SOCIAL IMPACT ASSESSMENT FINAL REPORT

KARAPUZHA IRRIGATION PROJECT

LAND ACQUISITION

Muppainadu, Ambalavayal and Thomattuchal Villages of Wayanad District



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CHAPTER 1 EXECUTIVE SUMMARY

1.1 Project and Public Purpose

Karapuzha Medium Irrigation Project (Kabini Scheme) is being implemented, in the Kabini sub-basin of the inter-state river Cauvery. Karapuzha Dam and Reservoir are owned and operated by the Irrigation Department, Kerala. It is the first Irrigation project taken up in Wayanad District, Kerala State with an average elevation of + 780 M above sea level, lying on the Eastern slope of Western Ghats. The dam is 13 Kms. away from the District Headquarters of Kalpetta town and 5.40 Km away from Kakkavayal Junction on NH 766.

The Project is to construct an earthen dam at Vazhavatta across Karapuzha Rivulet, a tributary of Panamaram River in Kabani basin with an objective to create a reservoir of 76.50 Mm³ storage capacity and to irrigate a net avacut of 5221 hectares of land in Vythiri, Sulthan Bathery and Mananthavady Taluks of Wayanad District through a network of canal system. Over the years, the Project has been transformed into a Multi - purpose Project, viz, Drinking water supply scheme to Kalpetta Municipality is commissioned and certain other schemes supplying drinking water to adjoining Panchayaths / Municipalities in Vythiri and Sulthan Bathery Taluks utilizing 44 MLD of water also are under implementation from the Karapuzha Reservoir. There is fishing activity / Fish farming (Pisci culture) also in the reservoir through SC – ST Co – Operative Society. In addition, scope for producing 0.75 MW of electricity through the canal head works is under consideration by Kerala State Electricity Board. Wayanad District, with its natural beauty and climatic condition, has already developed as an important tourist destination and the Karapuzha Mega tourism project with its rose garden and children's park has opened for the Public on 21 May 2017 after completing the First and the Second Phases of the Tourism Development near the Karapuzha Dam premises. The Third Phase of the Tourism development works is ongoing near the dam premises.

Land for public purposes is acquired as per the provisions of the Right to Fair Compensation and Transparency in Land Acquisition, Resettlement and Rehabilitation Act of 2013. The Act aims at ensuring a participative, informed and transparent process of speedy land acquisition for public purpose. The Act in its definition of Public Purpose in section 2 (b) (iv) enlists projects for water harvesting and water conservation structures. Therefore, Karapuzha Irrigation Project comes under the definition of Public Purpose. It is administered by the Water Resources Department, Government of Kerala regulated by the Central Water Commission (CWC).

In compliance with section 4 of the Act of 2013 and as per the Kerala State Government Order G.O (p) No.6/2019 PD) dated 19th January 2019, the social impact assessment of the land proposed for Karapuzha Irrigation Project in Ambalavayal, Muppainad and Thomattuchal Villages of Wayanad District was undertaken by Don Bosco Arts and Science College, Angadikadavu, Kannur. The SIA was carried out with the objective of identifying the potential socio-economic positive and negative impact of land acquisition and developing attainable mitigation measures to enhance the positive impact and reduce or avoid the negative impact and thereby ensure a participative, informed and transparent process of land acquisition for the extension of Karapuzha Irrigation Project at Wayanad.

1.2 Project Location and Alternatives considered

The choice of the present site of 5.72 Ha of land at Thomattuchal, Muppainad and Ambalavayal villages of Vythiri and Sulthan Bathery Taluks of Wayanad District was approved in January 2019 by the State Government. The project is at 700 MSL in a panoramic tourist location of Wayanad. Although certain losses such as of land and additional source of livelihoods are affected, the lesser social and environmental interference of the project at the present site and the absence of any commercial establishments saving the project from elaborate rehabilitation measures, makes this option the most suitable place for the establishment of Karapuzha Irrigation Project. The project area includes a tribal colony named Nellarachal where there is a community centre/Mahila Samajam, Anganwadi and a worship place. The less displacing character and the positives outweighing negatives make this project option as the most preferred option for the Karapuzha Irrigation Project extension.

1.3 Size and Attributes of Land Acquisition

SIA was done for the 5.72 hectors of land required for the extension of reservoir of Karapuzha Irrigation Project, covering Thomattuchal, Muppainad and Ambalavayal Villages in Vythiri and S. Bathery Taluks. It includes 52 dry lands and 11 wet lands. The land is

primarily an agricultural land. The prime cultivations reported are coffee and pepper. Other yields such as coconut, areca nuts, mangoes etc. have also been reported. The proposed project site is owned by 58 families and their dependents, besides 5 public utility services. Cultivation is their main source of income. There are 21 houses, 5 shops, 1 Anganwadi, 1 Mahila Samajam / community hall, 2 Devapura (places of worship), 2 Pot making units, and 2 water sources existing in the alignment.

Most of the inhabitants had gained the ownership hereditarily. No transaction was undertaken on any of the land for the last three years. Land acquisition of this area was delayed due to the demand for higher compensation, family disputes and lack of records in some cases.

1.4 Searches for Alternative Route

The study team observed that the Karapuzha Irrigation Project requires the declared land for the water reservoir to make optimum utilization of the project, covering maximum area for irrigation and agricultural growth. As far as dam location and water flowing topography are concerned, it is determined by the storage capacity. The team also elicited the views of the affected and the key informants regarding the possible alternatives. There was a general agreement with the chosen alignment and there was no other alternative found.

1.5 Social Impact

The significant negative impact of the project includes the loss of 21 houses of the tribal community, 5 shops, 1 Anganwadi, 1 Mahila Samajam / community hall, 2 pot making units, and 2 Devapura (places of worship) and 2 water sources. Acquisition of this land is estimated to affect a population of about 240 people out of which 51.72% belong to Scheduled Tribe community and 3.45% belong to Scheduled Caste community. 21 will lose their dwellings. Of 240 affected people 124 are male and 116 female; 36 members are above 60 years and 23 are below 6 years old. More than that 62.07% are BPL families.

The land notified for the Karapuzha Irrigation Project including the area under SIA study is primarily a fertile agricultural land. Several portions of the land are still under cultivation. Considering the cultivation presently carried out, it is assumed that the acquisition is likely to deprive them of their main source of income from the cultivation of this land. Currently the government owned land at the project site is being used by these

households as grazing pastures. With the establishment of the project, they will lose their grazing pastures impacting their income from grazing the cattle.

Sl. No	NAME AND ADDRESS	SURVEY NO	TYPE OF LAND	ASSESTS/ CROPS	RECOMMENDATION/ SUGGESTION
1	Abdusamad Ullaattuparamban Valakara PO Thiroorangadi Malappuram 676306	726/63	Dry	Coffee Plants 300 Areca Palm 350 Jack Tree 100 Coconut 5	Fair Compensation
2	Adivasi Mahila Samajam	606/234	Dry	Mahila Samajam, Room, Trees	No recommendation or suggestion
3	Alavikutty Koliyodan House Andoor Ambalavayal 673593	606/36	Dry	House, well Fruit Trees 8	Fair Compensation
4	Ammu KP Kallaramkottaparambil Malayachamkolli Nathamkuni 673577	711 719	Dry	Pepper 32 Cardamom 20 Coffee 22 Areca Palm 13 Mango Tree 3 Lemon Tree 1 Jack fruit Tree 7 Konna 15	Fair Compensation
5	Ammu MK W/O Appu Malayachamkolli 673577	726	Wet	Well Areca Palm 15 Pineapple 20 Pepper 2 Coconut 5	
6	Anganwadi Nellarachal Ambalavayal	666	Dry	Anganwadi building	No recommendation or suggestion
7	Anilkumar Malayachamkolli 673577	719/5	Wet	Areca Palm 300 Pineapple 50 Banana 10 Mango Tree 3	
8	Balan NA Naduveettil colony Nellarachal Wayanad (Dt)	112	Dry	House 1,Vaga 1 Coconut tree 4 Mango tree 2 Piaani 1, Palms 2 Karkka 1, Tamarind 1	No recommendation or suggestion
9	Barghavan Nellara veedu Nellarachal Ambalavayal	606/234	Dry	House	No recommendation or suggestion

1.6 Inventory Details of the Affected Property

10	Chandran Naduveettil, Nellara Nellarachal Wayanad (Dt)	112	Dry	Areca nut 15 Jack tree 6 Maruthi 3 Teak1, Payyani 1	No recommendation or suggestion
11	Chandran NS Nellara veedu Nellarachal (PO) Thomattuchal	606/16 606/539	Dry	House, Coffee 70 Coconut tree 5 Areca nut 80	No recommendation or suggestion
12	Devasya Joseph Varavukalayil H Cheengavallam 673593	726	Dry	Jack Fruit Tree 5 Coconut 5 Banana 10	
13	Esahak Mahathi Nadunjakandi (H) Puthiyangadi, Calicut	Not available	Dry	Trees Areca nut Old well	No recommendation or suggestion
14	Gauri Vellan Nellara 673593	606	Dry	Coffee Plants 10	
15	Gopalakrishnan (Late) Krishnadas Nellara Veedu Nellarachal Ambalavayal	606	Dry	Shop Coconut tree 1 Coffee 15 Mango tree 1	No recommendation or suggestion
16	Gopalakrishnan / Narayani	606/403 606/89 (104) 711/17	Dry	Well Coconut Trees 40 Areca Palm 40 Coffee Plants 300 Pineapple 200 Cardamom 200	Fair Compensation
17	Govindan Nellara veedu Nellarachal Wayanad (Dt)	606	Dry	Mango tree Coconut tree Shop	No recommendation or suggestion
18	Govindan (Late) Malayachamkolli Nathamkuni 673577	719/10	Dry	Coconut 9 Coffee Plants 21 Jack Tree 1 Bamboo 1 Areca Palm 7 Pineapple 5	Fair Compensation
19	Jayanthi Krishnan Malayachamkolli Nattamkuni (PO) Ambalavayal Wayanad (Dt)	719/2	Wet	House Mango tree 2 Jack tree 3 Areca nut 40 Coconut tree 1	No recommendation or suggestion
20	Joseph Joseph Podimattathil House Meppadi, Nathamkuni Wayanad	726/36	Dry	Well, Coffee 6 Areca Palm 6 Cardamom 6 Nutmeg 2	Fair Compensation

21	Kamala Malayachamkolli Nathamkuni Thomattuchal	711/94	Dry	Shop, Konna Parakam	No recommendation or suggestion
22	Karuppan Naduveettil Colony Nellarachal Wayanad (Dt)	606	Dry	House, Coffee Areca nut	No recommendation or suggestion
23	Krishnan Nellara Veedu Nellarachal Wayanad (Dt)	606/234	Dry	House Parakam 1	No recommendation or suggestion
24	Krishnan (Late) H/o Malu	726/170	Dry	Cardamom 200 Pineapple 200 Mango Tree 6 Jack Tree 5 Areca Palm 300	Fair Compensation
25	Kumaran N Nellra veedu Nellarachal (PO) Ambalavayal Wayanad (Dt) Kerala 673593	606/234	Dry	Jack fruit tree 6 Mango tree 4 Coconut tree 2 Areca nut 25 Coffee 200	No recommendation or suggestion
26	Kunjambu Pulppadikunnu (H) Nathamkuni (PO) Meppadi	CP 962	Dry	House, Coffee Pepper plant Areca nut 6	No recommendation or suggestion
27	Kunjambu (Late) Baskaran N K Nellarachal (PO)	606/317	Dry	Coffee	No recommendation or suggestion
28	Kunjammu W/O Kunjutty Malayachamkolli 673577	719/4	Wet	Areca Palm 150 Pineapple 100 Jack Fruit Tree 5	
29	Kunjan Polan Nellara 673593	606/1	Dry	Coffee Plants 10 Pepper 5	Fair Compensation
30	Kunjiraman (Late) Ayyappadas Nellara Veedu Nellarachal Ambalavayal	606/234	Dry	House Coconut tree 2 Areca nut 3 Guava 1	No recommendation or suggestion
31	Kunjutty KR Malayachamkolli 673577	711	Dry	Pot units 2 Coconut Tree 6 Areca Palm 30 Jack Tree 5 Pineapple 20	
32	Naani Karalan Naduveettil Nellarachal PO Ambalavayal	606	Dry	Coffee Plants 20 Areca Palm 8 Coconut Trees 2 Jack Tree 3	Fair Compensation

33	Narayanan Naduveettil Nellarachal Wayanad (Dt)	112	Dry	House Jack tree Tamarind	No recommendation or suggestion
34	Narayanan Nellara Nellarachal PO Ambalavayal	606	Dry	Coffee 15, Mango Trees 2	Fair Compensation
35	Narayanan (Late) Lakshmi Nellara veedu Nellarachal Ambalavayal	606/234	Dry	House Coconut tree 6 Mango tree 1	No recommendation or suggestion
36	Omana Mani Chirackal veedu Malayachamkolli Nattamkuni (PO) Ambalavayal	CP/812	Dry	House, Jack fruit tree 2 Coconut tree 6 Coffee 15, Guava 2 Mango tree 2 Chamba 1,	Immediately implement the project
37	Ponjulan (Late) Sudakaran N P Naduveettil colony Nellarachal Wayanad (Dt)	606/1A	Dry	Konna tree 2 Pepper plant	No recommendation or suggestion
38	Radha Prabhakaran Nellara veedu Nellarachal Ambalavayal	606/234	Dry	Dry land	No recommendation or suggestion
39	Raghavan Nadu Veedu Colony Nellarachal Wayanad (Dt)	112	Dry	House, Well	No recommendation or suggestion
40	Raghavan Malayachamkolli Puttada Ambalavayal Wayanad (Dt) Kerala	719/6 726/114 726/115 726/116	Dry	Areca nut 300 Pepper plant 50 Coffee 50 Pineapple 300 Mango tree 5 Jack fruit tree 5 Murikk 10 Cardamom 50 Cashew nut tree 1	No recommendation or suggestion
41	Rajan Nellarachal 673593	606	Dry	House Areca Palm 20 Coconut Tree 2 Jack Fruit Tree 4 Coffee Plants 10 Pepper 10 Tamarind 1	

42	Raju N S Nellra veedu Nellarachal (PO) Ambalavayal Wayand (Dt)	606/298	Dry	House, Coffee 70 Mango tree 8 Jack fruit tree 4 Naarakam 1, Konna 50 Pepper plant 50 Koli 2, Ayani 5	No recommendation or suggestion
43	Raman Naduveettil (H) Nellarachal Wayanad (Dt)	112	Dry	House Coconut tree 2 Areca nut 25 Chembakam 1 Cotton 1 Lemon Coffee 30,	No recommendation or suggestion
44	Ramanathan Naduveettil Nellarachal Ambalavayal Wayanad (Dt)	606/234	Dry	Coconut tree1 Tamarind 1 Arecanut 4 Palakapayyani 1 Parakam 1	No recommendation or suggestion
45	Ranjith Nathath (H) Nathamkuni (PO) Wayand (Dt)	568/1	Dry	Jack tree 9 Guava tree 4 Areca nut 350 Pineapple 200 Cardamom 150 Pepper 100 Coffee 12, Palms 2 Coconut Trees 6	Immediately take over the land.
46	Rejina MR W/o Arun Malayachamkolli 673577	726	Wet	Areca Palm 30 Cardamom 10 Pineapple 25 Jackfruit Tree 3	
47	Rosamma Devasya Varavukalayil H Cheengavallam 673593	726	Dry		
48	Shivadasan Nathath (H) Nathamkuni (PO) Wayanad (Dt)	568/1	Wet	Areca nut 50 Cardamom 1500 Coffee 800 Plantain 500 Pineapple 1500	Immediately take over the land.
49	Shivadasan Nellara Veedu Nellarachal (PO) Ambalavayal	606/186	Dry	Shop, Kattadi 8 Jack fruit tree Areca nut 9, Coconut tree	To provide better compensation
50	Shivanandan Pavakattiyel (H) Malayachamkolli Nattamkuni (PO)	711	Dry	Shed, Kazhuk, Tapioca	No recommendation or suggestion

51	Shivaraman NK Nellara veedu Nellarachal Ambalavayal	Not available	Dry	House 1 grass House 1 Sheet Coffee 10, Palms 2 Areca nut 20 Mango tree 1	No recommendation or suggestion
52	Subramanyan NV Naduveettil 673593	606	Dry	Pepper 10 Pineapple 30 Mango Tree 3 Coffee Plants 20 Areca Palm 20	
53	Sukumaran Nellara (H) Nellarachal Wayanad (Dt)	606/234	Dry	Coconut tree 4 Areca nut 20 Jack tree 1	No recommendation or suggestion
54	Temple		Dry	Devapura	
55	Temple Panchayath well	606/234	Dry	Devapura	
56	Thampi Kannan Nellarachal 673593	606/1/A	Dry	House Areca Palm 50 Coffee Plants 50	Fair Compensation
57	Thanka Chellappan Bhagavatianikkal 673593	573	Wet	House Areca Palm 50 Cardamom 10	Fair Compensation
58	Valsala Ponnakath (H) Keeral (PO)	574/1	Wet	Areca nut 100 Cardamom Pineapple	Provide a road access.
59	Veliyan Naduveettil Nellarachal Ambalavayal	206/234	Dry	House Coffee 30 Jack fruit tree 2	No recommendation or suggestion
60	Veluvi Vilavi Naduveettil Nellara, Nellarachal Wayanad (Dt)	606/33	Wet	Coffee Kattadi 4	No recommendation or suggestion
61	Vijayan Naduveettil Nellarachal 673593	606	Dry	Areca Palm 20 Coffee 25 Banana 10 Jack Tree 5 Mango Tree 3 Pepper 10	Fair Compensation
62	Vinod Malayachamkolli 673577	726	Wet	Mango Tree 1 Areca Palm 25	
63	Yasodha PP W/O Raghavan Malayachamkolli 673577	726	Wet	Areca Palm 250 Pineapple 100 Cardamom 25 Pepper 10, Banana 25 Cashew Nut 2 Coffee Plants 15	

We see above the total impact of the land acquisition for the proposed Karapuzha Irrigation Project reservoir area. Altogether there are 63 land holdings possessed by 58 individual land/ property owners and 5 others including 1 Anganwadi, 1 Mahila Samajam, 1 public well, 1 Devapura, and 1 Devapura and public well.

1.7 Social Impact Mitigation Plan (SIMP)

Based on the desk review, field investigations and consultations undertaken during the social impact assessment study towards the establishment of KRP, the following Social Impact Mitigation Plan (SIMP) has been developed. The major mitigation measures drawn are:

Economic Measure

Loss of property, houses and the assets due to acquisition of the land for the KRP should be compensated duly for all the 58 households and 5 others. The land and built up structures should be properly compensated to all the affected land/property holders as per the Right to Fair Compensation, Rehabilitation and Resettlement Act – 2013. During the extension of Irrigation Canal, preference should be given to the directly affected families and their members for ad-hoc employment opportunities at the KRP depending on their skills in whichever sectors possible. This would compensate to some extent the livelihood likely to be affected due to the acquisition of the land.

Environmental measures

The making of water reservoir related activities and avoid any kind of water logging at the site to minimize the impact on the flora and fauna of the areas. Any unused/ left out land must be used for forestry and as far as possible the earthen sides of the canal must be done with grass or bush plants in order to avoid soil erosion and enhancing the grassing of cattle for the affected.

Rehabilitation/Resettlement measure

Since there are 58 households and 5 other property holders losing their houses or agriculture land, institutions etc. due rehabilitation/resettlement packages including IRP should be promoted for affected families who are mostly Tribal. The provisions of the RFCTLARR Act-2013, the State policy for land acquisition and further government directives should be strictly complied for the rehabilitation and resettlement of the affected. The discussions and interactions with various stakeholders including the affected parties

highlighted a unanimous welcoming of KRP extension at the selected villages of Wayanad District. Through the extension of KRP, the rural villages of Thomattuchal, Ambalvayal and Muppainad in Wayanad are expected to gain a brand value and a place at the National map focusing on irrigation and tourism and become a centre of attraction and development. The SIA team is unanimous in viewing the project as important for the development of the area and the state. For its success, the proponent is suggested to balance environmental and, social considerations and benefits through implementation of the proposed mitigation measures.

	Table No.1.1 Breakdown of Social Impact and Mitigation Steps						
Sl. No.	Type of Impact	Status: Direct/indirect	Proposed Mitigation Measure				
1	Loss of Land	63 Land holdings would be affected – Direct Impact	Compensation as per RFCTLARR Act, 2013				
2	Loss/damage of Built-up Property	34 Built up properties either full or partially affected - Direct Impact	Rehabilitation/Resettlement as per the RFCTLARR Act, 2013				
3	Loss of Productive Assets	coconut trees, mango trees, coffee plants and number of other agricultural assets will be destroyed - Direct Impact	Compensation as per RFCTLARR Act, 2013				
4	Loss of Livelihood	6 people are affected – Directly - as they lose their livelihood. Business of all affected has direct impact	Compensation as per the RFCTLARR Act, 2013				
5	Loss of public utilities	5 common properties are affected	Compensation as per RFCTLARR Act, 2013NA				
6	Loss of Access to civic Services and common property resources	1 Anganwadi, 1 Mahila bhavan, 2 water sources	Apply the provisions of the RFCTLARR Act -2013				
7	Religious place/ property	2 Devapuras /Temple - Direct impact	Compensation as per RFCTLARR Act, 2013				

1.8 Mitigation Measures

It appears from the analysis and overview of the Act that the provisions of compensation for land acquisition under RFCTLARR Act, 2013 will effectively address the social issues. Speeding up the acquisition process and Disbursement of compensation is recommended.

Note: The above data/information are arrived as per the information provided by the respondents / and the observation by the data collection team during the survey. Supporting documents need to be verified and the losses calculated as per the government norms.

Table No. 1.2 Positive Impacts				
Impact	Direct/Indirect	Temporary /	Major/Minor	
		Permanent		
Canals to irrigate 5,221 hectares	Direct	Permanent	Major	
in 9 Panchayaths in two Taluks				
Economic and allied development	Direct & indirect	Permanent	Major	
Enables drinking water projects in many Grama Panchayaths	Direct	Permanent	Major	

Positive Impacts

The discussions and interactions with various stakeholders including the affected families highlighted the need to speed up the acquisition and the compensation and thus to end the immense sufferings of the affected. A few of them are reluctant to give up their land and property demanding better compensation. The SIA team is unanimous in viewing that this land be acquired by providing due compensation as per the RFCTLARR Act, 2013 provisions. The team emphasizes that the project is important for the development of the area and the District; the proponent is suggested to balance environmental and social considerations and benefits through implementation of the proposed mitigation measures. It is recommended that preventive measures be given first consideration in order to reduce the cost of undertaking the mitigation measures and at the same time, minimizing the negative impact of the project.

Table No. 1.3 Suggestions for Mitigating the Impacts						
	Frequency	Percent				
Rehabilitation /resettlement	7	11.11				
Maximum compensation	34	53.98				
Job for evictees	4	6.35				
Means for water conservation	2	3.17				
Eco friendly construction	2	3.17				
Proper resettlement of fully affected	2	3.17				
Any other	2	3.17				
Not responded	10	15.88				
Total	63	100				

1.9	Suggestions	by the	affected	for	Mitigating	the Impacts
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Table No.1.3 shows the suggestions made by the affected for mitigating the losses due to the acquisition. Majority of them state that maximum compensation will balance the loss.

Following are the major suggestions and recommendations proposed by the affected to mitigate the impacts on them:

- Complete the acquisition and due compensation at the earliest
- Better compensation for those who lose their sole property and livelihood
- Support for setting up alternate livelihood
- Value calculation in par with market value
- Consider the wet land inhabited for many years as dry land and give equal compensation.

CHAPTER 2 DETAILED PROJECT DESCRIPTION

2.1 Background and Rationale of the Project

Karapuzha Dam 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 Karapuzha 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 crores having been spent on the Karapuzha irrigation project over the past three decades, still the total completion is not over.

The Karapuzha Irrigation Project requires 5.72 hectares of land belonging to 63 land holdings in Ambalavayal, Muppainadu and Thomattuchal villages of Vythiri and S. Bathery Taluks in Wayanad District. The completion of the project will increase the reservoir capacity of the Karapuzha dam enabling irrigation of larger area for agriculture.

The major part of the land to be acquired for the reservoir is under private possession. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 is the Act which lays down the procedures and rules for land acquisition after ensuring compensation, rehabilitation and resettlement to the affected persons in India.

2.2 Project Size & Location

The Karapuzha Irrigation project will require the acquisition of 5.72 hectares of land from 63 land holdings owned by 58 individuals/concerns and 5 others (public utility) which belong to Ambalavayal, Muppainadu and Thomattuchal villages of Vythiri and Sultan Bathery Taluks in Wayanad District.

2.3 Examination of Alternatives

The acquisition is aimed at the enhancement of the Reservoir capacity of the dam, which will enable better water storage for irrigation of agricultural land in a vast area. The study team did not find any serious objection from the affected; besides, it looks justified as a multi-crore project, if not utilized fully, will be a loss. In this regard technically the acquisition cannot be avoided.

2.4 The Project Construction Progress

As a whole, the project comprises of the Dam, The canals and the reservoir areas. The land acquisition and construction activities are under the irrigation department of the state government and it is almost complete.

2.5 Details of Environment Impact Assessment

As the Project did not involve acquisition of forest land, Environmental Clearance was not required at the time of inception. It was also due to the fact that the Project got all the necessary clearances during the year 1978, which was long before the Environmental Protection Act, 1984 and subsequently, the Environmental Impact Assessment Regulations, 1994 as subordinate legislation came into force.

2.6 Workforce Requirement

The Proposed land acquisition is for the Karapuzha Irrigation Dam water reservoir project and hence there is not much involvement of the work force.

2.7 Need for Ancillary Infrastructural Facilities

There is no requirement for much ancillary infrastructural facility. However, a road connecting Meppady and Ambalavayal Panchayaths will be submerged when water is stored up to the Full Reservoir Level (FRL) by acquiring the land proposed. This road has to be raised and constructed above the FRL.

2.8 Applicable Rules and Statutes

Application of National Statutes and Regulations on socio-economic impact suggests that the Proponent has a legal duty and social responsibility to ensure that the proposed development be implemented without compromising the status of the environment, livelihood of people, natural resources, public health and safety. This position enhances the importance of this social impact assessment for the proposed site to provide a benchmark for its sustainable operation. The major legislation that governs the land acquisition for the present project is hereby discussed briefly:

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

- Government of Kerala Revenue Department State Policy for Compensation and Transparency in Land Acquisition.
- Right to Information Act, 2005.
- The Rights of Persons with Disabilities Act, 2016.

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

The chapter IV, Section 11 of the Central Act states that 'whenever it appears to the appropriate government that land in any area is required or likely to be required for any public purpose, a notification to that effect along with details of land to be acquired shall be published in the official Gazette, two daily newspapers, uploaded on the website of appropriate government and in the affected areas to all the persons affected.' (RFCTLARR Act, sec.11). Prior to the acquisition, Section 4 of the Act mandates 'conduct of a Social Impact Assessment' study of the affected area to study the impact the project is likely to have on various components such as livelihood of affected families, public and community properties, assets and infrastructure particularly roads, public transport etc. Similarly, where land is acquired, fair compensation shall be paid promptly to all persons affected in accordance with sections 28, 29 and 30 of the Act, along the following parameters:

- Area of land acquired,
- Market value of the property decided by the Collector,
- Value of things attached to land or building
- Damages sustained from the severance of the land,
- Damages to other property in the process of acquiring the said land,
- Consequences of changing residence or place of business by the land owners,
- Damages from diminution of profits of the land acquired.
- Award of Compensation.
- Interest paid at the rate of minimum 12% per annum on such market value for the period commencing on and from the date of the publication of the notification of the social impact assessment study.

The Proponent has undertaken Social Impact Assessment and developed mitigation measures for those who will be affected by the proposed project. The Proponent shall adhere to the requirements of the Act in the implementation of land acquisition.

CHAPTER 3 TEAM COMPOSITION, STUDY APPROACH, METHODOLOGY AND SCHEDULE

3.1 Background

Following the Right to Fair Compensation and Transparency in Land Acquisition, Resettlement and Rehabilitation act of 2013, and as per the Kerala State Government Order (G.O (p) No.6/2019 PD) dated 19 January 2019, the present Social Impact Assessment of the project was undertaken by Don Bosco Arts and Science College Angadikadavu, Kannur at Ambalavayal, Muppainad and Thomattuchal Villages of Wayanad District.

The objective of Social Impact Assessment (SIA) is to enumerate the affected land and structures, affected families and persons to identify social impacts, and to prepare Social Impact Management Plan (SIMP). Data from primary and secondary sources have been collected to elicit the information for the current process. As part of SIA, a detailed socioeconomic survey has been conducted by experienced members of the SIA unit in the affected area and 35 affected land owners of the Project were met to assess the adverse impacts of the projects.

3.2 SIA Team

The SIA unit that undertook SIA study for the land acquisition for the Karapuzha irrigation project reservoir in Ambalavayal, Muppainad and Thomattuchal villages of Vythiri and S. Bathery Taluks of Wayanad District, comprised of 8 members headed by the Head of the Department of Social Work, Don Bosco Arts & Science College, Angadikadavu, affiliated to Kannur University. The head of the team is a Doctor of Philosophy in Sociology and has wide experience in academic and development sectors. The co-ordinator is MSW in Social Work with 30 years' experience in Developmental Sector and 5 years in academic sector. The team leader of the SIA is with MSW and M. Phil in Social Work with extensive experience in research, project planning and implementation in the development sector over decades. The other team members are qualified social workers and well versed in investigating social phenomena, undertaking studies through interviews, group Discussions and PRA techniques to elicit information pertaining to the subject of inquiry.

	Table No. 3.1 SIA Team Members						
Sl. No.	Name	Qualification & Designation	Experience				
1	Dr Thomas	Director	Ph.D. in Sociology with 25 years				
	Koonan		experience in administrative,				
			academic and developmental sector				
2	Zavierkutty	Coordinator	MSW in Social Work with 30 years'				
	Francis		experience in Developmental Sector				
3	Sebastian KV	MSW, M. PHIL	25 years experience				
			in Development Sector				
4	Bijo Joseph	MSW	5 years experience				
5	Joyal Jose	Graduate in Social Work					
6	Akbar Sadique	Graduate in Social Work					
7	Mariya Augustine	Graduate in Social Work					
8	Amrutha Mathew	Graduate in Social Work					
9	Jinu Johnson	Graduate in Social Work					



3.3 SIA and SIMP Preparation Process

With the help of the Deputy Collector LA, Tahsildar LA, and staff members and other stakeholders, the study team identified the affected area. Before starting the detailed SIA study, field visits and pilot study of the socio-economic survey were conducted. For the data collection, the affected people were administered the interview schedule and their feedbacks collected carefully. The information was verified with the help of proper documents. From secondary sources, an understanding of the physical, social, economic and cultural set up of the project area was obtained. Many pre-coded questions were included in the questionnaire. Before filling the questionnaires, the study team ensured the whereabouts of the respondents by examining their address proofs and property documents.

The survey forms duly filled were consolidated and entered into a database, the information updated and the report prepared. While preparing draft SIA SIMP the study team followed some essential components and steps which are (1) identification of socio-economic impacts of the projects, (2) legal frameworks for land acquisition and compensation (RFCTLARR ACT, 2013). The various steps involved in the study have been described in detail.

3.4 Methodology and Data Collection

The methodology adopted for the assessment was a mix of quantitative and qualitative processes. "By using both qualitative and quantitative methodology, more comprehensive data will be obtained, and a more holistic product would result, without excluding important areas of assessment" (DEAT, 2006).

Quantitative information on the Project Affected Persons (PAP) and Families were gathered through the household survey. The SIA grouped Project Affected People into three broad categories, namely, Project Affected People whose land only is required for the proposed project and affected partially due to the acquisition; Project Affected People whose houses and land are to be acquired and are affected fully by the project; and Project Affected People whose commercial establishments / Industry being acquired for the project are affected fully / partially. The household interviews of the affected land holders, residents and commercial establishments and other structures of the SIA study area covered 63 households and their dependents who own property at the project location were conducted. Representatives of these households were contacted to elicit information pertaining to the subject.

Household survey was undertaken by qualified and experienced data enumerators by administering predefined interview schedules targeting the Project Affected Population (PAP). It was a very difficult task to trace the land owners who own the land in the proposed area and are settled / residing elsewhere; the SIA team could not reach two of them.

Qualitative information was gathered along with the field study / household survey through consultation with stakeholders. The consultations were conducted with the help of interview guides and guideline points. The SIA team developed several formats of interview methods to target various groups of stakeholders which included Project Affected People, elected representatives and representatives of various government departments. The key informant stakeholders, viz., elected representatives like, Member of Legislative Assembly, political leaders, revenue officials were contacted and relevant information collected.

During the study a number of informal consultations and discussions were conducted apart from the formal interviews and other information gathering process. Thus about 22 respondents and others which include the authorities of religious and social organizations that have land in the project location were covered in the assessment study. The stakeholders were identified and consulted with the objective of understanding the existing socio-economic conditions of the affected area and the immediate surroundings of the proposed project.

The data obtained from the survey was analyzed to provide a summary of relevant baseline information on affected populations - all types of project impacts which include direct and indirect impact of physical and or economic nature on the people and the general environment. The responses received from the community, the local administration and representatives of government departments through the public consultation and socioeconomic survey are represented in the subsequent chapters of this report.

3.5 Site Visits and Information Gathering





Key Informant: Deputy Collector (LA) Wayanad - Mr. Janilkumar Key Informant: Discussion with Ambalavayal GP Member Sri. Ramanathan

3.6 Schedule of Activities

Table No. 3.2 Schedule of Activities			
Sl. No.	Activities	Date of commencement	
1.	Selection of Don Bosco Arts & Science College, Angadikadavu, Kannur as the SIA unit for undertaking the SIA for KRP, Wayanad	19 January 2019	
2.	Preliminary Physical visit to the site for KRP	27 March 2019	
3.	Preliminary Discussion with Deputy Collector, Special Tahsiladar (LA), Panchayath Presidents and Key officials regarding the Social Impact Assessment	27 March 2019	
4.	Preparation of draft survey tools for data collection and circulation to experts for inputs	31 March 2019	
5.	Finalization of the survey tools after receiving inputs from others	2 April 2019	
6.	Orientation to the SIA team members	2 April 2019	
7.	Preparation for Data collection	2 April 2019	
8.	Interaction and Focus Group Discussion with people affected	3 & 4 April 2019	
9.	Interaction with the people indirectly affected/benefit from the project- (data collection-households)	3 & 4 April 2019	
10.	Data Editing and coding	April 15 – 16, 2019	
11.	Data Entry	17 April 2019	
12.	Processing and Analysis	20 April 2019	
13.	Preparation of Draft report	30 April 2019	
14.	Submission of the Draft Report to the District Collector	01 July 2019	
15.	Public Hearing	19 July 2019	
16.	Submission of the Final Report to the District Collector	24 August 2019	

From 27/03/2019 onwards the SIA team visited the site to verify the proposed acquiring land and to identify the affected area. After identifying the affected areas, the SIA unit consulted different stakeholders at the project area.

3.7 List of Key Informants Contacted & Interacted*

- 1. Deputy Collector (LA Wayanad) -Mr. Janil Kumar
- 2. Special Tahsildar (LA Wayanad) Ms. Sherly Poulose
- 3. Deputy Tahsildar (LA Wayanad)- Mr. Santhosh
- 4. Grama Panchayat President (Ambalavayal) Ms. Seetha Vijayan
- 5. Vice President, (Ambalavayal) Grama Panchayat Mr. Thomas
- 6. Ward Member (Ambalavayal) Mr. Ramanathan
- 7. Grama Panchayat JS (Ambalavayal) Mr. Unni
- 8. Tribal Extension Officer (Ambalavayal) Mr. Rejish
- 9. Village Officer (Ambalavayal) Mr. Sajish
- 10. Village Officer (Thomattuchal) Mr. Madhu
- 11. Village Officer (Muppainad)
- 12. Executive Engineer, KRP, Kalpetta Mr.Binu Jayakumar
- 13. Asst. Executive Engineer, KRP Mr. Sandheep
- 14. Grama Panchayat Secretary (Muppainad) Mr. Ramachandran
- 15. Grama Panchayat President (Muppainad) Ms. R. Yamuna
- * Other Officials and Leaders were very busy due to LS Elections

3.8 Summary of the Public Hearing



In connection with the acquisition of 5.72 hectares of land for Karapuzha Irrigation Project in Waynad District, public hearing was held at Ambalavayal Grama Panchayat Hall on 19 July 2019 from 10.30 am. Authorities from the Revenue Department, the Karapuzha Irrigation Project, the Local Self Government (Grama Panchayats) and the SIA Unit were present.

The minutes of the proceedings of the public hearings are given below. The register of the participants is in the appendix.



R. Yamuna (President, Muppainad Grama Panchayat)



NK Ramanathan (Ward Member, Ambalavayal Grama Panchayat)





Sandheep V (Asst. Executive Engineer, Karapuzha)

Authorities Present:

1) Karapuzna Irrigation Project			
Binu Jayakumar J	Executive Engineer		
Sandheep V	Asst. Executive Engineer		
Jisna Devassia K	Assistant Engineer		
Anil PC	Draftsman UR II, KRP Sub Division, Vazhavatta		
Rajeev Krishnan R	Clerk, KRP Sub Division, Vazhavatta		
2) Revenue Department			
Santhosh Kumar J	Valuation Assistant/Deputy Tahsildar, LA, BSIP, Vellamunda		
Bastin VV	SRI, BSIP, Vellamunda		
Dileep Thomas	Clerk, BSIP, Vellamunda		
K. Jyothi	Sr. Clerk, BSIP, Vellamunda		
3) Local Self Govt.			
B. Vinay Kumar	Secretary, Ambalavayal Grama Panchayat		
R. Yamuna	President, Muppainad Grama Panchayat		
Seetha Vijayan	President, Ambalavayal Grama Panchayat		
NK Ramanathan	Member, Nellarachal Ward, Ambalavayal Grama Panchayat		

4) Social Impact Assessment Unit

1) Karanuzha Irrigation Project

Fr Dr K.O. Thomas (Koonan)	Director, SIA
Zhavierkutty Francis	SIA Co-ordinator
Bijo Joseph	SIA Team Member

Summary Report of the Proceedings

After a silent prayer, Zhavierkutty Francis (SIA Unit Coordinator) welcomed the gathering. Fr Dr K.O. Thomas (Director, SIA) explained the context and purpose of the public hearing, introduced the SIA agency and presented the salient aspects of the draft report with the help of PowerPoint.

The affected parties who participated in the Public Hearing indicated the omissions in the draft report, raised their concerns and sought clarification on related and relevant matters. The various authorities in their official capacities responded adequately to the queries.

Some omissions were pointed out in the list of the affected people and properties. It was clarified that this had happened as the project had been initiated more than three decades back and the land survey itself completed by the Revenue Department at various times. Some owners had moved out of the area and some owners as per the land records could not be identified or contacted. Two sets of survey numbers (including resurvey) have also contributed to the omission.

Mr Prakash KG, Chairman, Social Welfare Committee, Ambalavayal Grama Panchayat, mentioned that land had been acquired earlier at very low rates. Even after so many years into the project, all the affected areas have not been taken over.

R Yamuna (President, Muppainad Grama Panchayat) expressed the concern whether the 17 houses constructed recently would be submerged. She also exhorted the irrigation authorities to bear in the mind the plight of ordinary adivasi population who need place to continue their cultivation.

NK Ramanathan (Nellarachal Ward Member) recalled the history of the project and the concerns with regard to the people and property not enlisted in the draft report.

Chandran (Ambalavayal) asked for compensation from the time the project was announced. There was also concern raised with regard to locations where huge amount of waste was being dumped in the project area.

Raman (Ambalavayal) pointed out that there was no work / job in and around the areas where people have been rehabilitated.

Responses of Authorities:

The SIA team affirmed that if omissions had occurred in the draft report about the people and property within the 5.72 hectares under the present SIA as per the GO, the team would give the affected another opportunity to present their details to be included in the final report. [*This was done on 26 & 27 July 2019*].

Sandheep V (Asst. Executive Engineer): The land acquisition began in 1978. In all around 86 kilometres come under the project surroundings / Reservoir Perimeter. Still about 8.12 hectares have to be acquired. The G.O has been now issued for 5.72 hectares. If there are more areas being affected but not enlisted in the GO, steps will be taken to acquire the same through subsequent GOs. There is no objection to people rehabilitated earlier cultivating the land given to them by resorting to good farming practices which mitigates soil

erosion and water pollution. But no new inhabitants will be allowed. Irrigation authorities have been lenient towards tribal people cultivating even the land acquired for the project; but the use of pesticides is strictly prohibited as the water is used for drinking. The water level in the reservoir will further rise up to 5.40 metres once the Full Reservoir Capacity is reached. The State Planning Board has already set aside funds for Karapuzha Project.

The Revenue Authorities helped to cross check the names of landholders as per their documents and identify those who have been left out for reasons mentioned earlier.

After the session in common, individuals who had grievances were given time to meet with the authorities and air their concerns.

The entire public hearing was held in a very pleasant and transparent manner.

CHAPTER - 4 VALUATION OF LAND

4.1 Background

The SIA unit conducted the socio-economic survey of the families and individuals affected by the project at the project site during the month of March 2019. It was learnt through this survey to what extent the proposed project would impact on the properties, income, livelihood, etc. of each family. A pre-coded questionnaire was used for the purpose. The major goal of the survey was to assess the socio-economic structure, type of property, right to the assets, the likely impacts and their depth, details of properties, etc. of the affected families. The findings of the survey and the gravity of the problems are discussed in this chapter.

4.2 Village-wise Land Detail

Table No. 4.1 Village-wise Land Detail				
Villages	Land area (H)	Percentage		
Muppainad	1.12	20		
Ambalavayal	2.95	51		
Thomattuchal	1.65	29		
Total	5.72	100		

Table No. 4.1 shows the details of land acquisition from each village. The total land to be acquired is 5.72 hectares from three villages, namely, Muppainad village (1.12 hectares) of Vythiri Taluk and Ambalavayal village (2.95 hectares) and Thomattuchal village (1.65 hectares) of Sulthan Bathery Taluk.

4.3 Type of Land Affected

Table No. 4.2 Type of Land				
Туре	Frequency	Percent		
Dry land	52	82.54		
Wet land	11	17.46		
Total	63	100.00		

Table No. 4.2 shows the details of the type of land. Out of the total 63 land holdings, 52 are dry land and 11 land holdings are wet land.

Sl. No	NAME AND ADDRESS	SURVEY NO	TYPE OF LAND	ASSESTS/ CROPS	RECOMMENDATION/ SUGGESTION
1	Abdusamad Ullaattuparamban Valakara PO Thiroorangadi Malappuram 676206	726/63	Dry	Coffee Plants 300 Areca Palm 350 Jack Tree 100 Coconut 5	Fair Compensation
2	Malappuram 676306 Adivasi Mahila Samajam	606/234	Dry	Mahila Samajam, Room, Trees	No recommendation or suggestion
3	Alavikutty Koliyodan House Andoor Ambalavayal 673593	606/36	Dry	House, well Fruit Trees 8	Fair Compensation
4	Ammu KP Kallaramkottaparam bil Malayachamkolli Nathamkuni 673577	711 719	Dry	Pepper 32 Cardamom 20 Coffee 22 Areca Palm 13 Mango Tree 3 Lemon Tree 1 Jack fruit Tree 7 Konna 15	Fair Compensation
5	Ammu MK W/O Appu Malayachamkolli 673577	726	Wet	Well Areca Palm 15 Pineapple 20 Pepper 2 Coconut 5	
6	Anganwadi Nellarachal Ambalavayal	666	Dry	Anganwadi building	No recommendation or suggestion
7	Anilkumar Malayachamkolli 673577	719/5	Wet	Areca Palm 300 Pineapple 50 Banana 10 Mango Tree 3	
8	Balan NA Naduveettil colony Nellarachal Wayanad (Dt)	112	Dry	House 1, Vaga 1 Coconut tree 4 Mango tree 2 Piaani 1, Palms 2 Karkka 1, Tamarind 1	No recommendation or suggestion
9	Barghavan Nellara veedu Nellarachal Ambalavayal	606/234	Dry	House	No recommendation or suggestion
10	Chandran Naduveettil, Nellara Nellarachal Wayanad (Dt)	112	Dry	Areca nut 15 Jack tree 6 Maruthi 3 Teak1, Payyani 1	No recommendation or suggestion

4.4 Inventory of the affected area by the Project
11	Chandran NS Nellara veedu Nellarachal (PO) Thomattuchal	606/16 606/539	Dry	House, Coffee 70 Coconut tree 5 Areca nut 80	No recommendation or suggestion
12	Devasya Joseph Varavukalayil H Cheengavallam 673593	726	Dry	Jack Fruit Tree 5 Coconut 5 Banana 10	
13	Esahak Mahathi Nadunjakandi (H) Puthiyangadi, Calicut	Not available	Dry	Trees Areca nut Old well	No recommendation or suggestion
14	Gauri Vellan Nellara 673593	606	Dry	Coffee Plants 10	
15	Gopalakrishnan (Late) Krishnadas Nellara Veedu Nellarachal Ambalavayal	606	Dry	Shop Coconut tree 1 Coffee 15 Mango tree 1	No recommendation or suggestion
16	Gopalakrishnan / Narayani	606/403 606/89 (104) 711/17	Dry	Well Coconut Trees 40 Areca Palm 40 Coffee Plants 300 Pineapple 200 Cardamom 200	Fair Compensation
17	Govindan Nellara veedu Nellarachal Wayanad (Dt)	606	Dry	Mango tree Coconut tree Shop	No recommendation or suggestion
18	Govindan (Late) Malayachamkolli Nathamkuni 673577	719/10	Dry	Coconut 9 Coffee Plants 21 Jack Tree 1 Bamboo 1 Areca Palm 7 Pineapple 5	Fair Compensation
19	Jayanthi Krishnan Malayachamkolli Nattamkuni (PO) Ambalavayal Wayanad (Dt)	719/2	Wet	House Mango tree 2 Jack tree 3 Areca nut 40 Coconut tree 1	No recommendation or suggestion
20	Joseph Joseph Podimattathil House Meppadi, Nathamkuni Wayanad	726/36	Dry	Well, Coffee 6 Areca Palm 6 Cardamom 6 Nutmeg 2	Fair Compensation
21	Kamala Malayachamkolli Nathamkuni Thomattuchal	711/94	Dry	Shop, Konna Parakam	No recommendation or suggestion

22	Karuppan Naduveettil Colony Nellarachal Wayanad (Dt)	606	Dry	House, Coffee Areca nut	No recommendation or suggestion
23	Krishnan Nellara Veedu Nellarachal Wayanad (Dt)	606/234	Dry	House Parakam 1	No recommendation or suggestion
24	Krishnan (Late) H/o Malu	726/170	Dry	Cardamom 200 Pineapple 200 Mango Tree 6 Jack Tree 5 Areca Palm 300	Fair Compensation
25	Kumaran N Nellra veedu Nellarachal (PO) Ambalavayal Wayanad (Dt) Kerala 673593	606/234	Dry	Jack fruit tree 6 Mango tree 4 Coconut tree 2 Areca nut 25 Coffee 200	No recommendation or suggestion
26	Kunjambu Pulppadikunnu (H) Nathamkuni (PO) Meppadi	CP 962	Dry	House, Coffee Pepper plant Areca nut 6	No recommendation or suggestion
27	Kunjambu (Late) Baskaran N K Nellarachal (PO)	606/317	Dry	Coffee	No recommendation or suggestion
28	Kunjammu W/O Kunjutty Malayachamkolli 673577	719/4	Wet	Areca Palm 150 Pineapple 100 Jack Fruit Tree 5	
29	Kunjan Polan Nellara 673593	606/1	Dry	Coffee Plants 10 Pepper 5	Fair Compensation
30	Kunjiraman (Late) Ayyappadas Nellara Veedu Nellarachal Ambalavayal	606/234	Dry	House Coconut tree 2 Areca nut 3 Guava 1	No recommendation or suggestion
31	Kunjutty KR Malayachamkolli 673577	711	Dry	Pot units 2 Coconut Tree 6 Areca Palm 30 Jack Tree 5 Pineapple 20	
32	Naani Karalan Naduveettil Nellarachal PO Ambalavayal	606	Dry	Coffee Plants 20 Areca Palm 8 Coconut Trees 2 Jack Tree 3	Fair Compensation
33	Narayanan Naduveettil Nellarachal Wayanad (Dt)	112	Dry	House Jack tree Tamarind	No recommendation or suggestion

34	Narayanan Nellara Nellarachal PO Ambalavayal	606	Dry	Coffee 15, Mango Trees 2	Fair Compensation
35	Narayanan (Late) Lakshmi Nellara veedu Nellarachal Ambalavayal	606/234	Dry	House Coconut tree 6 Mango tree 1	No recommendation or suggestion
36	Omana Mani Chirackal veedu Malayachamkolli Nattamkuni (PO) Ambalavayal	CP/812	Dry	House, Guava 2 Jack fruit tree 2 Coconut tree 6 Coffee 15, Mango tree 2 Chamba 1,	Immediately implement the project
37	Ponjulan (Late) Sudakaran N P Naduveettil colony Nellarachal Wayanad (Dt)	606/1A	Dry	Konna tree 2 Pepper plant	No recommendation or suggestion
38	Radha Prabhakaran Nellara veedu Nellarachal Ambalavayal	606/234	Dry	Dry land	No recommendation or suggestion
39	Raghavan Nadu Veedu Colony Nellarachal, Wayanad (Dt)	112	Dry	House, Well	No recommendation or suggestion
40	Raghavan Malayachamkolli Puttada Ambalavayal Wayanad (Dt) Kerala	719/6 726/114 726/115 726/116	Dry	Areca nut 300 Pepper plant 50 Coffee 50 Pineapple 300 Mango tree 5 Jack fruit tree 5 Murikk 10 Cardamom 50 Cashew nut tree 1	No recommendation or suggestion
41	Rajan Nellarachal 673593	606	Dry	House Areca Palm 20 Coconut Tree 2 Jack Fruit Tree 4 Coffee Plants 10 Pepper 10 Tamarind 1	
42	Raju N S Nellra veedu Nellarachal (PO) Ambalavayal Wayand (Dt)	606/298	Dry	House, Coffee 70 Mango tree 8 Jack fruit tree 4 Naarakam 1, Konna 50 Pepper 50 Koli 2, Ayani 5	No recommendation or suggestion

43	Raman Naduveettil (H) Nellarachal Wayanad (Dt)	112	Dry	House Coconut tree 2 Areca nut 25 Chembakam 1 Cotton 1 Lemon Coffee 30,	No recommendation or suggestion
44	Ramanathan Naduveettil Nellarachal Ambalavayal Wayanad (Dt)	606/234	Dry	Coconut tree1 Tamarind 1 Arecanut 4 Palakapayyani 1 Parakam 1	No recommendation or suggestion
45	Ranjith Nathath (H) Nathamkuni (PO) Wayand (Dt)	568/1	Dry	Jack tree 9 Guava tree 4 Areca nut 350 Pineapple 200 Cardamom 150 Pepper 100 Coffee 12, Palms 2 Coconut Trees 6	Immediately take over the land.
46	Rejina MR W/o Arun Malayachamkolli 673577	726	Wet	Areca Palm 30 Cardamom 10 Pineapple 25 Jackfruit Tree 3	
47	Rosamma Devasya Varavukalayil H Cheengavallam 673593	726	Dry		
48	Shivadasan Nathath (H) Nathamkuni (PO) Wayanad (Dt)	568/1	Wet	Areca nut 50 Cardamom 1500 Coffee 800 Plantain 500 Pineapple 1500	Immediately take over the land.
49	Shivadasan Nellara Veedu Nellarachal (PO) Ambalavayal	606/186	Dry	Shop, Kattadi 8 Jack fruit tree Areca nut 9, Coconut tree	To provide better compensation
50	Shivanandan Pavakattiyel (H) Malayachamkolli Nattamkuni (PO)	711	Dry	Shed, Kazhuk, Tapioca	No recommendation or suggestion
51	Shivaraman NK Nellara veedu Nellarachal Ambalavayal	Not available	Dry	House 1 grass House 1 Sheet Coffee 10, Palms 2 Areca nut 20 Mango tree 1	No recommendation or suggestion
52	Subramanyan NV Naduveettil 673593	606	Dry	Pepper 10 Pineapple 30 Mango Tree 3 Coffee Plants 20 Areca Palm 20	

53	Sukumaran Nellara (H) Nellarachal Wayanad (Dt)	606/234	Dry	Coconut tree 4 Areca nut 20 Jack tree 1	No recommendation or suggestion
54	Temple		Dry	Devapura	
55	Temple Panchayath well	606/234	Dry	Devapura	
56	Thampi Kannan Nellarachal 673593	606/1/A	Dry	House Areca Palm 50 Coffee Plants 50	Fair Compensation
57	Thanka Chellappan Bhagavatianikkal 673593	573	Wet	House Areca Palm 50 Cardamom 10	Fair Compensation
58	Valsala Ponnakath (H) Keeral (PO)	574/1	Wet	Areca nut 100 Cardamom Pineapple	Provide a road access.
59	Veliyan Naduveettil Nellarachal Ambalavayal	206/234	Dry	House Coffee 30 Jack fruit tree 2	No recommendation or suggestion
60	Veluvi Vilavi Naduveettil Nellara, Nellarachal Wayanad (Dt)	606/33	Wet	Coffee Kattadi 4	No recommendation or suggestion
61	Vijayan Naduveettil Nellarachal 673593	606	Dry	Areca Palm 20 Coffee 25 Banana 10 Jack Tree 5 Mango Tree 3 Pepper 10	Fair Compensation
62	Vinod Malayachamkolli 673577	726	Wet	Mango Tree 1 Areca Palm 25	
63	Yasodha PP W/O Raghavan Malayachamkolli 673577	726	Wet	Areca Palm 250 Pineapple 100 Cardamom 25 Pepper 10, Banana 25 Cashew Nut 2 Coffee Plants 15	

The inventory of the total impact of the land acquisition for the proposed Karapuzha irrigation project reservoir area is seen above. Altogether there are 63 land holdings possessed by 58 individual land / property owners and 5 others including 1 Anganwadi, 1 Mahila Samajam, 1 public well, 2 Devapura (places of worships), with a public well.

KARAPUZHA IRRIGATION PROJECT-WAYANAD UT - OFF DIAGRAM

4.5 Site Sketch Plan

The Sketch of the Karapuzha Project

4.6 Land Requirements for the Project

The proposed Karapuzha Irrigation project requires 5.72 hectares of land. Most of the affected areas/ properties (58) are under private possession and 5 are in public utility. Out of the 63 land holdings, 52 are dry land and 11 land holdings are coming under the wet land category.

4.7 Use of Public Land/Property

The public properties in the affected area include 1 Anganwadi, 1 Mahila Samajam, 1 Public well and 2 Devapuras (places of worships) out of which one has a public well also.

4.8 Land Already Purchased

No land has been purchased till now from this newly proposed site for acquisition.

Table No. 4.3 Transaction during the last 3 years					
Particulars	Frequency	Percent			
No	54	85.71			
NA/NR	9	14.29			
Total	63	100.00			

4.9 Previous Transactions in the Area

Table No. 4.3 shows the information given by the respondents about the previous transactions on land. Out of 63 land holdings, 54 have not done any transaction and 9 respondents are in the not-applicable category. So, it means that there were no transactions on the land for the last three years.

Table No. 4.4 Road Access to Land				
	Frequency	Percent		
Yes	54	85.72		
No	2	3.17		
NA/NR	7	11.11		
Total	63	100.00		

4.10 Road Access to the Affected Land

Table No.4.4 shows the land/ properties to be acquired for the Project. 54 out of 63 land holdings have road access to their properties. Only 2 landholdings do not have road access and 7 are of not applicable/ not reachable category.

4.11 Type of Road

Table No. 4. 5 Types of Road				
	Frequency	Percent		
Tar	18	28.57		
Concrete	09	14.28		
Mud	30	47.63		
NA/NR	06	9.52		
Total	63	100.00		

Table No.4.5 shows the details of the type of roads having access to the affected property. 18 roads are made with coal tar, 9 roads with RCC/ concrete and 30 roads are just mud roads. 6 properties are in the not applicable category.

CHAPTER 5 ESTIMATION AND ENUMERATION

This chapter presents the livelihood affected families and the scale of impact on the affected families. It also mentions about the loss incurred by the affected. Besides, this chapter provides an estimation of the units affected at the marked alignment in the villages of Vythiri Taluk and S. Bathery Taluk of Wayanad District.

5.1 Number of Properties Affected

The property area extending up to 5.72 hectares in the proposed site for the Karapuzha Irrigation Project that comes under the purview of SIA study is fully affected by the project. This land which is spread over about 12 survey numbers and their sub-divisions is owned by 58 families, their dependents and 5 others (including 1 Anganwadi, 1 Mahila bhavan, 2 Devapura with water sources).

5.2 Village level land holdings

1	Table No. 5.1 Properties Affected				
Sl. No.	Name of Villages	No. of landholdings			
1	Ambalavayal	35			
2	Muppainad	4			
3	Thomattuchal	24			
	Total	63			

Table No. 5.1 shows the village vs. number of landholdings affected by the acquisition. There are totally 63 land holdings affected by the acquisition for the Karapuzha irrigation project from three villages. Out of this, 35 landholdings are in Ambalavayal village, 4 landholdings in Muppainadu village and 24 landholdings in Thomattuchal village.

5.3 Extent Affected

Table No. 5.2 Extent Affected				
Extent	Frequency	Percent		
Totally affected	33	52.38		
Partially affected	18	28.58		
Don't Know	06	09.52		
NA/NR	06	09.52		
Total	63	100.0		

Table No.5.2 shows the extent of land or property affected by the acquisition. Out of 63 land holdings 33 are stated to be affected fully and 18 land holdings/ properties are partially affected. 6 respondents stated that they do not know the extent being acquired and 6 landholdings are in not applicable or not reachable category. As per the normal situation, only if any land or any other property is affected more than 70 percent, it is considered as fully affected. But in the case of a house which requires an amount of privacy and all facilities of a dwelling place, it should be considered differently. If the basic facilities are affected and no space for new one (the septic tank is included in the acquisition and no other space left for making a new one) then it should be considered as fully affected.

5.4 Ownership of the Land

The 5.72 hectares area of SIA study is not fully privately owned. There is also 1 Anganwadi, and one Mahila Samajam which are public properties.

Table No. 5.3 Type of Ownership			
Туре	Frequency	Percent	
Purchased	17	26.98	
Hereditary	38	60.32	
NA/NR	08	12.70	
Total	63	100.0	

Table No. 5.3 shows the type of the ownership of the land affected by the acquisition. Out the 63 land holdings, 38 land ownerships are hereditary, 17 land ownerships by purchase and details of 8 land holdings are in Not Applicable/ Not Reachable including the landholding belonging to the Temple or public properties.

5.5 Land Documents

Table No. 5.4 Possession of land documents				
Possession	Frequency	Percent		
Yes	55	87.30		
NA/NR	8	12.70		
Total	63	100.00		

Table No.5.4 shows the details of the documents of the land/ property. Out of the 63 land holdings 55 stated that they have the land documents. 6 of them were in not reachable or not applicable group. In Nellarachal and Naduveettil colonies, the properties are under common ownership – they have joint documents (*koottu pattayam*).



Receipt of Tax Payment

5.6 Land Possession

Table No. 5.5 Amount of Land Possessed		
Amount of Land	Frequency	Percent
below 5 cents	8	12.70
05 -10 cents	16	25.40
11 - 15 cents	7	11.11
16 - 25 cents	9	14.28
26 – 50 cents	7	11.11
51 cent -1 acre	4	6.35
above1 acre	7	11.11
NA/NR	5	7.94
Total	63	100.00

Table No. 5.5 shows the total land possessed by the affected. Eight affected possesses less than 5 cents of land. 16 of the affected possess 5-10 cents of land while 7 affected possess land between 11 - 15 cents. 9 of the affected possess 16 - 25 cents of land and 7 have land between 26-50 cents. There are 4 members with 51 cents to 1 acre while 7 of the affected possess above 1 acre of land. Details of 5 affected are not reachable/ not available/ no response.

Table No. 5.6 Use of Land /Properties included in the Land		
Item	Frequency	Percent
House	21	33.33
Cultivation/others	27	42.87
Shop	5	7.94
Water source	4	6.34
Devapura	2	3.17
NR	2	3.17
Mahilas Samaj	1	1.59
Anganwadi	1	1.59
Total	63	100.0

5.7 Current Use of the Affected Properties

Table No 5.6 shows the items or assets in the land to be acquired. There are 21 land holdings with houses, 27 lands which are cultivated, 5 landholdings with livelihood/shops, 4 land pieces with water sources, 2 lands are with places of worships, 1 land is with an Anganwadi and another is with a Mahila Samajam and 2 land holding are in not applicable or available category.

5.8 Possession of Other Lands

Table No. 5.7 Any other land		
Other Land	Frequency	Percent
Yes	16	25.40
No	41	65.08
NR/NA	6	9.52
Total	63	100.0

Table No. 5.7 shows the details of the possession of land anywhere else. 16 out of 63 stated that they have land other than the land in the project site. 41 of them stated that they do not have any land other than this. Details of 6 landholders are not available.

5.9 Litigation on Land

Table No. 5.8 Litigation on Land		
Litigation	Frequency	Percent
Yes	3	5
No	53	78
NA/NR	7	17
Total	63	100

Table No.5.8 shows the litigation/legal issues against the land to be acquired. 3 of the affected land/ property stated that their properties are having some litigation on it. 53 of the landholdings are free from any litigation / legal complications on it. 7 of them are not applicable/ not reachable.

Table No. 5.9 Structures Affected		
Structures	Frequency	Percentage
House	21	67.74
Shop	06	19.35
Anganwadi	01	3.23
Mahila Samaj	01	3.23
Devapura	02	6.45
Total	31	100

5.10 Effect on Structures/ Buildings

Table No. 5.9 shows the effect of the acquisition on the structures / built up properties. 21 houses are affected and 5 shop / livelihood also exist in the alignment for acquisition. There is one Anganwadi, one Mahila Samajam, and two Devapura - places of worships as public assets.

5.11 Present Condition of Structures

Table No. 5.10 Present Condition of Structures		
Condition of Structures	Frequency	Percent
Pakka	25	80.65
Kacha	06	19.35
Total	31	100

Table No 5.10 shows the condition of the structures at present. There 25 structures which are *pakka* and 6 are *kacha*.

5.12 Structures with Electricity Connection

Table No. 5.11 shows the structures with electricity connection. Out of 31 existing structures 25 have electricity connection and 6 structures being Kacha do not have electricity connection.

Table No. 5.11 Electricity Connection		
Responses	Frequency	
Yes	25	
No	6	
Total	31	

5.13 Water Sources Affected

Most people do not have their own sources of water. There are two public wells. Only 2 have own wells. Only one has answered as depending on pipe line for water.

CHAPTER 6 SOCIO – ECONOMIC PROFILE

6.1 Preface

This chapter contains the social, economic and cultural status and the peculiarities of the families in the project affected areas. Details of the population, socialisation of the people and such related information are added to this chapter.

6.2 Gender

Table No. 6.1 Gender		
Gender	Frequency	Percent
Male	124	51.7
Female	116	48.3
Total	240	100.0

Table No. 6.1 shows the details of gender among the affected community. The gender category among the affected shows that there are 124 Male and 116 female constituting a total of 240 members.

6.3 Marital Status

Table No. 6.2 Marital Status		
	Frequency	Percent
Married	142	59.17
Unmarried	39	16.25
Widow/er	12	05.00
NA	13	05.42
Not App	34	14.16
Total	240	100.00

Table No.6.2 shows the details of marital status. The total population affected is 240 and out of which 142 of them are married, 39 are unmarried, 12 are in the category of widow/widower/ separated and 34 are not applicable and 13 are not available.

6.4 Age Factors

Table No.6.3 shows the age factors of the affected 240 population. There are 23 children who belong to the early childhood age (below 6) and 20 children in the age group of 7-18. The youth (19-35) constitute 79 in number while those between 36 and 60 are the largest group (82). Those above 60 years are 36 members.

Table No. 6.3 Age		
Age	Frequency	Percent
6 & below	23	09.58
7 to 18	20	08.33
19 – 35	79	32.92
36 - 60	82	34.17
Above 60	36	15.00
Total	240	100.00

6.5 Educational Status

Table No. 6. 4 Educational Status		
Status	Frequency	Percent
Completed	166	69.17
Studying	31	12.91
Nil	13	05.42
NA	13	05.42
NAP	17	07.08
Total	240	100.00

Table No.6.4 shows the educational details of the affected. Out of 240 population affected by the acquisition, 166 have completed their education at different levels, most of them at lower levels. Only 31 members of this group are continuing their education while 13 are illiterate. Details of 13 members are not available and the educational status of 17 members is in the category of *Not Applicable* / below the school age.



6.6 Ration Card Type

Chart No.6.1 shows the types of the ration cards of the affected families. Out of the 58 households, 36 belong to BPL (62.07%) category, and 18 landholdings (31.03%) have APL ration cards. 4 landholdings (6.9%) belong to NA/NR category.





The Chart No.6.2 shows the religious grouping of the affected community. Out of the 60 land holdings including the two temples, 73.3 percent (44) of the affected landholdings belong to the Hindu religious community while 8.3% landholdings (3 each) belong to Muslim and Christian communities. The remaining 3 affected landholdings are public properties.

6.8 Affected Vulnerable Groups

Chart No.6.3 shows the caste and vulnerability of the affected community. Out of the 58 land holdings (excluding the public property), 2 belong to SC community (3.45%), 30 landholdings belong to ST community (51.72%), another 13 landholdings belong to OBC community (22.4%) while there are only 6 landholdings (10.34%) belonging to General categories.



Table No. 6.5Members with Chronic Diseases	
Frequency	
Cancer	3
ТВ	1
CVD	4
Diabetic	4
Paralysis	1
Others	13
Total	26

6.9 Chronic Diseases

Table No. 6.5 shows that there are 26 members with chronic Diseases. Among them 3 persons suffer from cancer, 1 from TB, 4 have CVD, 4 have diabetics, 2 have paralysis, 3 have respiratory problems. 13 others are having other health problems. There is a child in Muppainad with cancer; one in Ambalavayal has had snake bite; one in Ambalavayal has sickle cell; another is differently-abled in Ambalavayal. It is natural that the aged have age related issues.

6.10 Employment Scenario

Table No. 6.6 Employment			
	Frequency	Percent	
Yes	87	36.25	
No	90	37.50	
NA	20	8.33	
NAP	43	17.92	
Total	240	100.00	

Table No.6.6 shows the employment situation of the affected community. Out of 240 people in the affected area 87 are engaged in one or another type of economic activity. 90 seem to be unemployed/underemployed and, 43 members are below 18 years of age. Details of 20 members are not available.

6.11 Type of Occupation

Table No.6.7 shows the Type of occupation engaged by the affected population. 6 members are in government service and 3 are in private jobs. 18 members are engaged in Coolie labour while 3 are doing self employment. Two depend on pension for their survival

and 9 members are in the not available or not applicable category. Most people are engaged in small scale household agricultural activities.

Table No.6.7 Type of Occupation				
Job type	Frequency	Percent		
Govt. job	6	15		
Pvt. Job	3	7		
Coolie	18	44		
Self employment	3	7		
Pension	2	5		
NA/NR	9	22		

6.12 Monthly Family Income

Table No. 6.8 Monthly Income of the Family			
Income	Frequency	Percent	
below 5000	22	37.93	
5001 - 10000	06	10.34	
10001 - 20000	11	18.97	
20001 - 40000	09	15.52	
Above 40000	3	5.18	
NA/NR	7	12.06	
Total	58	100	

Table No. 6.8 shows the details of monthly income of the land owners. Out of the 58 landholdings affected, 22 of them stated that their family income is below 5,000 per month. Another 6 of them said their family income is between 5,000 and 10,000. 11 members stated their income is between 10,001 and 20,000. There are 9 landholders who stated that their family income is between 20,001 and 40,000 and 3 of them said their family income is more than 40,000 a month. There are 7 land holdings which are not applicable/not reachable and coming under the No Response category.

The family income of almost all the 58 land holders will be affected. It is because most of them have agriculture related activities as their main or subsidiary source of income. Some of them, as it was mentioned during the public hearing, already find it hard to get even coolie works in the place where they had been relocated after the first phase of land acquisition.

Table No. 6.9 Impact on Social Life				
Responses	Frequency Percent			
Yes	26	44.83		
No	22	37.93		
NA/NR	10	17.24		
Total	58	100.00		

6.13 Impact on Social Life

Table No.6.9 shows the impact of acquisition on social life. 26 members of the 58 affected stated that their social life will be affected due to the acquisition. 22 of them remarked that acquisition will not affect their social life. 10 of them are in the category of NA/NR.

6.14 Impact on Economy

Table No. 6.10 Effect on Economy				
	Frequency Percer			
Yes	40	68.97		
No	10	17.24		
NA/NR	8	13.79		
Total	58	100.00		

Table No. 6.10 shows the impact of acquisition on the economy. 40 of the 58 affected responded that it will affect their economy while 10 of them said that it will not affect their economy. 8 of them are in the NA/NR category.

6.15 Benefit of the Project

Table No. 6.11 Benefit of the Project		
Areas	Frequency	
Increase in land price	3	
Growth in agriculture	1	
Infrastructural development	1	
Drinking water increase	4	
Others	7	
No use	16	
NA/AR	9	

Table No. 6.11 shows the benefit of the Irrigation Project. There were different benefits placed and they had to choose the one most suitable. 3 of them agreed that there will be increase in the price of the land due to the project. Only one respondent said that there will

be growth in agriculture and another one agreed that there will be infrastructural growth. 4 respondents said that there will be increase in drinking water facility. Another 7 respondents stated there will be other kinds of benefit. The large majority stated that there will not be any use of this project to them directly.

Table No. 6.12 Bad Effects		
Bad Effects	Frequency	
Loss of houses/structures	55	
Loss of agri/pasture land	9	
Loss of water sources	3	
increase in rent	2	
Loss of job	2	
any other	1	
not responded	2	

6.16 Bad Effects due to the Project

Table No. 6.12 shows the bad effects pointed out by the affected community due to the project. 55 indicated the loss of houses/buildings. 9 of them pointed out that their agricultural/ pasture land is lost. 3 of them stated that their water source is being lost. 2 of them stated that there will be increase in rent. Another 2 of them stated that there will be loss of employment.

Table No. 6.13 Expectation from the Officials				
Expectations	Frequency	Percent		
Yes	55	87.30		
No	1	1.59		
not responded	7	11.11		
Total	63	100		

6.17 Expectation from the Officials

Table No. 6.13 shows the expectations from the Officials/ Department by the affected. 55 of them stated that they have a lot of expectations from the proponents/ revenue departments as they lose their valuable properties. Only one of the affected stated there is no expectation from the Officials. 7 of them belong to NR/NA.

6.18 Means for Mitigation

Table No.6.14 shows the means of mitigation suggested by the affected. 46 of the affected suggest maximum compensation for their losses. 2 of them demand job opportunities

for the evictees. 2 of them suggested means for water conservation. 2 of them suggested that there should be eco friendly construction and earth work practices for irrigation. Another 2 of them suggested proper resettlement of the fully affected. 7 of them are among NR/NA.

Table No. 6.14 Means for Mitigation			
Means for Mitigation	Frequency	Percent	
Maximum compensation	46	73.04	
job for evictees	2	3.17	
means for water conservation	2	3.17	
Eco friendly construction	2	3.17	
proper resettlement of fully affected	2	3.17	
any other	2	3.17	
not responded	7	11.11	
Total	63	100.00	

6.19 Welcoming the Project

Table No.6.15 Welcoming the Project				
	Frequency Percent			
Yes	49	77.78		
No	7	11.11		
NR/NA	7	11.11		
Total	63	100.00		

Table No.6.15 shows the opinion of the affected towards the project. 49 of them said they welcome the project and 7 of them stated they do not welcome the project. 7 of the affected are among the NA/NR.

6.20 Willingness to Give Up Land

Table No. 6.16 Willingness to give up land			
	Frequency Percent		
Yes	52	82.54	
No	4	6.35	
NA/NR	7	11.11	
Total	63	100.00	

Table No. 6.16 presents the willingness of the affected to give up their properties. 52 out of 63 stated that they are willing to give up their properties for the Irrigation Project. Only 4 of them stated that they are not willing to give up their properties. Another 7 of them belong to NR/NA.

CHAPTER 7 PLANNING OF COUNTER – IMPACT IMPLEMENTATION

7.1 Approaches to Impact Mitigation

The social counter-impact project has been planned to reduce / mitigate the social impact caused in connection with land acquisition. Land / property owners mainly demand for satisfactory compensation. Therefore, what has been proposed as a counter–impact mitigation step is to negotiate the compensation for the loss of land and properties with the affected parties concerned and pay them well in advance prior to the takeover.

7.2 Methods for Negation, Mitigation and Compensation of the Impact

During the SIA study the team got the feedback from the affected community that they are willing to give their land / property if a fair compensation as per the RFCTLARR Act, 2013 is given. So, compensate on time as per the strict execution of RFCTLARR Act, 2013 which insists on Fair Compensation, Transparency, Rehabilitation, Resettlement and other packages.

7.3 Measures Included in Rehabilitation and Resettlement

Compensation as outlined in the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 shall be provided to the affected. The proponent also shall clearly and transparently uphold the provisions of the Act and Disseminate the Compensation for Rehabilitation and Resettlement packages as per the Act and as per the directions from the government in power from time to time. It includes the land value compensation, properly and fairly assessed structured property values, transportation charges and rent packages etc for the resettlement/rehabilitation charges and support services respecting the grievances of the affected etc.

7.4 Measures Requiring Body Will Introduce to the Project Proposal

The Requiring Body need to make a separate budget to provide compensation in par with the present money value, inflation and market realities particularly in Kerala. The affected are giving up their valuables and some of them moving away for the benefit of the larger public and their sentiments / emotional attachment to the property, should be considered with at most sensitivity.

7.5 Alterations to Project Design to Reduce the Social Impact

There was no suggestion or request for alternate alignment. All were supporting the alignment. Most of the affected agreed with the project alignment and they expressed willingness to give up their properties/land for the project.

7.6 Impact Mitigation and Management Plan

Based on the desk review, field investigations and consultations undertaken during the social impact assessment study for the Karapuzha Irrigation Project, the following Social Impact Mitigation Plan (SIMP) has been developed to mitigate/minimise the negative social impact that may arise. The responsibility for the incorporation of mitigation measure for the project implementation lies with the District Administration (Land revenue/acquisition Department) and the proponents. This mitigation plan is addressed to reduce the negative social impact of the acquisition of 5.72 hectares of land from Ambalavayal, Muppainadu, and Thomattuchal villages of Vythiri Taluk and Sulthan Batheri Taluk of Wayanad District. The mitigation measures suggested:

Table No. 7.1 Impact Mitigation and Management Plan			
Impact	Mitigation MeansFactors to be monitored		Concerned
			Agency
Loss of 21 houses/	Resettlement for the	Transparency in	Dept of
dwelling places	affected in the proper way	Compensation;	Revenue
		Number of complaints about	
		resettlement.	
Concern about	To formulate criteria for	Transparency in	Dept of
Inadequacy of	full compensation;	compensation	Revenue
Compensation	Criteria to be published	Number of complaints	
	before hand;	about compensation	
	To set up Grievance	Number of demands to	
	Redressal system	enhance compensation	
Apprehension	Disseminate the Packages	Compensation value reaches	Dept of
about	and provisions fixed by	Transparently.	Revenue
rehabilitation and	the government	Package provisions are	
resettlement		correct and for the right	
packages		purpose	
Fund insufficient	Modify criteria to increase	Number of persons unable to	Dept of
to buy alternative	the compensation to buy	find land.	Revenue
land	Land in the same locality.	Caution about misuse	
	Enable exemptions in		
	stamp duty and such		
	things		

Fear of loss of pastures/ agri-land.	Create pastures and social forestry where ever possible especially in the leftout areas and both the banks of the irrigation canal	Area of pastures and social forest created.	Proponent/ irrigation department
Demolition of Public utility institutions like Anganwadi and Mahila samajam	Resettlement of the same institutions and ensuring the smooth functioning of the same	Anganwadi and Mahila samajam /community hall to be re settled in the accessible area and	Revenue department and proponents
Demolition of place of worships	Proper arrangements for the resettlements of two "Devapura"	Place of worships are relocated with adequate rituals and rites.	Acquisition Body.
Loss of livelihood when 5 shops are in the affected area	Provide adequate compensation/ support for livelihood by resettlement.	Support is given for alternatives or setting up a new shop	Dept of Revenue
Loss of water sources	Prepare water conservation plan and rain water recharge packages in the affected areas	Steps taken for water conservation and rain water recharge	Irrigation Department

Economic Measures

The most significant social impact through the implementation of the project at the present location is the loss of property for 58 private land/property holdings and their dependents. 5 of them are losing their shops and livelihoods. The pastures and other open land getting submerged disrupt the grazing of cattle and such economic activities. Loss of property and the assets due to acquisition of land for the Irrigation Project should be compensated as mandated by the RFCTLARR Act, 2013 under sections 26-31 and which are listed in the First Schedule of the Act.

Environmental Measures

- a. At the designing phase of the project, care should be given to design eco-friendly earth works at the site minimizing the impact on the flora and fauna of the area.
- b. The water submerging will make serious loss of vegetations and difficulty to other organisms. Extra waste land and the canal side must be used for forestry to compensation the loss of the same.

Rehabilitation and Resettlement Measures

Usually, when govt. / any proponent takes over the land the compensation and resettlement package is given, but in this case, most of the affected are tribal and hence alternate land must be identified and complete resettlement must be taken care of. Some of them have already been given compensatory land earlier. The fully affected 21 houses and other properties including the structures must be properly and transparently resettled and fair compensation should be given to required alternate land. Along with the compensation the resettlement package provisions should be made available.

The rehabilitation of the land or property must be taken care with utmost care and the sentiments of the affected should be respected.

Other measures

A public redressal mechanism should be designed at the project site /in the concerned office to address the concerns of the indirectly affected population during the construction and operational stages of the project.

7.7 Measures to Avoid, Mitigate and Compensate

- The Proponent should ensure that preventive measures are taken to address the sanitation and health issues.
- Two households in the proposed land were not accessible to the SIA Unit for consultation. The department should make necessary arrangement for catering to the issues with regard to the acquisition of their property.
- The livelihood of 7 is affected: 5 with household shops (including the indirectly affected) and two others who stated that they lose their job/livelihood due to acquisition. Proper compensation must be provided for the same and linked with schemes or programs that will help them engage in new or the same livelihood even after the acquisition.
- The risks to the safety of employees and the public at different stages of the construction are to be addressed by the concerned agencies.
- A redressal system may be set up with representatives from the Revenue Department, Panchayat and the proponent for the speedy settlement of the unanticipated issues that may crop up during various stages of the project as well as at the time of evacuation / demolition.

Irrigation project helps the growth of agriculture and allied activities. Comparing / weighing the positive against the negative, it can be easily concluded that the former outweighs the latter reaffirming the identified site as apt for the completion of the Karapuzha irrigation project. The loss of ancestral assets and households will have its negative impact physically and psychologically. There is displacement of households and negative impact on land, livelihood, and physical resources. Nevertheless, the project is justified as the negative is minimal. Most importantly the affected are willing to give up their properties. It is also observed by the SIA team that many of the negative impacts highlighted can be minimized or mitigated further with appropriate and effective mitigation measures / strategies.

CHAPTER 8 SOCIAL IMPACT ACTION PLAN DIRECTORATE

Following the desk studies, field investigations and public consultations undertaken in this study, a Social Impact Mitigation Plan (SIMP) has subsequently been developed. The SIMP provides a general outlay of the social aspects, potential impacts and mitigation measures. The responsibility for the incorporation of mitigation measures for the project implementation lies with the Institutional Framework and key persons designated by the Government for the said purpose in accordance with the sub-section (1) of section 44 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Central Act 30 of 2013).

8.1 Institutional Structures & Key Persons

The Government of Kerala has set up a well-established institutional frame work for the implementation of social impact mitigation / management plan (SIMP) and to perform the functions under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013.

The Kerala State Policy for Compensation and Transparency in Land Acquisition published as per G.O. (Ms) No.485/2015/RD, dated 23/09/2015 constituted a **State level Empowered Committee** with its members as Chief Secretary, Revenue Secretary, Secretary of the Administrative Department, Law Secretary and Finance Secretary to perform the functions designated to them in relation to RFCTLARR.

As per the same policy at the District **level a Fair Compensation, Rehabilitation and Resettlement Committee with its members as** District Collector, Administrator for resettlement and rehabilitation, Land Acquisition officer, Finance Officer, Representatives of the requiring body to take financial decisions on its behalf and Representatives of Local Self-Government Institution has been set up to undertake various functions under the Act.

The **Administrator** in the committee appointed in line with sub-section (1) of section 43 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act' 2013 (Central Act 30 of 2013), is responsible for the rehabilitation and resettlement formulation' execution and monitoring of the rehabilitation and resettlement scheme in respect of land acquisition. Government of Kerala as per G.O. (P) M. No. 590/2015/RD dated 11 November 2015 has appointed the Deputy Collector (Land

Acquisition) in each District as the Administrator for rehabilitation and resettlement for performing the functions under the said Act and rules made there under in respect of the persons who are involuntarily displaced due to acquisition of land.

Besides, as per G. O. (P) M. 589/2015/RD dated 11 November 2015, has appointed the Land Revenue commissioner as the Commissioner for Rehabilitation and Resettlement in accordance with sub-section (1) of section 44 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Central Act 30 of 2013), for supervising the formulation of Rehabilitation and Resettlement scheme or plans, proper implementation of the same and to carry out post-implementation of social audit.

At the District level as per G O. (P) No.649/2015/RD dated 4 December 2015, the Government of Kerala in exercise of the powers conferred by clause (g) of Section 3 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Central Act 30 of 2013), r/w sub-rule (l) of rule 3 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Kerala) Rules, 2015 has appointed Special Tahsildar LA & Deputy Collector LA Wayanad to perform any one or more functions of a Collector under the said Act within the area specified in column (3) thereof and authorize them, their servants and workmen to exercise the powers conferred by section 12 in respect of any land within their respective jurisdiction for the acquisition of which a notification under sub-section (1) section 11 of the above Act.

The District level Committee is mandated to ensure finalization of fair compensation and appropriate resettlement and rehabilitation package and mitigation measure and its proper implementation.

CHAPTER 9 SOCIAL IMPACT MANAGEMENT BUDGET AND FINANCING OF MITIGATION PLAN

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9.1 Costs of all Resettlement and Rehabilitation Required

The cost is to be calculated for resettlement and rehabilitation as per the RFCTLARR Act, 2013 by the Empowered committees at the State and the District levels.

9.2 Annual Budget and Plan of Action

To be worked out by the land acquisition section of the Revenue Department.

9.3 Funding Sources with Break Up

Not available (Land Revenue Department and Irrigation Department).

CHAPTER 10 SOCIAL IMPACT MANAGEMENT PLAN MONITORING AND EVALUATION

Introduction

Monitoring is a long-term process which should begin from the start of the construction and should continue throughout the life of the project. Its purpose is to establish benchmarks so that the nature and magnitude of anticipated social impacts can be continually assessed. Monitoring involves the continuous or periodic review to determine the effectiveness of recommended mitigation measures. The types of parameters that can be monitored may include mitigation measures or design features, or actual impacts. However, other parameters, particularly those related to socio-economic and ecological issues can only be effectively assessed over a more prolonged period of say 3 to 5 years.

The Government of Kerala in accordance with the State Policy for Compensation and Transparency in Land Acquisition frame in connection with the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Central Act 30 of 2013), has established District and state level mechanisms for reporting and monitoring the land acquisition process and the implementation of various social mitigation measures. It includes the following:

10.1 State Level Body

At the state level as per G. O. (P) M. 589/2015/RD dated 11 November 2015, *the Land Revenue commissioner appointed as the Commissioner for Rehabilitation and Resettlement* in accordance with sub-section (1) of section 44 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Central Act 30 of 2013), is responsible for supervising the formulation of Rehabilitation and Resettlement scheme or plans, proper implementation of the same and to carry out post-implementation of social audit.

10.2 District Level Body

At the District level, the **Administrator** appointed in line with sub-section (1) of section 43 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act' 2013 (Central Act 30 of 2013), is responsible for the rehabilitation and resettlement formulation' execution and monitoring of the rehabilitation

and resettlement scheme in respect of land acquisition. Government of Kerala as per G.O. (P) M. No. 590/2015/RD dated 11 November 2015 has appointed the Deputy Collector (Land Acquisition) of Wayanad District as the Administrator for rehabilitation and resettlement for performing the functions under the said Act and Rules made there under in respect of the persons who are involuntarily displaced due to acquisition of land'

Besides, the *Fair Compensation, Rehabilitation and Resettlement Committee at the District level* and *State Level Empowered Committee* is authorized to ensure finalization, implementation and monitoring of the compensation, rehabilitation & resettlement package and mitigation measures.

The District level committee is expected to finalize the fair and reasonable price of land and compensation along with the Rehabilitation and Resettlement package to be given to the affected person/family. The committee shall ensure that eligible affected family is given Rehabilitation & Resettlement as envisaged in the second and third schedule of the Act. The state level empowered committee is expected to approve or return the estimate prepared and submitted by the District level Fair Compensation, Resettlement and Rehabilitation Committee with suggestions/observations.

CHAPTER 11 ANALYSIS OF COSTS AND BENEFITS RECOMMENDATION ON ACQUISITION

11.1 Introduction

The Karapuzha Irrigation Project envisages an earthen dam with concrete spillway across **Karapuzha River** at Vazhavatta in Vythiri Taluk of Wayanad District for providing irrigation to an area of about 5600 hectares. The reservoir has a gross storage capacity of 76.5 Mm³ and live storage capacity of 72.0Mm³. The Karapuzha River originating from Western Ghats in Wayanad District is a tributary of Panamaram River which is a tributary of Kabini River, a tributary of river Cauvery. The catchment area of Karapuzha River up to the dam site is 62.0 sq. km. and lies entirely in Kerala State.

Main Components of the Project:

- An earthen dam with a concrete section on the right flank, 625 m long with maximum height of 28 m.
- A concrete spillway, 3 spans of 10 m each with radial gates.
- Three earthen saddle dams of total length 555 m at Pakkom, Cherupetta and Chingery.
- A steel outlet conduit of 2 m diameter through the right bulk head of spillway that bifurcates and delivers water in to the left bank and right bank canals.
- Left bank canal system to irrigate an area of 3,486 ha.
- Right bank canal system to irrigate an area of 2,114 ha.

So far, the earthen dam and saddle dams have been completed and canal system is under progress.

11.2 Final Conclusion and Recommendations

The Karapuzha Medium Irrigation project is a hundred Percent Public purpose project aiming at development of agricultural and allied activities. The proposed Karapuzha Irrigation Project enhance and materialise the long term demand for better irrigation in and growth for the agricultural and allied activities in the region.

11.3 Character of Social Impacts

The affected people of the area face many difficulties due to the implementation of the project. The significant negative impact of the project includes the loss of 21 houses of the tribal community, 5 shops, 1 Anganwadi, 1 Mahila Samajam / community hall, 2 pot making

units, and 2 Devapura (places of worship). Acquisition of this land is estimated to affect a population of about 240 people out of which 51.72% belong to Scheduled Tribe community and 3.45% belong to Scheduled Caste community. Of the 240 affected people 36 members are above 60 years and 23 are below 6 years old. 62.07% are BPL families. 30 landholdings (51.72%) belong to ST community, 2 to SC community (3.45%), and 13 landholdings belong to OBC community (22.4%). The families expressed the concern that for the acquisition they need to get fair compensation considering the loss of livelihood and income in multiple ways.

Since the project is treated as 'framed for a public purpose' under RFCTLARR Act, 2013, the people of the area should feel secure and through this Act, they need to get fair compensation. If all the authorities and people of the project area work together, the implementation of the project will be successful. Considering the public advantage and interest and treating it as inevitable, the project needs to be implemented.

11.4 Major Suggestions by the Affected

Following are the major suggestions and recommendations by the affected to mitigate the impacts:

- The Karapuzha Irrigation project work started more than 3 decades back and still not completed. So also are the acquisition process and the compensation to the affected. Avoid this delay.
- Better compensation is required as the properties that are going to be acquired, is the only sole property and source of livelihood etc as far as each affected is concerned.
- Support for setting up another viable livelihood
- Price calculation in par with market value
- If portions of the house are demolished, it will become dangerous to stay in the remaining part. The acquisition is for water reservoir and it is going to be a threat for such dwellings.

SUMMARY& CONCLUSION

The Karapuzha medium irrigation Project will be a milestone in the path towards the growth of agricultural and allied activities in the region. The proposed project involves acquisition of 5.72 hectares of land belonging to 58 households, and 5 others including 1 Anganwadi, 1 Mahila samajam, 2 places of worship (Devapura) and water source are affected. The land acquisition is for enhancing the reservoir capacity of the dam for

increasing irrigation area and it seems to be for better public utility and there is no other alternate to optimise the utility of the dam. Almost all the affected have expressed their willingness to give land/properties for acquisition expecting a fair compensation at the earliest. This study report helps the affected people to receive fare compensation as per RFCTLARR Act 2013.

To execute this project, many people need to sacrifice and give away their sole property. As part of land acquisition for this project, people of that area lose land, house/ building/livelihood units etc. According to the Right to Fair Compensation, Transparency in Land Acquisition, Rehabilitation, Resettlement Act 2013, the People of this area need to get fair compensation. For this, the team has studied the social impact on the area and proposed methods to reduce the negative impact. Provisions of compensation for the land acquisition under the RFCTLARR Act 2013 are enough to mitigate the impact of the loss of land/property and livelihood.

Appendix 1: Government Orders



Revenue (B) Department

NOTIFICATION

G. O. (P) No. 6/2019/RD.

Dated, Thiruvananthapuram, 19th January, 2019.

RULES

S. R. O. No. 56/2019.—WHEREAS, it appears to the Government of Kerala that the land specified in the Schedule below is needed or likely to be fleeded for a public purpose, to wit for the land acquisition for Karappuzha Irrigation Project in Wayanad District;

AND WHEREAS, in exercise of the powers conferred in sub-section (1) of section 4 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act,

92/254/2019/S-10.

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2013 (Central Act 30 of 2013), Government of Kerala have decided to conduct a Social Impact Assessment in the area specified in the schedule below;

Now, THEREFORE, sanction is accorded to the Social Impact Assessment Unit, Don Bosco Arts and Science College, Angadikadavu, Iritty, Kannur to conduct a Social Impact Assessment Study and to prepare a Social Impact Management Plan as provided in the Act. The process shall be compeleted within a period not exceeding 9 weeks in any case.

SCHEDULE

District-Wayanad.

Taluk-Vythiri and Sulthan Bathery.

Village-Ambalavayal and Muppainad.

Survey Nos. Description Extent Block No. 70 A Muppainad Village 1.12 Ha. Vythiri Taluk Re-survey No. 568, 574 Block No. 73 Re-survey No. 192, 194, 204, 2.95 Ha. 285 & 296 Ambalavayal Village Sulthan Bathery Taluk Block No. 76 Re-survey No. 104, 105, 106, 1.65 Ha. 573, 576, 577 & 578

(The extent given is approximate)

By order of the Governor,

P. H. KURIAN, Additional Chief Secretary.

SIA: Karapuzha Irrigation Project – Final Report by Don Bosco College, Kannur

Explanatory Note

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(This does not form part of the notification, but is intended to indicate its general purport.)

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules has come into force on 19-9-2015 and as per Rule 10 notifying a Social Impact Assessment Unit for conducting Social Impact Assessment Study is required. Requisition has been received for acquiring 5.72 Ha. of land in Ambalavayal and Muppainad Villages of Vythiri and Sulthan Bathery Taluks in Wayanad District for Karappuzha Irrigation Project.

The notification is intended to achieve the above object.

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അസിസ്റ്റന്റ് എക്സിക്യൂട്ടീവ് എഞ്ചിനീയറുടെ കാര്യാലയം, കാരാപ്പൂഴ ജലസേചനപദ്ധതി സബ് ഡിവിഷൻ നമ്പർ 2, വാഴവറ്റ ഫോൺ : 04936 247276

ഇമെയിൽ:aee2krp@gmail.com തീയതി : 14/05/2019

പ്രേഷകൻ

അസിസ്റ്റന്റ് എക്സിക്യുട്ടീവ് എഞ്ചിനീയർ

ഗ്രാഹകൻ

Fr.Dr.K.O Thomas, Director,

SIA & Head, Department of Social Work,

Don Bosco Arts and Science College

Angadikadavu (P.O), Iritty, Kannur- 670706

സർ,

വിഷയം:–

Ho:- കാരാപ്പുഴ പദ്ധതി എസ്.ഐ.എ സ്റ്റഡി–അപാകതകൾ– സംബന്ധിച്ച്

സൂചന:- എക്സിക്യുട്ടീവ് എഞ്ചിനീയർ, കെ.ആർ.പി.ഡിവിഷൻ, കൽപ്പറ്റ യുടെ 07/05/2019 തീയതിയിലെ എ1–688/2016 നമ്പർ കത്ത്

മേൽ വിഷയത്തിലേക്ക് അങ്ങയുടെ അടിയന്തിര ശ്രദ്ധ ക്ഷണിക്കുന്നു. കാരാ പ്പുഴ ജലസേചന പദ്ധതിക്കായി സ്ഥലം ഏറ്റെടുപ്പുമായി ബന്ധപ്പെട്ട് താങ്കളുടെ ടീം നടത്തിയ സർവ്വെ പ്രകാരം വില്ലേജ് ഓഫീസുകളിൽ പഴയ സർവ്വെ നമ്പർ പിൻതുടരുന്നതും റീ സർവ്വെ നമ്പർ ലഭ്യമല്ലാത്തതും, സർവ്വെ നടത്തുന്നതിന് ബുദ്ധിമുട്ട് വരുത്തുന്നതായി അറിയിച്ചിരുന്നുവല്ലോ. എന്നാൽ സ്പെഷ്യൽ തഹസിൽദാർ (എൽ.എ) ബി.എസ്.ഐ.പി.യുടെ റിപ്പോർട്ട് പ്രകാരം റിസർവോയർ ഏരിയ്ക്കുവേണ്ടി ഏറ്റെടുക്കുവാനുള്ള ഭൂമി ഉൾപ്പെടുന്ന മൂപ്പൈനാട്, അമ്പലവയൽ, തോമാട്ടുചാൽ വില്ലേജുകളിലെ റീസർവ്വെ നടപടികൾ പൂർത്തിയായിട്ടുള്ളതും എന്നാൽ റിക്കാർഡ് പ്രാബല്യത്തിൽ വരാത്തതുമാണ്. ആയതിനാൽ ഇതു സംബ ന്ധിച്ച് നിലവിലുള്ള സർവ്വെ നമ്പറുകളുടെ അടിസ്ഥാനത്തിൽ തുടർ നടപടികൾ സ്വീകരിക്കാൻ ജില്ലാ കളക്ടറുടെ ഉത്തരവ് ഉള്ളതിനാൽ കോറിലേഷൻ മാപ്പു ഉപയോഗിച്ച് കൊണ്ട് തുടർ നടപടികൾ സ്വീകരിക്കാവുന്നതാണെന്നും അറിയിച്ചി ട്ടുണ്ട്. ഇതു സംബന്ധിച്ചുള്ള ജില്ലാ കളക്ടറുടെ ഉത്തരവിന്റെ പകർപ്പ് തുടർ നടപടി കൾക്കായി ഇതോടൊപ്പം ഉള്ളടക്കം ചെയ്യുന്നു.

വിശ്വസ്തതയോടെ,

അസിസ്റ്റന്റ് എക്സിക്യുട്ടീവ് എഞ്ചിനീയർ.

Appendix 2: Tools for Data Collection



1: 1. ക്യാൻസർ 2. ക്ഷയം 3. മലമ്പനി 4. എയ്ഡ്സ്

5. ശ്വാസകോശ സംബന്ധം 6. പ്രമേഹം 7. വേറെ എന്തെങ്കിലും

സാമൂഹൃ ആഘാത പഠനം: കാരാപ്പുഴ ജലസേചന പദ്ധതി വൈത്തിരി – സുൽത്താൻ ബത്തേരി GO (P) No. 6/2019/RD dt. 19.01.2019 SIA ഏജൻസി: ഡോൺ ബോസ്കോ ആർട്സ് ആൻറ് സയൻസ് കോളേജ്, അങ്ങാടിക്കടവ്, ഇരിട്ടി, കണ്ണൂർ – 670706 വ്യക്ണിഗത വിവര ശേഖരണത്തിനുള്ള ഫോറം: ഏപ്രിൽ 2019

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3. അവി	വാഹിത മകൻ/മകൾ 4. വിവാഹിത	മകൻ/മകൾ	4	. അപ്രസകം			
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7. അച്ച	ഹ്നർ/അമ്മ 8. സഹോദരൻ/സഹോദ					•	
	2.6 കുടുംബാംഗങ്ങളുടെ ജോല		V				
ക്രമ നമ്പർ	പേര്	2.	തൊഴിൽ	ദ. പ്രതിമാസ ്റ്റ	ചരുമാനം		
1							
2		-					
3							
2: 1. 000	ർക്കാർ ജോലി 2. സ്വകാര്യ ജോലി	(a. Manageria	al/administ	rative. b. supervi	sory c. clerical d.	assistant/atte	ndant)
3. കൂലി	(a) നിർമ്മാണം (b) കാർഷികം (c)	ടെക്നിക്കൽ)	4. ഫാക്ടറി	5. കരകൗശല വ	സൂക്കൾ 6. സ്വയം	തൊഴിൽ	
7. മൃഗാന	സൂത്രണം 8. ഡ്രൈവർ 9. പെൻഷ്യാ	ൻ 10. വേറെ എ	ന്തെങ്കിലും				
4	ആകെ പ്രതിമാസ കുടുംബ വരുമാനം						
5	ഭൂമി ഏറ്റെടുക്കൽ വരുമാനത്തെ	0		1. ഉവ്വ്	2. ഇല്ല		
	2.7 ആരോഗ്യ സ്ഥിതി: തുടർ <u>ം</u>	~				ശങ്ങൾ:	
ക്രമ നമ്പർ	1. രോഗം	2. തിരിച്ചറില	ത്ത വർഷം	3. നിലവ	ിലെ സ്ഥിതി		
1							
2							

1

3: 1. മരുന്ന് കഴിക്കുന്നു

2. സുഖമായി

3. ഭൂമിയുടെ വിശദാംശങ്ങൾ

1. സർവ്വേ നമ്പർ	2. വിസ്കീർണ്ണം	3. കൈവശമായ വിധം	4. കൈവശമായ വർഷം	5. ഭൂമിയിനം	െ ഭൂമിയിൽനിന്നുള്ള പ്രതിവർഷ വരുമാനം
	 ക്വാങ്ങിയത് 2. പ ടം/കര 2. നിലം	വ്പരാഗതമായി 3. കടന്നുക	 യറിയത് – പുറമ്പ്രോക് 4.	മറ്റുള്ളവ (വൃക്ട	 മാക്കുക)
7	ഭുമിയ്ക്ക് പട്ടയം 1)	ഉണ്ട് 2) ഇല്ല 3)	ഭാഗികം		
8	ഭാഗികമെങ്കിൽ, പട്ടവ	മില്ലാത്ത ഭൂമിയുടെ വിശദാ	ംശങ്ങൾ:		
9	പട്ടയമനുസരിച്ച് ഭൂമി	യുടെ ഉടമസ്ഥൻെറ പേര്:			
10	പദ്ധതി പ്രദേശത്തുള	ള ഭൂമിയുടെ അളവ്:			
ഭൂമിയിലുള	ള വസ്തുവിവരങ്ങൾ				
11	1. മരങ്ങൾ (ഇനവും 2. ഫല വൃക്ഷങ്ങൾ 6. ജലവിതരണ ഹൈ	എണ്ണവും) പ്പ് 7. വൈദ്യൂതി		4. കിണറുകൾ ഭൂഗർഭ ഓടകൾ	5. കുളങ്ങൾ 10. മറ്റുള്ളവ
12	നിര്ദ്ദിഷ്ട സ്ഥലത്ത്	കൃഷിയൂണ്ടെങ്കിൽ, ഇനങ്ങ	60		
13	എത്ര വർഷമായി ക	ഷ്രി ചെയ്യുന്നു?			
14	ഭൂമിയുടെ ഫലഭുയിഷ	ച് ഠത വിവരിക്കുക:			
15	നിർദ്ദിഷ്ട സ്ഥലത്തേ സ്വന്തമാണോ?	രെക് വഴിയുണ്ടെങ്കിൽ, വഴിയ മണ്ണ്/ടാറ്/കോൺക്രീ		വലിപ്പം	
16	കഴിഞ്ഞ മൂന്ന് വർഷ	ങ്ങളിൽ ഭൂമിയിൽ നടന്ന വ	പ്രവഹാരങ്ങളുടെ വിശദാംശഭ	ആൾ:	
17	ഭൂമിയ്ക്ക് എന്തെങ്കില തുക	നും ബാധ്യതയുണ്ടെങ്കിൽ, രേ തിരിച്ചടയ്	ഖപ്പെടുത്തുക ക്കലിൻെറ വിശദാംശങ്ങൾ		
18			കസ് നിലനിൽക്കുന്നുണ്ടോ?		- 00 00
10	ഏറെടാക്കൽ ഭൂമിയെ	എങ്ങനെ ബാധിക്കുന്നു? പ	പർണമായി 🗖	ഭാഗികമായി	
19		rightania antiscontari, ing.		ചല്ല 🗆	101-5-1/-

കെട്ടിടങ്ങൾക്കുള്ള ആഘാതം – പദ്ധതി പ്രദേശത്ത് കെട്ടിടങ്ങളുണ്ടെങ്കിൽ വിശദാംശങ്ങൾ:

	ഇനം	വർഷം	സ്വഭാവം	ତ୍ରକୋଟ୍ଟ୍ରେ?
കിലും (സൂചിപ്പിക്കുക	e.)			
	മിലും (സുചിപ്പിക്കും	മലും (സൂചിപ്പിക്കുക)	മിലും (സൂചിപ്പിക്കുക)	മലും (സൂചിപ്പിക്കുക)

5. ജല സ്രോതസ്റ്റും ശുചിത്വവും

1	ബാധിതമാകുന്ന ജലസ്രോതസ്സുകൾ	 പൊതു ടാപ്പ്/കിണർ 2. സ്വന്തം കിണർ 3. പൈപ്പ് ലൈൻ 4. ടാങ്കർ ലോറി വേറെ എന്തെങ്കിലും
2	ബാധിതമാകുന്ന ശൂചിത്വ സംവിധാനം	1. സെപ്റ്റിക് ടാങ് 2. വീടിനോട് ചേർന്നോ അല്ലാതെയോ 3. വേറെ എന്നെങ്കിലും

2

	പ്രദേശം പഞ്ചായത്ത് വാർഡ്:	സർവ്വേ നമ്പർ: ഉടമസ്ഥർ:	
11	കൂടുതൽ വിവരങ്ങൾ/നിർദ്ദേശങ്ങൾ:		
	വിവരദാതാവിൻെറ പേര്	അഭിമുഖം നടത്തിയ ആളുടെ പേര്	
	ഒപ്പ്	ഒപ്പ്	
	തിയതി	തിയതി	
		3	

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2	കാരാപ്പുഴ ജലസേചന പദ്ധതി മൂഖേനയുണ്ടാകാവുന്ന ദോഷഫലങ്ങൾ 1) വീടുകളുടെയും കെട്ടിടങ്ങളുടെയും നഷ്ടം 2) കൃഷി ഭൂമിയുടെയും മേച്ചിൽപുറങ്ങളുടെയും നഷ്ടം 3) ഉപരീതല/ഭൂഗര്ഭ ജലസ്രോതസ്സുകളുടെ നഷ്ടം 4) താമസസ്ഥലങ്ങളുടെയും വ്യാപാരസ്ഥലങ്ങളുടെയും വാടക വർദ്ധനവ് 5) ജനസാന്ദ്രതയിലുള്ള ആധിക്യം 6) മറ്റ് പ്രദേശവാസികളുടെ വരവുവഴി സ്വകാര്യതയ്ക്കുണ്ടാകുന്ന ക്ഷതം 7) ശബ്ദമലിനികരണം 8) ജല ഭൗര്ലഭ്യത 9) മറ്റുള്ളവ
3	കാരാപ്പുഴ ജലസേചന പദ്ധതി അധികാരികളിൽനിന്നും താങ്കൾ എന്തെങ്കിലും ആനുകൂല്യം പ്രതീക്ഷിക്കുന്നെങ്കിൽ, വിവരിക്കുക:
4	ഭൂമി ഏറ്റെടുക്കൽ സാമൂഹ്യ ജീവിതത്തെ ബാധിക്കുമെങ്കിൽ, വിവരിക്കുക.
5	ഭൂമി ഏറ്റെടുക്കൽ സാമ്പത്തിക മേഖലയെ ബാധിക്കുമെങ്കിൽ, വിവരിക്കുക:
6	കാരാപ്പുഴ ജലസേചന പദ്ധതി സൃഷ്ടിക്കാവുന്ന ഇതര നഷ്ടങ്ങൾ/വെല്ലുവിളികൾ ഏവ? 1) നിർമ്മാണ ഘട്ടത്തിൽ: 2) പ്രവർത്തന ഘട്ടത്തിൽ:
7	മുകളിൽ പ്രതിപാദിച്ച വെല്ലുവിളികൾ നേരിടുവാനുള്ള മാർഗ്ഗങ്ങൾ ഏവ? 1) പുനരധിവാസത്തിനുള്ള സഹായം 2) മൂല്യത്തിനനുസൃതമായ നഷ്ടപരിഹാരം 3) ബാധിതരാകുന്ന കൂടുംബങ്ങളിലുള്ളവർക്ക് ജോലി 4) ജലസംരക്ഷണത്തിനുള്ള മാർഗ്ഗങ്ങൾ 5) വൃക്ഷലതാദികളും ജലസ്രോതസ്സുകളും സംരക്ഷിച്ചുകൊണ്ടുള്ള നിർമ്മാണങ്ങൾ 6) പൂർണ്ണമായി ബാധിക്കുന്നവർക്ക് പൂന:സ്ഥാപനം 7) വേറെ ഏന്തെങ്കിലും
8	കാരാപ്പുഴ ജലസേചന പദ്ധതി നിങ്ങൾ സ്ഥാഗതം ചെയ്യുന്നുവോ? 1. ഉവ് 🗌 2. ഇല 🗆
9	കാരാപ്പുഴ ജലസേപന പദ്ധതിക്ക് ഭൂമി വിട്ട് കൊടുക്കുവാൻ നിങ്ങൾ തയ്യാറാണോ? 1. അതെ 🔲 2. അല്ല 🗌 തയ്യാറല്ലെങ്കിൽ കാരണം:
10	ഈ പദ്ധതിയ്ക്കായി നിർദ്ദേശിച്ചിരിക്കുന്ന സ്ഥലത്തിന് പകരമായി വേറെ ഏതെങ്കിലും ഉചിതമായ സ്ഥലം നിർദ്ദേശിക്കാനുണ്ടെങ്കിൽ, വിശദാംശങ്ങൾ നൽകുക? പ്രദേശം പഞ്ചായത്ത് വാർഡ്: സർവ്വേ നമ്പർ: ഉടമസ്ഥർ:
11	കുടുതൽ വിവരങ്ങൾ/നിർദ്ദേശങ്ങൾ:
	വിവരദാതാവിൻെറ പേര് അഭിമുഖം നടത്തിയ ആളുടെ പേര്

പദ്ധതിയുമായി ബന്ധപ്പെട്ട വിവരങ്ങൾ
 കാരാപ്പുഴ ജലസേചന പദ്ധതി മുഖേനയുണ്ടാകാവുന്ന പ്രയോജനങ്ങൾ:

6) വാടക വരുമാനത്തിൽ വർദ്ധനവ് 7) മറ്റുള്ളവ

പ്പാതൽ യാത്രാസൗകര്യങ്ങൾ 2) കുടുതൽ ജോലി സാധ്യതകൾ 3) ഭൂമി വിലയിൽ വർദ്ധനവ്
 4) സാമ്പത്തിക/വ്യാപാര മേഖലകളിലുള്ള വളർച്ച 5) അടിസ്ഥാനസൗകര്യങ്ങളുടെ വികസനം

Appendix 3

Public Hearing at Ambalavayal Grama Panchayat – 19 July 2019 List of Participants

El- well assis Decemaion on all all - is all all and - 2019 19 2019 conversion and and marked raginerender - 3/2 ansal e~_ 0 02 as: mours 03 mi N12 (012 million) @ 2000 16. 000 day 1563 1 Binu Jaya Kumao J EE, Kasapuzha 9447102252 2. SANDHEEP.V 3. Ros gouza 9447021171 Tisna Devessis K) Assistant Enginese 9497478743 Tarigation Kacapuzh 4 5 Anil. P.C DROFTS MAN UR II KRP Sub DVN Valhoutha 9645341452 6 Rujeev & nistron R Clark. E. R. P. S. & Division, Vagfuntar Den St. Telefoldy 7. Santheshikuman. J. Normation Assistant Duput Tabeldy LA, BSIP Venaminde 9562887345 8 Bastin-V.V SRI, BSIP, Vellamut 9947792305 Dileep Thomas clash, BSIP, Vellamancher. 9 9656050364 10 K. Syoth Stelerk, BSIP, Vellamunda 4012921227 11. and all a sort and shire and a vaged 12 Porod. augm (21) and shire a sort of a land a vaged 13 See the Vyayon president Ambalavayed 14 FR DR KO. Thomas Directory sin. Don Bosco College 15. Bijo Joseph 31A - Rom 16. ZAVIMARING MANG SID RODEDINAME

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biosidies and a man to the se and the for the last a the same it a - manal 19, 2019 mies mice the BLO -sound al more a man a com a con a fa m 53 - 3 · A ser in the sea the the for AJO. ga. comoraldad de stodd an 18 Contail V of Conservations Brand Brand - my 19 Corner and animal. Correct 9961214297 Der-20 21 audited 2003 apartimit 9188067982 22 10/01/10/15/06 Cm 125, 2016 9841311244 A 23 - 21 Br. Consado - 9841311244 A 24 280000 Bander 00- 96005512587 m 25 mademate asomesado 9526148775 26 Gaszzab 621000 romesado 9524829130 (Det 27 @ 3200 ton w armelard 7034101814 G 28 Considerants annularent 9605211854 Cost 3 and among Saland 29