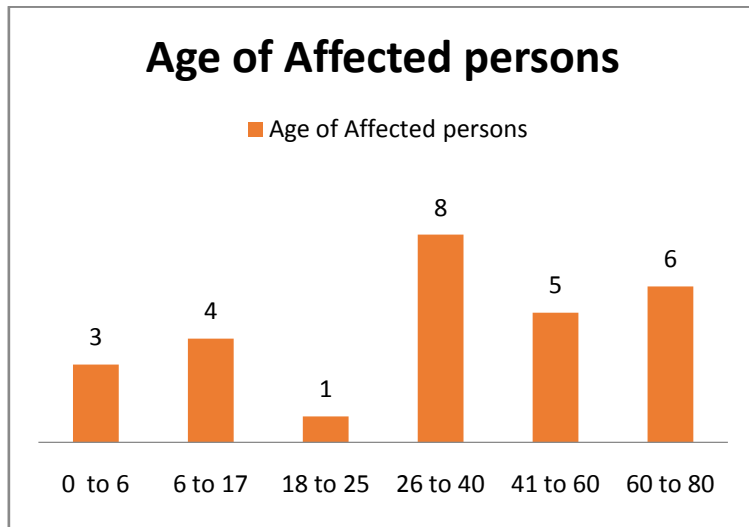


Figure (6.1.4)

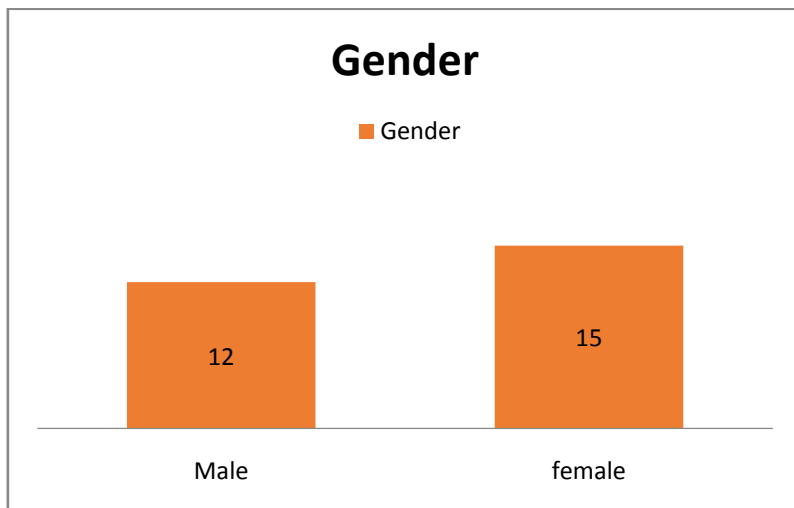


Figure (6.1.5)

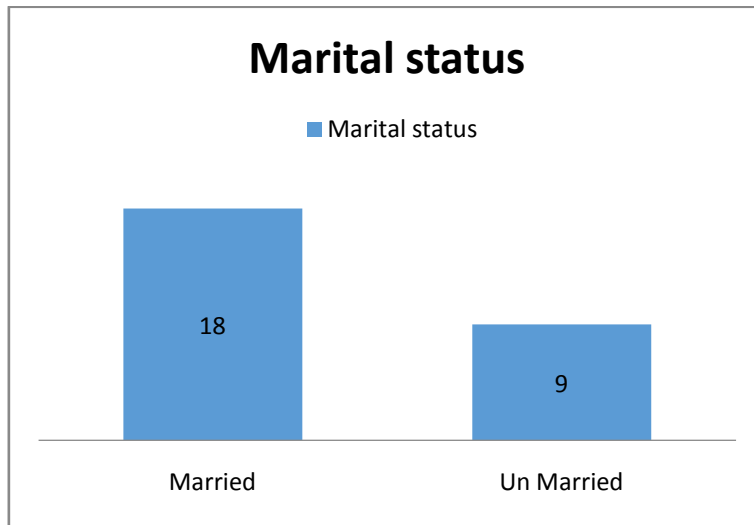
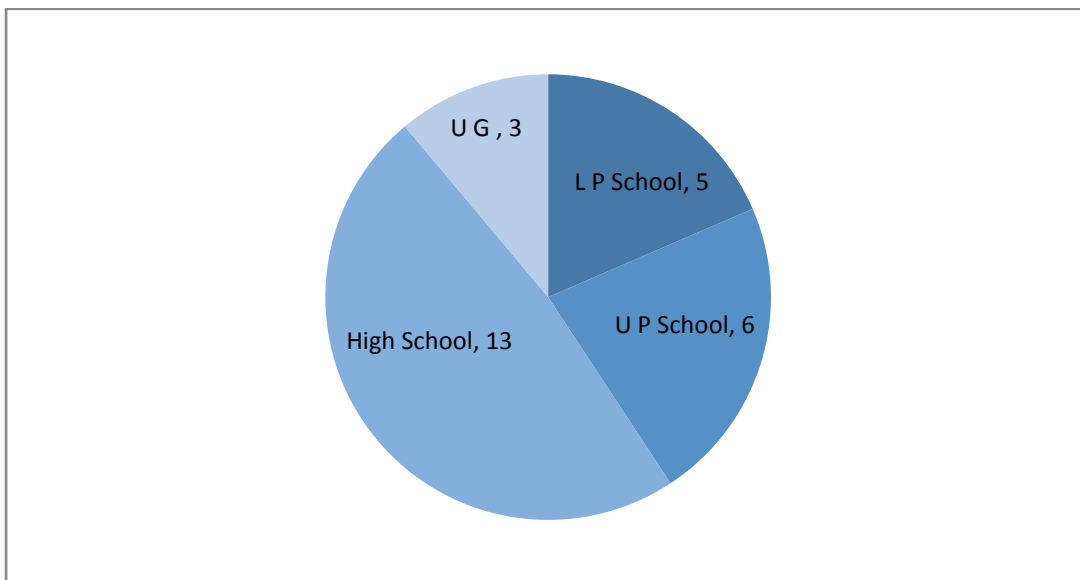


Table (6.1.6) Education



6.2 Income and poverty levels

Income level of the affected families is found to be above average as per the available information and varies between 15,000 to 30,000 per month. All families have responded to this question and given the information.

While all the families have only one earning member each and contributes to the family income. The average No. of Dependents in the family is three (3).

All families have disclosed information about the Ration Card they hold and it is reported that four of them have 'Blue' coloured Ration Card, whereas two hold 'White' coloured Ration Card, indicating the above average income level of the affected families.

6.3 Vulnerable groups

Though major aspects of Human Development Index such as education, income, health etc. are found to be positive, there are certain vulnerable groups especially children and elders who would require special attention while acquiring the proposed area. No. of Children under 17 years of age is Seven (7) and elders whose age is above 60 years is Six (6).

6.4 Land use and livelihood

The land owners cultivating crops and other farming activities in the proposed land and the land owners are getting income from it.

6.5 Local economic activities

Agriculture and related activities are the main local economic activities in the region.

6.6 Factors that contribute to local livelihoods

The land owners cultivating crops and other farming activities in the proposed land. They get income from it. Out of the 6 affected families the earning member of the two affected families are working in an agricultural farm and the earning members of other 4 families are depend on the agriculture and income from that.

6.7 Kinship patterns and social and cultural organization

The affected land owners are kins and they received the land as ancestral property. None of the cultural or social organizations were affected by the proposed project.

6.8 Administrative organization

The affected land is very close to Karappuzha reservoir area. No Administrative Organisations are present in the region.

6.9 Political organization

No political organisation is observed to be located in the vicinity of the proposed location.

6.10 Community based and civil society organizations

Though the project area has presence of all major religions, Hinduism and Christianity are two dominant religions in the proposed area. No such organizations were affected by the project.

6.11 Regional dynamics and historical change processes

No major negative impact could be found regarding the regional dynamics and historical change process.

6.12 Quality of the living environment

The proposed land is very close to the banks of the Karappuzha dam. There is no build up properties in the proposed land. The land required for the project is to increase the reservoir capacity of the Karappuzha dam. When the reservoir area of the dam increases, irrigation of about 5221 hectares of land in Vythiri, Sulthan Bathery and mananthavady Taluks of Wayanad district can be improved.

Chapter 7

Social Impact Management

7.1 Approach to mitigation

To assess the mitigation, the expert research team of SIA Unit has adopted an approach that is spanned in four phases. In the first phase, a physical observation of the area was held to understand major risks and opportunities involved with the project. Later the affected families were surveyed by using a structured questionnaire and collected details on the socio-economic background of the families dynamics of risks of each affected families is collected. To understand generic and common risks involved with the project, in-depth interviews were held with selected key persons and stakeholders of the project. A draft report is prepared based on the scientific analysis of the data collected through survey and interview and will be presented on the Public Hearing proposed to be held on 16.10.2019 at Govt. H.S. Nellarachal. Notices for the same have been given to the affected families. During the Public Hearing the affected families will get an opportunity to share their opinion/anxieties related to land acquisition which will be redressed by the concerned authorities.

7.2 Measures to avoid, mitigate and compensate impact

The proposed acquisition of land for Karappuzha irrigation project at Sulthan Bathery Taluk in Wayanad District is planned by the requiring body by minimizing the risk in the most possible manner. No major structure is understood to be affected as the alignment of the acquisition of the land. Hence the project site mostly covers wet land and farming activities of the families are disturbed. However, the project is assumed to adversely affect 6 families, the following measures may be taken to avoid, mitigate and compensate impact.

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

- The Resettlement package as per the Policies issued by Revenue (B) Department, Kerala vide G.O (Ms) NO.485/2015/RD dated 23/09/2015 and G.O.(Ms)No.448/2017/RD dated 29/12/2017 in lieu of RFCTLAR&R Act 2013 shall be provided to the affected land owners.
- The income receives as agricultural yields from the land should be considered for compensation.
- Loss of 1 well should be compensated.
- Measures to be taken to plant saplings in lieu of the trees to be destroyed for the project.

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

The Rehabilitation and Resettlement package as per the Policy issued by Revenue(B) Department, Government of Kerala vide G.O.(Ms) No.485/2015/RD dated 23/09/2015 and G.O. (Ms) No. 448/2017/RD dated 29/12/2017 for the rehabilitation and resettlement package for land acquisition in the state in lieu of RFCTLARR Act 2013 shall be provided to the affected land owners.

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

Measures stated by the requiring body in the project proposal as sufficient fund has been reserved as compensation.

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

Not applicable.

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

The Rehabilitation and Resettlement package as per the Policy issued by Revenue(B) Department, Government of Kerala vide G.O.(Ms)No.448/2017/RD dated 29/12/2017 for the rehabilitation and resettlement package for land acquisition in the state in lieu of RFCTLARR Act 2013 shall be provided to the affected land owners.

Table (7.6) Mitigation strategies and timelines

S I. No.	Impact	Impact mitigation	Timeline
1	Loss of land	Compensation as per RFCTLARR ACT 2013, 1 st schedule.	As per the Right to Fair Compensation and Transparency in Land Acquisition and Resettlement Kerala Rules 2015.
2	Loss of assets attached to the land	Compensation as per RFCTLARR ACT 2013, 1 st schedule.	

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

Not Applicable

Chapter 8

Social Impact Management Plan Institutional Framework

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

The project of acquiring land for Karappuzha irrigation project in Wayanad District is proposed by Kerala irrigation department. Government of Kerala has appointed various key persons through formal order with clear roles and responsibilities in accordance with the Right to Fair Compensation and Transparency in Land Acquisition, Resettlement and Rehabilitation (RFCTLARR) Act, 2013.

RFCTLARR 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.

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

8.2 Specify role of Non-Governmental Organizations, if involved

Not applicable

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

Not applicable.

8.4 Timelines for each activity

Timeline will be finalized as per the Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015.

Chapter 9

Social Impact Management Plan Budget and Financing of Mitigation Plan

9.1 Costs of all resettlement and rehabilitation costs

For the Acquisition of land for Karappuzha irrigation project, a total amount of INR 300 Crores (Three hundred crores Only) is budgeted by Kerala Water authority which includes the cost for land acquisition and rehabilitation.

9.2 Annual budget and plan of action

Not Applicable

9.3 Funding sources with break up

Not Applicable

Chapter 10

Social Impact Management Plan Monitoring and Evaluation

10.1 Key monitoring and evaluative indicators

The proposed Karappuzha irrigation project in Wayanad district will affect 6 families. The key monitoring and evaluative indicators are

- Fair compensation and resettlement measures as per RFCTLARR Act, 2013
- Timely disbursement of funds to the affected families
- Implementation of the proposed project in the timeframe defined
- Environmental measures

10.2 Reporting mechanisms and monitoring roles

Rehabilitation and Resettlement procedures as stated in the Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015 will be applicable.

10.3 Plan for independent evaluation

Not Applicable

Chapter 11

Analysis of Costs and Benefits and Recommendation on Acquisition

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

The Karappuzha irrigation project requires 0.4000 hectares of land belonging to 6 landholdings in Thomattuchal village of Sulthan Bathery Taluk in Wayanad district. The completion of the project will increase the reservoir capacity of the Karappuzha dam enabling irrigation of larger area for agriculture.

0.4000 Hectares of land in Sulthan Bathery Taluk to be acquired for the project. Further, as per Section 2 b (iv) of The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 (RFCTLARR Act), the project fits in for public purpose. Suitable Resettlement/ Rehabilitation/Compensation measures should be taken to mitigate the impact of the affected. The land is not using for their residential purpose so the land acquisition will not cause eviction of families and also not losing their livelihood. Even then the families will lose a fruitful land which is their ancestral property is the major impact of the project.

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

Based on the analysis and assessment of the positive and negative impacts of the acquisition of land in Karappuzha dam reservoir area in Wayanad District. The project is expected to improve the irrigation facility. The proposed acquisition of land for Karappuzha irrigation project at Sulthan Bathery Taluk in Wayanad District is planned by the requiring body by minimizing the risk in the most possible manner. No major structure is understood to be affected as the alignment of the acquisition of the land. Hence the project site mostly covers

wet land and farming activities of the families are disturbed. However, the project is assumed to adversely affect 6 families, the following measures may be taken to avoid, mitigate and compensate impact.

- Compensation shall be provided to the land owners as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 & Kerala Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2015.
- The Resettlement package as per the Policies issued by Revenue (B) Department, Kerala vide G.O (Ms) NO.485/2015/RD dated 23/09/2015 and G.O.(Ms)No.448/2017/RD dated 29/12/2017 in lieu of RFCTLAR&R Act 2013 shall be provided to the affected land owners.
- Ensure fair compensation is given to the affected families.
- The income receives as agricultural yields from the land should be considered for compensation
- Loss of 1 well should be compensated
- Measures to be taken to plant saplings in lieu of the trees to be destroyed for the project.

References

1. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013
2. Rehabilitation and Resettlement Package for acquisition of Land in the State in lieu of RCFTLAAR Act, 2013 G.O. (Ms) No. 448/2017/RD dated 20/12/2017