

CARe

**A SUSTAINABLE MODEL FOR
SOCIAL HOUSING**



GOVERNMENT OF KERALA
DEPARTMENT OF COOPERATION



CARe

**Cooperative
Alliance to
Rebuild Kerala**

FOREWORD

The Government of Kerala has been the front runner in human development among the twenty-eight States in India with its social welfare measures. When the floodwaters came gushing in, the people especially the downtrodden was left helpless. The Government committed in its mission to be with the citizens in an efficient manner took initiatives to help the people in their efforts to recover from the losses brought in by the unprecedented floods.

CARe, an initiative by the Department of Cooperation has been one of its kind and proved to be in line with the socio-economic development vision of the Government of Kerala. By keeping aside, a portion of the profit dividend, the 15000 plus Co-operative societies in the State raised enough funds to house around 2000 families of which most of them were poor and had challenges physically, mentally and socially.

This cooperative model-based social housing can be a model for inclusive development fulfilling the 11th Principle of the UN Sustainable Development Goal.

Cooperative societies are globally accepted due to the voluntary nature, concept of self-help and mutual help, principle of concern for community and united vision in achieving the needs be it cultural, social or economic development and these initiatives by them should not be kept in darkness. The effort by the cooperatives in helping a fellow human being should be well visible and should be showcased globally so that others can follow.



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SURENDRAN

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EXECUTIVE SUMMARY

Kerala which forms 1.13 percent geographic area of India witnessed worst floods in its history during the monsoons of 2018 & 2019. Valuable lives were lost, and houses were destroyed in a moment's time which led to substantial loss to state's economy and infrastructure. State Government took this as a challenge and undertook rescue and rehabilitation work as part of disaster management protocols. Government invited expression of interest voluntarily from the public to support the rescue and rehabilitation activities. One of the biggest challenges was lack of funds to support these efforts. This led to formation of the CARE Kerala (Cooperative Alliance to Rebuild Kerala) Program under Registrar of Cooperative Societies, Govt of Kerala, India with the support from various co-operative societies.

This report highlights the painstaking efforts taken by the cooperative societies. As part of the effort, under the Caring wings of the cooperative family, the beneficiaries were rehabilitated. A few projects out of the total 1917 have been explained here. Moreover, the other projects had also undergone similar processes. Profit dividends of the cooperative banks and societies were pooled and utilized for the project. The project was implemented in a transparent manner and no allegations were raised against this project due to its timeliness and commitment of completion of work as undertaken by the cooperative societies. It clearly depicts how crowd funding model can facilitate sustainable development and livelihood support.

The report highlights the challenges, processes and impact involved in the delivery of the project. This is a unique model for an inclusive development, wherein collective efforts of cooperatives and public can support sustainable housing development as envisaged in the United Nation's development goals. This success story is documented to scale this model across the World.

Sincere efforts of co-operative societies deserve due recognition and appreciation from international organisations in future.



SMT. MINI ANATONY, IAS

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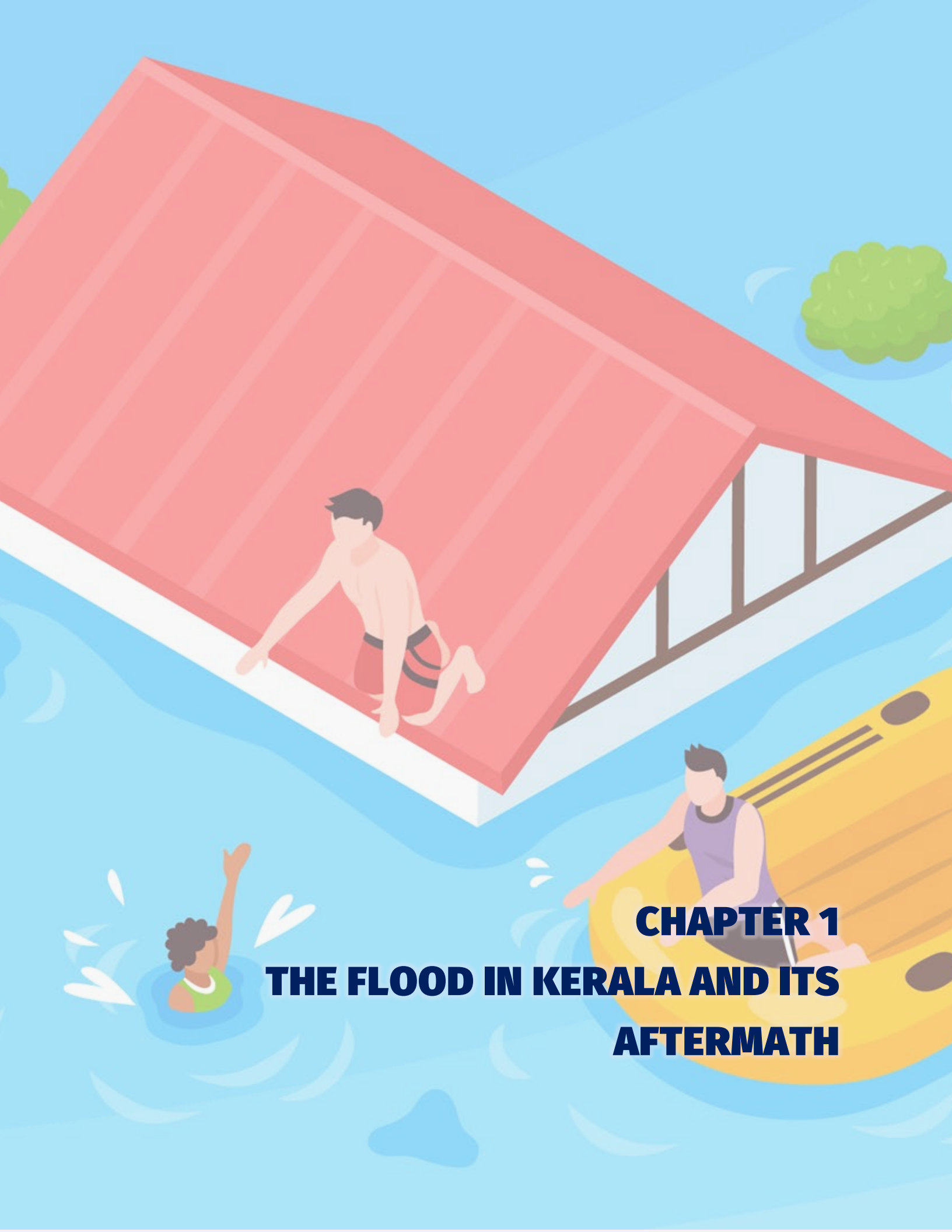
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CHAPTER 1
THE FLOOD IN KERALA AND ITS
AFTERMATH

AUGUST 2018-DARKEST HOURS FOR KERALA STATE

KERALA-A PINNACLE OF HOPE FOR THE NATION

The Kerala state lying in the southernmost part of the Indian Peninsula is one of the very few states in the country that had achieved remarkable levels of Human Development with its social welfare measures and those levels even match with that of the developed countries around the world . Kerala ranks number one in this matter among the other states in India and has been a role model for development for the other states in India.

Kerala is also blessed with rivers and lakes, hills and valleys and is definitely a God's own Country, a tag line so appropriately chosen to invoke the curiosity of the wanderlust minds and has never failed to disappoint them with warm hospitality and rich experiences. History and demography and many other factors are contributing to the growth of Kerala and to have a progressive, social welfare minded attitude.

This report aims to explore and bring to light the efforts and measures made by this small state in its darkest hours to help their fellow citizens from the disaster they have faced.

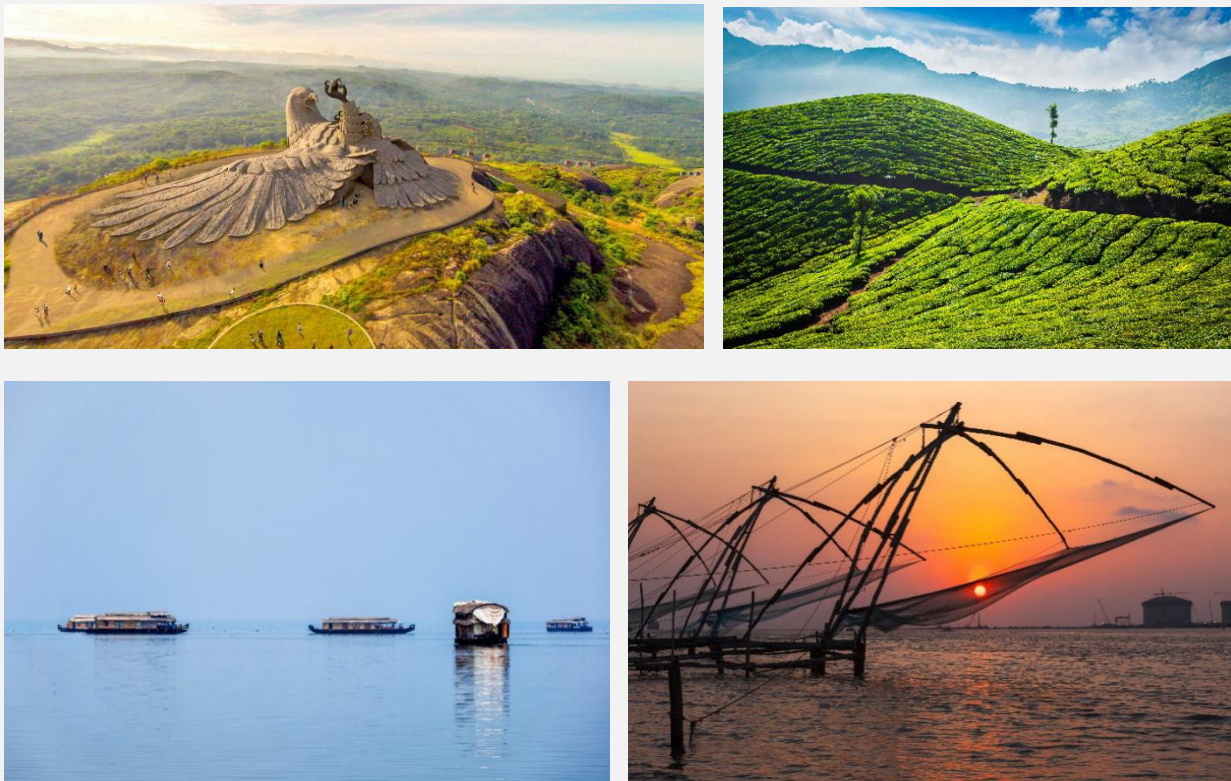


Figure 1 Kerala- Vibrant & Diverse views

SCENARIO OF KERALA'S MONSOON AND DISASTER RISK

Kerala State has an average annual precipitation of about 3000 mm. The rainfall in the State is controlled by the South-west and North-east monsoons. About 90% of the rainfall occurs during six monsoon months. The high intensity storms prevailing during the monsoon months result in heavy discharges in all the rivers. The continuous and heavy precipitation that occurs in the steep and undulating terrain finds its way into the main rivers through innumerable streams and water courses.

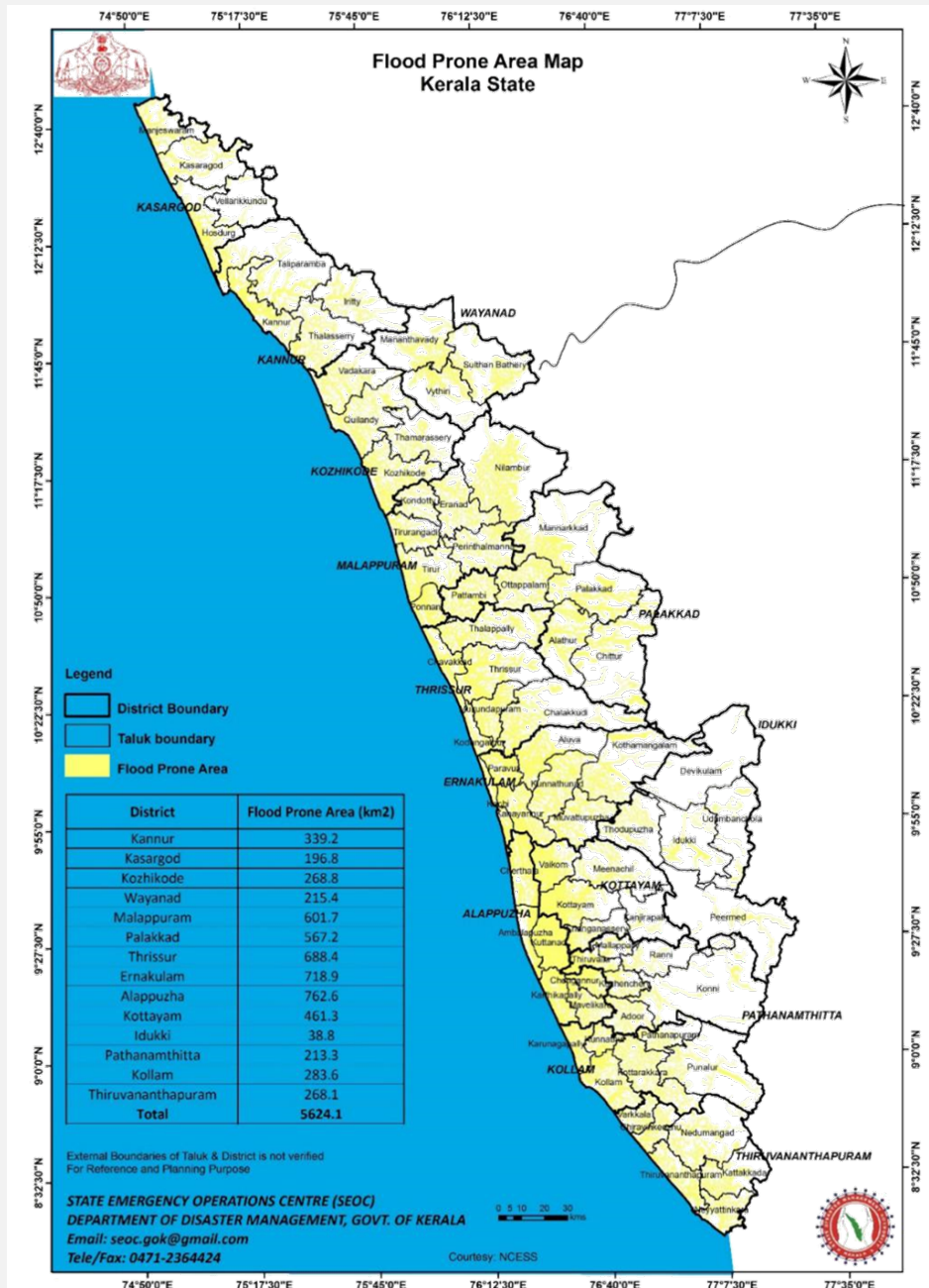


Figure 2 Flood Prone Area Map of Kerala (Source: KSDMA)

Kerala is highly vulnerable to natural disasters and the changing climatic dynamics given its location along the seacoast and steep gradient along the slopes of the Western Ghats. It is prone to a host of natural hazards such as cyclone, monsoon storm surge, coastal erosion, sea level rise, tsunami, flood, drought, lightning, landslide (debris flows), land subsidence (due to tunnel erosion or soil piping) and earthquake.

Kerala anticipates the effects of global climate change to bring an increase in extreme rainfall and with it the probability of urban flooding during the north-east monsoon period, a water shortage during peak summer months, along with a subsequent increase in urban temperature, and a potential increase in coastal erosion along the highly populated coastline due to rising sea-levels.

MONSOON OF 2018 AND 2019

2018 FLOODS

Kerala experienced an abnormally high rainfall from 1 June 2018 to 19 August 2018. This resulted in severe flooding in 13 out of 14 districts in the State. As per IMD data, Kerala received 2346.6 mm of rainfall from 1 June 2018 to 19 August 2018 in contrast to an expected 1649.5 mm of rainfall. This rainfall was about 42% above the normal.

Due to heavy rainfall, the first onset of flooding occurred towards the end of July. A severe spell of rainfall was experienced at several places on the 8th and 9th of August 2018. The water levels in several reservoirs were almost near their Full Reservoir Level (FRL) due to continuous rainfall from 1st of June. Another severe spell of rainfall started from the 14th of August and continued till the 19th of August, resulting in disastrous flooding in 13 out of 14 districts of Kerala.

The devastating floods and landslides caused extensive damage to house, roads, railways, bridges, power supplies, communications networks, and other infrastructure; washed away crops and livestock and affected the lives and livelihoods of millions of people in the state. Early estimates by the government put recovery needs at about USD 3 billion; however, it was felt that a comprehensive assessment of damage, loss, and needs would amount to much more

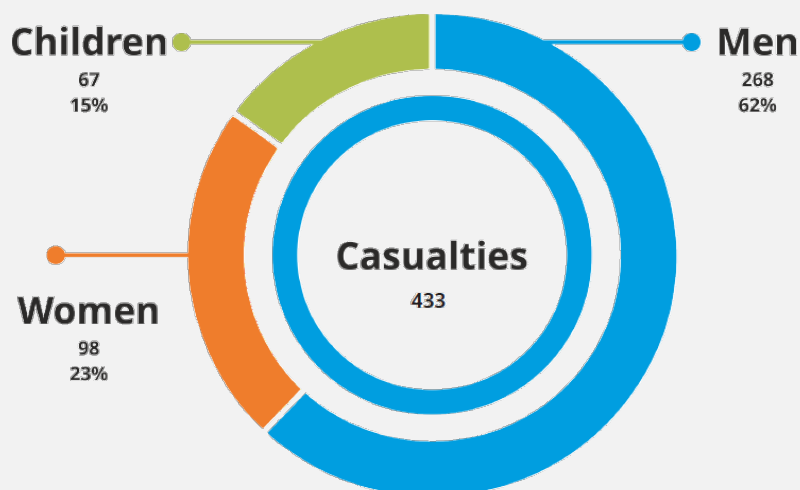


Figure 3 Details of Casualties in Kerala Floods 2018(Source: KSDMA)

Table 1 Estimates of Damage and recovery needs

Sector	Damage	Loss	Total Effect (D + L)		Total Recovery Needs	
	INR Crores	INR Crores	INR Crores	USD Million	INR Crores	USD Million
Social Sectors						
Housing, Land and Settlements	5,027	1,383	6,410	916	5,443	778
Health and Nutrition	499	28	527	75	600	86
Education and Child Protection	175	4	179	26	214	31
Cultural Heritage	38	37	75	11	80	11
SUB-TOTAL	5,739	1,452	7,191	1,028	6,337	906
Productive sectors						
Agriculture, Fisheries and Livestock	2,975	4,180	7,155	1,022	4,498	643
SUB-TOTAL	2,975	4,180	7,155	1,022	4,498	643
Infrastructure sectors						
Water, Sanitation and Hygiene	890	471	1,361	195	1,331	190

Transportation ^{a,b,c}					10,046	1,435
Power ^{b,c}					353	50
Irrigation ^{b,c}					1,483	212
Other infrastructure ^{b,c}					2,446	349
SUB-TOTAL	890	471	1,361	195	15,659	2,236
Cross-cutting sectors						
Environment	26	0.04	26	4	148	21
Employment and Livelihoods	881	9,477	10,358	1,480	3,896	557
Disaster Risk Reduction	17	583	599	86	110	16
Gender and Social Inclusion	0.9	0	0.9	0.13	35	5
Local Governance	28	0	28	4	32	5
SUB-TOTAL	953	10,060	11,013	1,574	4,221	604
TOTAL (A)	10,557	16,163	26,720	3,819	30,715	4,389
Integrated Water Resources Management (B)	0	0	0	0	24	3
GRAND TOTAL (A+B)					30,739	4,392
GRAND TOTAL (ROUNDED OFF)					31,000	4,400
a Recovery costs for roads from urban and rural infrastructure sections are included						
b In Rapid Damage and Needs Assessment, the cost of damage and loss has not been quantified						
c Estimates taken from the World Bank-Asian Development Bank Joint Rapid Damage and Needs Assessment (JRDNA)						
Note: Figures are rounded, and so column totals may not add up precisely						

(UNDP, 2018)



Figure 4 The extremity of the 2018 Floods

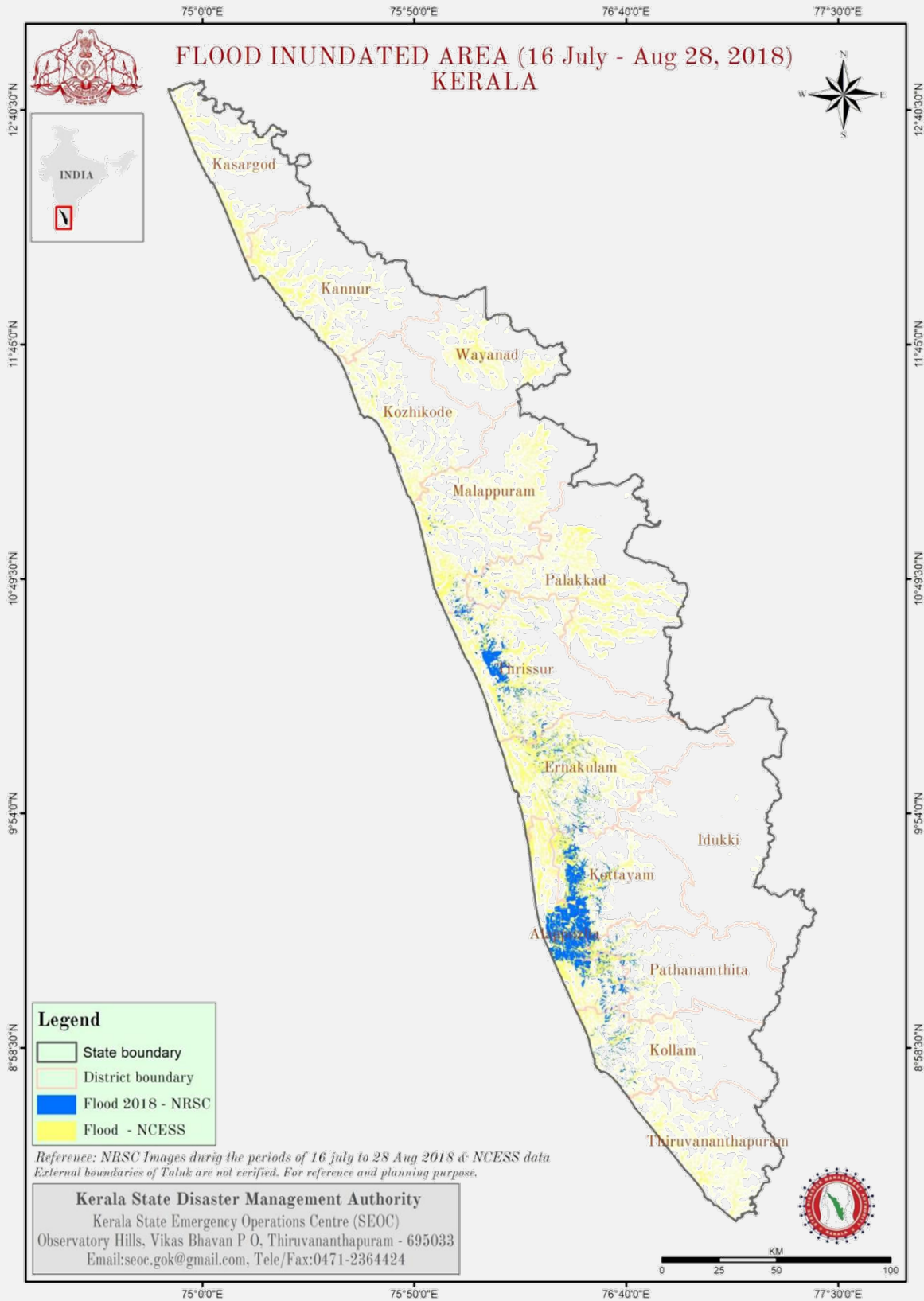


Figure 5 Flood Inundated Area map of 2018 (Source: KSDMA)

2019 FLOODS & LANDSLIDES

On 8 August 2019, due to heavy rainfall in the Monsoon season, severe flood affected Kerala. As a security measure in the prevailing situation of heavy rains, the Government of Kerala had issued Red alert in the 9 districts in Northern and Central Kerala, orange alert in 3 districts of Central Kerala, and yellow alert in the 2 districts of southern Kerala. Thousands of people have been evacuated to safer places and relief camps. A total of 101 people have died due to rain-related incidents since 14 August 2019. The death toll has gone up to a frightening 92, and 58 others are reported missing – feared trapped under mud and debris – at Kavalappara in Malappuram district and Puthumala in Wayanad district, where massive landslides have wiped out hundreds of houses, places of worship and other buildings. As many as 250,638 people are displaced due to the rains with many living in 1326 relief camps, while alert was sounded in 13 of the state’s 14 districts.

The situation in the state once again pointed to the absence of a scientific flood and disaster management system. The official measures taken since the deluge last August have obviously failed to prevent the loss of human lives and livelihood. The situation in the state once again pointed to the absence of a scientific flood and disaster management system. The official measures taken since the deluge last August have obviously failed to prevent the loss of human lives and livelihood.

REBUILD KERALA DEVELOPMENT PROGRAMME

The toll of damage as illustrated in the above paragraphs was huge and, in a position, which required a need for developing a special vehicle to accelerate the healing process, thereby giving birth to the Rebuild Kerala Initiative (RKI).



Figure 6 Rebuild Kerala Logo

The Rebuild Kerala Development Programme (RKDP) is a direct response to the 2018 floods, designed to serve as a resilient recovery programme which aims to build resilience during recovery and promotes resilience in regular development⁸. The Rebuild Kerala Initiative (RKI) is the institutional modality or framework for the entire

rebuilding process and acts as a vehicle to operationalize the RKDP by coordinating, facilitating and driving policy shifts, institutional renewal and investment on-the-ground required for a resilient rebuilding of Kerala. Through establishing RKI, the Government aims to put in place a streamlined and transparent process of decision making for comprehensive and resilient recovery and rebuilding from the 2018 floods.

The RKI is such a huge task aimed at transforming a haphazard development into something sustainable in every manner. RKI aims to bring in a change in perception at the governmental level and encompasses all facets of life. The same is described in the Figure 7 Rebuild Kerala- Structural Framework, one thing to be noted is that the system aims to rehabilitate those affected by the floods in an efficient manner. But the real challenge is in mobilizing the funds needed for such a rehabilitation project. The housing requirement in addition to the social housing projects happening in Kerala became huge after the flood. This social welfare activities that makes Kerala stand out from rest of the nation will be discussed in Chapter 2. The tally of the homes that were affected in the floods is given in Table 2 Preliminary Damage Assessment. RKI initiative is so big that to discuss that its detail will take another report and will be deviating from the prime task of detailing out the Care Kerala Project.



Figure 7 Rebuild Kerala- Structural Framework

Table 2 Preliminary Damage Assessment

District	(2) Both land & building lost	(3) Only building lost	(4) Building damage >75%: needs rebuilding	(5) Buildings to be re- built (cols 2+3+4)	(6) Partially dam aged buildings with concrete roof	(7) Partially dam- aged buildings with non-concrete roof	No. of house- holds that lost goods and wells, and must clean their homes	Total no. of buildings affected by flood/ landslide (columns 5+6+7)
Thiruvananthapuram	7	374	31	412	745	1415	1675	2572
Kollam	11	321	38	370	956	2058	1809	3384
Pathanamthitta	28	856	118	1002	10143	6660	10877	17805
Alappuzha	128	1653	114	1895	21054	17973	21497	40922
Kottayam	18	566	128	712	7007	9389	8999	17108
Idukki	259	1530	83	1872	2019	4605	86150	8496
Ernakulam	153	2523	293	2969	73866	11836	35488	88671
Thrissur	66	3610	369	4045	12286	8122	16044	24453
Palakkad	70	1622	127	1819	1282	4972	5730	8073
Malappuram	49	679	59	787	3332	3511	3831	7630
Kozhikode	27	314	42	383	2784	2171	2756	5388
Wayanad	116	629	68	813	3356	3544	3760	7713
Kannur	13	147	19	179	347	1209	926	1735
Kasaragod	2	53	3	58	33	242	223	333
Total	947	14877	1492	17316	139210	77707	119765	234233

Source: Rebuild Kerala' mobile app. accessed on 4 October 2018, 4:35 p.m.

(Source: (UNDP, 2018))

The table above gives an insight on the need of a suitable rehabilitation program. When we look at the financial status of the Government of Kerala, the capital available to rebuild these homes is very meagre and will lead the government to a financial meltdown. There comes the role of private players and organizations. The financial hit that the state of Kerala took was so huge that funds received as donations were not enough to rebuild Kerala back. The damage it caused on the infrastructure and housing sector amounted to more than ₹30,000 Crore and 17,000 plus houses had to be reconstructed and another 2,00,000 homes with repairs, this was something out of control. The lack of support from the Central Government worsened the situation forcing the government to seek help from sources like never. The funds offered by foreign governments in aiding Kerala to rebuild itself was stuck in red tape, but nevertheless the people of Kerala survived with sheer courage and a positive mindset.

The cooperative movement of Kerala had a significant impact in helping Kerala stand back on its feet by assisting the rebuilding and rehabilitation efforts of the Government of Kerala through the CARE Kerala program. The program envisaged by the cooperative department source funds from various cooperative bodies under it and helped those in need.

The following pages will be looking into why CARE Kerala is unique and one of its kind and a model for collective responsibility in disaster rehabilitation. Not only that the specific goals and approaches can be explored in achieving the sustainable development goals of the United Nation



CHAPTER 2
HOUSING INITIATIVES IN KERALA

HOUSING INITIATIVES IN KERALA

As discussed in the previous chapter, Kerala is a state who has predominantly given its importance to social welfare and had been commended by many international agencies because of this. Housing, healthcare and agriculture development along with achieving basic literacy has been one of the prime areas of focus of the various governments which ruled Kerala.

The Kerala Government not only created their own housing schemes but also successfully implemented similar schemes created by the central government like Indira Awaas Yojana, Rajiv Awaas yajna, Pradhan Mantri Awaas yojana etc. All these was possible because the Kerala Government was aiming for transparency in all the activities it had done in this regard alienating the exploitation of middlemen and corruption.

Even now the government is not just sitting idle, they have been creating schemes and policies for the welfare of all, and the important thing is that they are not just concentrating on the residents of Kerala, but also has successfully taken up initiatives to enable the migrant labour in Kerala from various parts of India have a safe and economical accommodation in various parts of Kerala.

Some of the major housing scheme's In Kerala is detailed out in the following sections to get a clear view of the state's welfare attitude.

LIFE MISSION HOUSING SCHEME

Two lakh houses have been completed under the Life Mission, a housing project of the State government. The LIFE (Livelihood Inclusion and Financial Empowerment) mission housing scheme is the Government of Kerala initiative to provide home for the homeless in Kerala. It was launched by the Chief Minister Pinarayi Vijayan in 2015. Through the implementation of LIFE Mission Project, the Kerala Government desires the Development of the housing sector in the state and aims to provide homes for all the people in the state.



Figure 8 Life Housing Apartment at Adimali, Kerala

The first phase of the LIFE mission was the completion of various unfinished houses. 54,098 such homes were there in the state. The second stage of life is to build a home for the homeless. The third phase is the construction of housing for families who do not own their home or land.



Figure 9 Life mission Logo

The target of the mission was to provide safe housing to nearly 4.30 lakhs of homeless in the State within a period of 5 years. The state government will have to spend Rs. 4 lakhs for the construction and preparation of each residential unit. Area of every residential house have a carpet area of 500 square meters. The Life Mission has been targeted towards people who lost their home due to natural calamities and the financially weaker sections in the state. The government secured loan of 4,700 crore from HUDCO towards the realization of this project. This is not the only project by state to address this issue, there are others like One lakh housing scheme, EMS Housing project etc., briefly written below.



Figure 10 Chief Minister Shri. Pinarayi Vijayan with a happy beneficiary on moving into a new LIFE home

LAKSHAM VEEDU PROJECT

The Laksham Veedu (One Lakh) housing Project was launched by M.N. Govindan Nair in 1972. It was the first attempt in India to provide adequate accommodation to the impoverished sections of society. This scheme provides the financial assistance for the reconstruction of dilapidated twin houses into single units and reconstruction of single houses. 50% of the subsidy amount will be given by Kerala State Housing Board and the balance amount shall be met by the Local Self Government Departments.

FISHERMEN HOUSING SCHEME



Figure 11 Housing settlement for Fisherfolk in Muttathara Trivandrum

Fishermen Housing Scheme, National Fishermen Welfare Fund Assisted Housing Scheme programme is meant for providing housing to fishermen under the model village development programme. The unit cost per house is Rs. 50000/- . The State Government have enhanced the unit cost to Rs 2 lakh and is given to the beneficiary as 100% grant. The beneficiaries are registered fishermen. The implementing agency is Department of Fisheries.

NEW SURAKSHA HOUSING SCHEME, SCHEMES OF SC & ST DEPARTMENTS

The scheme is to give financial assistance for the house less EWS in both Urban and Rural areas. Under this Scheme, assistance will be given to persons owning at least 2 cents of land to construct a house by themselves. The scheme will have an option to associate Voluntary Agencies and NGOs to assist the construction.

In cases where Voluntary Organizations are associated, they shall provide entire amount to the beneficiary or build the structure up to roof level and the Government Subsidy shall be disbursed. In this case no loan component is involved, and beneficiary is fully free from repayment.

EMS HOUSING SCHEME

EMS is a project to build houses for the homeless poor in Kerala with the help of Local Self Government Institutions. Elamkulam Manakkal Sankaran (EMS) Namboodiripad was the former Chief Minister of Kerala. In the name of Namboodiripad, in his 10th death anniversary, formally inaugurated on March 19, 2008, at Kodakara in Thrissur district, the then Chief Minister VS Achuthanandan. It also aims to repair the houses built under the one lakh housing scheme.





CHAPTER 3
DEPARTMENT OF COOPERATION &
CARe

THE NEED FOR CARE

Kerala faced worst flood between 1st June and 19th August of 2018. About 5.4 million of states population was affected by this disaster. Government of Kerala decided to help and support these affected community through Rebuild Kerala mission.



Figure 12 Houses submerged in water during the 2018 floods

CaRe Kerala project which is a collective of all the Kerala cooperative societies was developed to support Rebuild Kerala mission spearheaded by the department of cooperation. Cooperative Department will provide all support to the government projects to raise the living standards of the people of the state. CaRe Home, CaRe Loan and CaRe Grace are the three subprojects under CaRe Kerala mission. CaRe Home was established with an aim to construct new houses for the people who lose their home. CaRe Loan was established with an aim to provide loan for affected people. CaRe Grace was established with an aim to rehabilitate social life by providing health care and support to the flood victims in distress, provide children with educational kits and general service to the people.

CaRe Home project was inaugurated by Chief Minister Pinarayi Vijayan at Chengannur on 2nd December 2018. First stage of CaRe Home include construction of 2000 houses in which construction of 231 houses were completed and transferred to the beneficiaries

on 26th February 2019. CaRe Kerala is a participatory approach focusing on resilient, green, inclusive and vibrant Nava Keralam.

The project was led by the registrar of Cooperative societies in Kerala, an apex body regulating the functions of cooperative societies and bodies in Kerala.

REGISTRAR OF COOPERATIVE SOCIETIES

Co-operative movement in Kerala is one of the most vibrant Co-operative movements in the Country. About 15624 Co-operative Societies are functioning under the administrative control of Registrar of Co-operative Societies, of which 3685 societies are credit societies. Co-operative Societies in the state have played a vital role in the



Figure 13 RCS Head office Trivandrum, Kerala

economic uplift of the people particularly the weaker and downtrodden people in rural areas. **RCS is an exclusive wing of the Department of Cooperation** which oversees the operation of various cooperative societies.

The co-operatives in the state have an extensive network, engaged in various promotional activities, particularly in agricultural credit, public distribution system, distribution of agricultural commodities, health, education including professional education, housing, agro processing, SC/ST sector, women development etc. and have made an impressive progress and serve the people in diverse economic activities. The movement has made a tremendous progress in all the sectors, covering all spheres in the life of the people. Apart from the above number of co-operative societies, Kerala

Co-operative Movement also contain the co-operative organization registered and functions under different functional registrars.

Table 3 Total Co-operatives in Kerala

Sl.no.	Particulars	Number
1	Co-operatives under the administrative control of Registrar of Co-operative Societies	15624
2	Co-operatives Regulated by other Departments	7456
3	Total	23080

IMPORTANT INITIATIVES

KERALA CO-OPERATIVE BANK (KCB)

As a part of overall restructuring of Co-operative credit structure, all the 14 District Cooperative Banks and Kerala State Co-operative Bank will be integrated to form **Kerala Co-operative Bank** which will be strengthened in all aspects i.e. economically and technologically. The Kerala Co-operative Bank or **Kerala Bank** at the core will be serving co-operatives and their members but will also function as a modern banking institution participating in the economic growth and prosperity of the State. The operating principle would be to eliminate all overlaps at the field level and transfer the business pro-actively to the PACS where the PACS is permitted and capable of handling the business and the Kerala Co-operative Bank provides the back up support to PACS.



Figure 14 Kerala Bank Logo

COOPERATIVE ALLIANCE TO REBUILD KERALA - CARE KERALA

Due to the unprecedented flood which occurred during the month of August 2018, the people of Kerala suffered heavy losses to their homes and means for living. The cooperative department have come forward and contributed, in a significant manner,

during relief works by opening several relief camps, conducting medical camps, etc. To address the various pressing needs of the people of state in the aftermath of the calamity, the department has formed a mega project “CARE Kerala “. CARE Kerala has 3 components.



Figure 15 Care Kerala Logo

CARE HOME

This scheme aimed at rebuilding the houses of those who lost their houses completely. In the first phase, the scheme envisages the construction of **2000 houses**. The outlay for this scheme is Rs 80 crores with Rs 4 lakh per house. The construction will be finished within a span of 4 months. The construction of houses will be done under the supervision of a society working in the region. The houses are constructed with the help of engineering



Figure 16 Kerala Chief Minister at the foundation stone laying ceremony of CARE Project Statewide

experts and engineering college students. Each house will have a minimum area of 500 m² and will be disaster resistant. All basic amenities like water connection, waste disposal facility also included in the premises. The fund required for this mammoth task have been raised from the cooperative societies in the state.

CARE LOAN

To support the immediate financial needs of the flood-stricken families, the State Government has floated a loan scheme, **Resurgent Kerala Loan Scheme** by fully absorbing the interest component. Cooperative Banks in the state have contributed heavily in this front by providing loan facility to 1000s of families.

CARE GRACE

This was a special project developed to address the social and emotional trauma into which many families have been thrown in to by the calamity. It includes providing mental and emotional support to the families especially school going children and supports them to regain their lost certificates, other documents lost during the flood.

PUNARJANI

This Project aims to uplift the Scheduled Caste, Scheduled Tribe cooperative societies working in the state within 3 years. The project has a layout of Rs. 300 crores. The first phase will be implemented in 2019 -20. 309 societies are included in the project. The main functions of these societies are giving short term loans, conducting monthly deposit schemes and welfare activities of members etc.

KRITHI - (KERALA INITIATIVE FOR THINKING INTERACTIVENESS)

As a great initiative of Government of Kerala to bring together the literary lovers across the globe through an International platform, the first edition of International Book Fair namely **KRITHI** are organized in Kochi every year. This 10-day literary fest, organized by Department of Cooperation, the largest in South India also focuses on contemporary social issues and the changing trends in the literary world. **‘Muttathe Mulla’- Micro finance Scheme.**

The scheme gives the protection to common people from private micro finance groups charging exorbitant interest. The pilot project was started in Palakkad district. The scheme involves the disbursement of loans at low rate of interest to the common people. The scheme is implemented through Kudumbashree. The Primary Agricultural Cooperative Societies (PACS) having high connectivity across the state will give cash credit to the Kudumbashree units. Under the scheme Rs. 1000 -25000 will be given to the needy with a nominal interest rate of 12 % with a maximum repayment instalment

of 52 weeks. Also, the loan will be given to close old loans taken from blade companies which can be settled on a onetime basis. The distribution and collection of the loans will be done by Kudumbshree.

PADDY PROCUREMENT

The co-operative department decided to enter the procurement of paddy cultivated by farmers through forming a consortium of Primary Agricultural Cooperative Society (PACS). Palakkad district is selected for the implementation of the scheme. It has been decided to procure, process and distribute rice produced in this scheme through the cooperatives in the upcoming years.

KSRTC PENSION DISTRIBUTION

As instructed by Honourable Chief Minister of Kerala, the Department of Cooperation took the responsibility for the distribution of Pension and arrears to pensioners. KSRTC is the state-owned enterprise in ensuring connectivity to all destinations in Kerala. Since some areas are remote the revenue from these routes are meagre but still the operations are done to ensure the citizens are not stuck anywhere, this welfare attitude is sometimes causing fund crunch and had caused problems in Pension and salary distribution. The cooperative sector aided the KSRTC in this matter. Distribution of pension and arrears for 39045 KSRTC pensioners was started on February 2018 and it is carried out through cooperative banks and societies. Every pensioner opened an account at nearby cooperative bank/society.

SOCIAL WELFARE PENSION

Social welfare pension distribution was successfully completed through six stages. Under the scheme Rs.16723.45 Crores, Rs. 499.12 crores, Rs. 538.69 crores, Rs. 197.58 crores, Rs.1020.55, Rs.629.07 are distributed in the first, second, third, fourth, fifth and sixth phases respectively. The distribution of seventh phase of pension distribution started in April 2018.



CHAPTER 4
CARE KERALA- CARE HOME

CARE HOME

GENERAL

The Care Home program, run by the Co-operative Department, is a model to the world. Rehabilitation is the most difficult process, among that, housing is one of the important parts, but the Cooperative Department-led housing model is effective in this scenario, there are many models of housing in Kerala. The government, especially the Left-aligned political parties, have always made great strides in providing housing for the homeless. Laksham Housing Project, EMS Housing Plan, Life Housing Plan, and many other projects are examples of this and the same has been briefly explained in the previous chapter. The Care Home Plan is different from that, the Department of Cooperatives, which works to implement the 'All for Everyone' campaign, is also involved in the project by applying the phrase "Cooperation". There are around 2000 homes in 14 districts of Kerala as of date constructed under the aegis of the CARE banner.



Figure 17 Inauguration of CARE Project by Hon. Chief Minister Shri. Pinarayi Vijayan at Nishagandhi Auditorium

August 2018 witnessed one of the worst floods Kerala has ever seen. We have lost billions of rupees, but in the face of this catastrophe, the state was rescued with tremendous efficiency and incredible speed. As a model, we are moving towards a greater goal of rehabilitating the affected people. For that, the Kerala Government has formulated the biggest program of the post-Flood Rebuilding of Kerala. The co-

operative movement, which encompasses all the spheres of the land, cannot stand apart from it. Flood Days Like all others, the Co-operative Institutions have been very active in the relief efforts of the department. The Care Kerala Project is a joint venture project with the co-operative sector, the announcement of the project was announced by the Chief Minister of Kerala, Sri Pinarayi Vijayan, in the presence of thousands of supporters gathered at the Nishagandhi Auditorium on 1st September 2018.



Figure 18 CARE Home Workshop

The systematic preparations for the success of this project were organized at first. As part of the implementation of the Care Home program, a workshop for technical and social experts was held. The technical experts have been very supportive of this. National and international experts participated in the workshop chaired by the Hon. Minister of Co-operatives. The project was formulated with their opinion, G Padmanabhan, Former Emergency Analyst at UNDP, Prof. Devadas Menon from IIT Madras, PH Kurian, IAS, and many other experts were present. Based on the expert panel's opinion, Various housing models have been introduced and adopted. Co-operative sectors provided generous support for these activities. More than 2,500 groups in 14 districts donated funds for care home projects. Rs. 44.98 Crores have been received. At the request of the Hon. Minister of Co-operatives, the Co-operatives have decided to pay dividends for the second phase of the care home project.

The projects are in three phases namely Care Home, Care Loan, Care Grace. The most important sub-plan of this is the Care Home Scheme for providing a home for the homeless in the event of a flood. Under this scheme, 2000 families who have lost their homes will be given a home in the first stage. The Chief Minister of Kerala Shri Pinarayi Vijayan inaugurated the first foundation laying ceremony of the houses under this scheme in Chengannur in cooperation with the District Administration under the supervision of Co-operative Societies.

The construction process was undertaken by the secretary of the beneficiary committee and regional cooperative society. For implementing the plan for beneficiaries' statutory instructions must be followed and after detailed inspections, the beneficiary society should handover the documents timely to district level action committee. The program was planned to complete the construction of 2000 houses within three and half months and handover to the beneficiaries. Society assured any kind of related assistance for the successful completion of the programme. For that purpose, the district taluk committee was formed. For rebuilding our state, the cooperative society assisted state government programme to rebuild Kerala mission through care home initiative and this initiative became the prestigious project for state government as well as the cooperative societies.



Figure 19 CARE Home Phase 2 Banner

BENEFICIARIES

The project covered four out of the five municipal corporations, which are relatively large cities, as well as 31 out of the 88 municipalities, or relatively smaller towns across the State. The largest number of beneficiaries have been in Grama panchayats, the rural local governments of the State, where a total of 1751 houses were constructed. Thus, out of the 1917 houses under the project, 1751 are in areas covered by rural local governments while 149 were in towns and 17 are in larger cities. While 91.34% of the houses are in rural areas, flood hit cities were also covered.

The cooperative department didn't interfere in the selection of the beneficiary, this was done in a transparent matter by the district administration in order to avoid duplication of release of funds from government sides. This process enabled the government and the Cooperative department to efficiently handle the rehabilitation process. The homes that the district administration gave were visited by various

cooperative societies under the RCS and efficiently took up the task of creating and mobilizing the resources needed for the successful completion of the project

The highest number of beneficiaries were in Thrissur (491) followed by Ernakulam (337). Idukki has 210 houses constructed under the project while Palakkad (192), Alappuzha (154), and Pathanamthitta (114) are the districts with more than 100 houses under the project. These were the districts with the highest percentage of houses in terms of loss of land and building, total loss of building, and damage to the buildings estimated above 75%.

The project has kept a focus on vulnerable communities. While the State's total population of Scheduled Caste (SC) and Scheduled Tribe (ST) communities is around 11%, the project had a higher coverage of these vulnerable sections. Of the 1917 houses constructed, 24.62 have been for SC/ST families. Among the beneficiary families, Thrissur, Ernakulam, Palakkad, and Idukki had the highest number of BPL households. Thrissur topped the number of the most backward sections with 115 such families.

HOUSING DETAILS

People across different economic segments and social groups are affected equally by disasters, the ability of the families to recover would depend on their economic assets as well as social capital. Therefore, even if disasters are levellers, it is worth exploring the social and economic state of the affected communities from a perspective of their lives and development beyond the rehabilitation phase.

Most of the houses were in poor condition and dilapidated state. Many of the houses lacks proper roofing and they are less secured. The vulnerable sections of society lived in houses less than 400 ft² which was about 47.78% which is now reduced to 1.62%. The next category was 400-600 ft² with 740 houses (38.60%) which is now improved to 76.47%. However, as any post disaster scheme would, the current project has also covered 28 families who had lost their large houses, with plinth area above 1000 square feet. There were 233 families that fell in the middle layer, with houses of plinth area between 600 and 1000 square feet.

From the table below showing the economic status of the beneficiaries which was analysed based on the categorization into APL and BPL¹. APL called 'above poverty line',

¹ The classification APL and BPL is defined by the state administration based on the overall economic status of Kerala as envisaged in the National Food Security Act of 2013 and is a general tool in India to identify whether a person is having enough money to survive in the residing state

meaning, the families that fall above the officially defined 'poverty line' sums up the white and blue card members to about 21.91%. The category, BPL meaning, the families that fall below the officially defined 'poverty line' is classified into two-pink and yellow. The percentage of beneficiaries in BPL is about 78.09%. Yellow card indicates economic status a notch below BPL; these are beneficiaries who have been considered the most economically backward and have been beneficiaries of the 'Antyodaya Anna Yojana' scheme under which they were entitled to higher portions of grains from the PDS.

Table 4 Economic status of the beneficiaries

Districts	White	Blue	Pink	Yellow	Total
Alappuzha	2	16	97	39	154
Ernakulam	16	75	224	22	337
Idukki	33	41	106	30	210
Kannur		1	16	3	20
Kasaragod	5		2		7
Kollam	3	1	33	5	42
Kottayam	3	8	57	15	83
Kozhikode	4	5	25	10	44
Malappuram	1	6	62	21	90
Palakkad	10	35	133	14	192
Pathanamthitta	7	28	65	14	114
Thiruvananthapuram	2	10	27	10	49
Thrissur	24	67	285	115	491
Wayanad	9	8	55	12	84
Total	119	301	1187	310	1917
%	6.21	15.70	61.92	16.17	100.00
White Non-priority- Blue-Non-priority subsidy of Above Poverty Line Pink-Priority of Below Poverty Line(BPL) Yellow-Most economically backward section of society- Antyodaya Anna Yojana Beneficiaries					

Table 5 Condition of Old and New homes

	Old house		New house	
	Houses	%	Houses	%
Concrete; concrete and other combinations	95	4.96%		
Concrete			1908	99.53%
Tile; tile and other combinations except concrete	1373	71.62%		
Tile			5	0.26%
Sheet	345	18.00%	4	0.21%
Thatched/grass/plastic	104	5.43%		
Total	1917	100.00%	1917	100%

DESIGN AND IMPLEMENTATION



Figure 20 A beneficiary with the design of his CARE home at the time of project launching

CaRe Home is being implemented with help of various technical experts and support from all walks of life. Students and professors of various engineering and architecture colleges of Kerala assisted in this matter. On close analysis, the Construction of 917 houses (47.84%) was completed with technical support sourced by beneficiaries from their locality. Construction of 47 houses (2.45%) was completed with technical support from cooperative department. Technical support from cooperative societies towards the project accounted to 730 houses (38.08%). Engineering colleges contributed technical support towards the completion of 136 houses (7.09%). NGOs gave of technical support for completion of a single house (0.05%). 54 houses (2.82%) were constructed with a of technical support from panchayat. Private contractors and Technical cooperative institutions provided technical support for 16 houses (0.83%). This distribution helps to clearly visualize the amount of involvement of the people irrespective of their economic differences or educational background.

FUNDING

The funding for CARE Kerala is comprised from various sources like the SDRF (State Disaster Response Fund), the fund which is available with the State Governments for responses to notified disasters. It is primary fund available with States for disaster

response and is constituted under Section 48 of the DISASTER MANAGEMENT ACT, 2005 SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims of cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack, and frost and cold wave.



Figure 21 The Hon. Minister of Cooperation, Shri. Kadakampally Surendran addressing the crowd during the inaugural session of CARE Home

Besides, for providing immediate relief to the victims of State-specific disaster within the local context, which are not included in the list of the above notified natural calamities Total amount received from SDRF was Rs.18,43,05,900. With this fund available for this project each home received a certain sum for building their abode based on the terrain they were situated. Around 294 houses built in hilly areas got Rs.1,01,900 and 1623 houses built in the plains got Rs. 95,100 each.

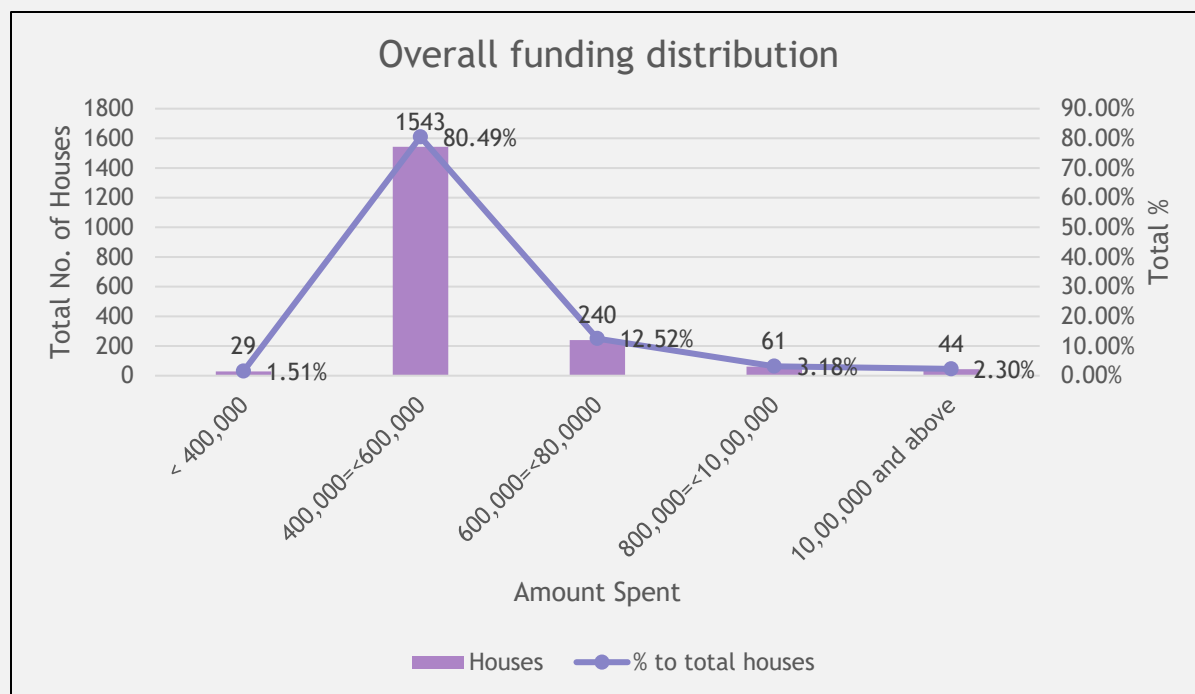


Figure 22 Overall funding distribution

The main source of the funding in the CARE Keralam was from the cooperative societies this was made possible with the control and direction given from the office of the registrar of cooperative societies (RCS). Cooperative societies together spent a total of Rs. 77,37,12,205 in this project to rehabilitate or reconstruct the disaster affected. In 525 houses, cooperative societies invested in the range of Rs. 400,000 to Rs. 600,000.

The additional resources the cooperative movement mobilized includes cash, contributions in kind, and voluntary work, taking the total average investment per house upwards by more than ₹ 1,00,000. Total value of the contributions mobilized in cash and kind amounted to ₹ 15,99,35,334. Add to this the value of voluntary Labour worth ₹ 6,48,26,475 as well as gifts worth ₹ 51,03,922.

There was also an additional project support in the form of construction and supply of materials toilets, bathrooms, wells, compound walls, and biogas plants worth ₹ 3,53,500. The grand total amount spent on the houses adds up to ₹ 118,82,37,336; this works out to ₹ 6,19,842 per house. This could be a first of its kind in Kerala’s post disaster housing schemes. These additional resources added in a big way to the moto of ‘building back better’ in a post disaster context.



CHAPTER 5
GLIMPSES OF HAPPINESS

GENERAL

In this chapter a few of the projects from the total lot implemented in the first phase is being explored, the selection for this study was random and covered the basic details of each of the beneficiaries. In the explorations below efforts have been put to study the impact the project had on these lives and tried to explore into the living conditions of the beneficiaries before the implementation of the project. Even though they have a positive impact on the lives of the people, a short description can help in understanding the efforts put in and the impact this novel initiative had on the beneficiaries.

There are fourteen districts in Kerala and the impact of the 2018 floods were felt in all districts, but some faced more damage than the rest.

The list of the houses selected for the survey is given below

Table 6 List of Houses Sampled

SI NO	NAME	DISTRICT	ADDRESS
1	T Suresh	Thiruvananthapuram	Vilaveetulankam Veedu, Thatinakam, Nalanchira PO Thiruvananthapuram
2	Radha P	Thiruvananthapuram	Anil Bhavan, Murinjapalam, Medical College PO Thiruvananthapuram
3	Prakashini Amma	Kollam	Pulliprakattil, Thekathil, Chavara, Mukundhapuram PO Kollam 691585
4	Omana Amma	Kollam	Thodiyil Malethil, Pallimon East, Meyanoor PO Kollam 691537
5	Sasidharan Nair	Pathanamthitta	Care home no: 434, Molavana, Palliakara, Thiruvalla PO Pathanamthitta
6	Kunjamma	Pathanamthitta	Care Home NO: 408, Thevilezhayathu, Nedumbram PO Pathanamthitta
7	Valsamma Rajappan	Alappuzha	Kochuparambu House, Nadubhagam, Chambakulam PO

8	Gopalakrishnan	Alappuzha	Cheruvallitharayil, Cheruvallitharayil Cheruthana, Karthikapally
9	Subhadra	Kottayam	Sindhunivas, Ayyarkulangara, Vaikom
10	Kumari Viswambharan	Kottayam	Kumarakom, Kottayam
11	Babu T S	Idukki	Thazhathu Veetil, Nayarupara, Idukki dam top
12	Rajamma Chandrashekar	Idukki	Varayapillil, Prakash (PO)
13	Satheeshan Chandran	Idukki	Nirappel veed, Thovarayar(po), Anchurali
14	Sreemathi	Ernakulam	Koonamthettayil, Edayapuram, Aluva
15	Santha Vasudevan	Ernakulam	Pallupadam House, Thathapally, Paravur
16	Sobhana	Thrissur	Kakkanattu House PO Pazhuvil, Thrissur
17	Viswanathan KV	Thrissur	Kolakattil House P. O Kizhapullikara
18	Visalakshi Amma	Palakkad	Oom Thengil Veedu, Marudur PO Ongallur, Palakkad
19	Nabeesa A	Palakkad	Ayyalil, Edapallam, Vilayur, Palakkad
20	Arumughan	Malappuram	Pooshali house, Perumundassery, Shanthinagar, Vaniyambalam
21	Valsala	Malappuram	Nilambur Taluk, Pallipadam village, Veetikunnu colony, Pin:676542
22	Bhavana Suresh	Kozhikode	Mandhakav, Naduvannur Grama Panchayat, Ward no 14

23	Kunheema	Kozhikode	Areekuzhiyil, Oorkadav, Mavoor Grama Panchayat, Kunnamangalam block
24	Mr Mohanan	Wayanad	Kizhakedath Veedu, Meppadi PO, Wayanad
25	Mrs Annakutty	Wayanad	Pathiraparambil House, Valad PO, Wayanad
26	Latha K V	Kannur	Kanishan House, Ramanthali Panchayath, Kannur(dt)
27	Nimmy Elias	Kannur	Thenpalliyil House, Prapoyil, Cherupuzha panchayath, Kannur (dt)
28	Beefathumma	Kasaragod	w/o Abdulla, Nellithadukkam, Kasaragod (dt)
29	Muhammad	Kasaragod	Kuttipalam House, Muliya, Kasaragod (dt)

CARE HOME-TRIVANDRUM DISTRICT

Thiruvananthapuram was not as severely affected as other districts such as Wayanad, Pathanamthitta etc. Even then more than 2400 persons were moved to safer places and shelters in Thiruvananthapuram and Kollam districts following heavy rains and flooding in 2018. Many areas of Kollam district and Attingal, Nedumangad, Kilimanoor and Thiruvananthapuram city have been flooded and in excess of 500 houses were damaged and 501 houses were destroyed. The normal life of people was completely disturbed. To bring them back to their earlier serene life the CARE Home project held their hands at their most vulnerable time and have since handed over 49 homes to the beneficiaries.

T SURESH

Mr. T Suresh is one of the beneficiaries of CARE Home project whose house is located at Thatinakam, Nalanchira which is at Thiruvananthapuram district. There are only 2 members in their family (T Suresh and his sister). Suresh is a temporarily employed as a staff of KSBC Ltd. and his sister is mentally challenged. Before the disaster they lived in a house assembled with cement bricks and tarpaulin sheet and the floor was laid with cow dung. Their house got completely collapsed



Figure 23 Suresh's Home before the 2018 floods

during 2018 flood. CARE Project stepped in and they received a place that they could say was their own. The total construction cost was twelve lakhs (1200000/-) where the major funding were the Government (95,100/-), a major contribution was made from the Thiruvananthapuram Government Employee's Cooperative Society (6,70,000/-), and the remaining from other cooperative societies (1,74,900/-) and balance amount were donated by the residence associations, neighbours etc. and sponsorship from kind hearted people from the neighbourhood (in the form of fifty cement bags) were also present. Materials from their old home was recycled and was used in filling the basement earthwork. The plan and drawings were prepared by Department of Architecture of College of Engineering Trivandrum.

Some of the major changes happened to their life are that now they have a well-furnished home including attached toilets and good ventilation and they were able to shift from wood to gas and that helped them in avoiding respiratory diseases and reduced carbon foot print, they were able to overcome the problems created by the flood, now they have public water connection which helps them to fetch water even in the dry season, their new house is equipped with LED lighting which will reduce the usage of electricity as well as having the advantages of being energy efficient and economic.

The time consumed in completing the paper works and approvals was only two weeks and the time taken for completing the construction was just four months. The effective support from the part of cooperative bank employees, resident's association, political parties and voluntary support from labours resulted in the successful completion of the project.

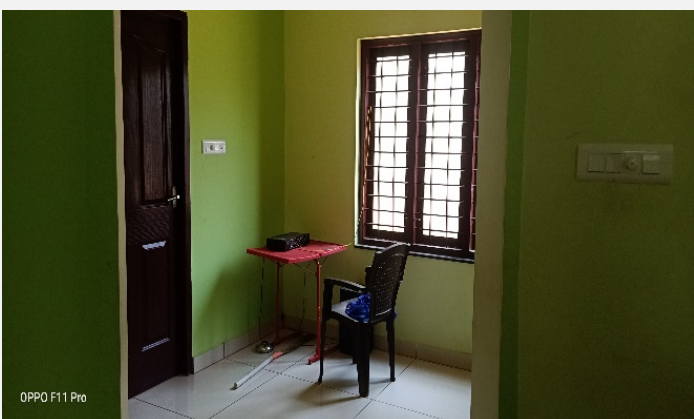


Figure 24 Interiors of Suresh's Home after completion



Figure 25 Suresh's Home after completion of CARE project



Figure 26 Rendered plan of Suresh's residence under CARE project

RADHA P

Mrs. Radha who is a beneficiary of the CARE Kerala scheme who lives in Murinjapalam,



Figure 27 Amayizhanchan canal which caused flooding in the area

near medical college in Thiruvananthapuram district. There are five members in their family. Before the disaster they lived in a Kutcha house and the floor was laid with cow dung, a traditional Indian low-cost flooring system. Their house got completely ruined during the 2018 flood.

The total construction cost was Rs. seventeen lakhs seventy eight thousand (17, 78,000/-) where the funding agencies were the Government (95,100/-), Kadakampally service cooperative Bank No 3515 (5, 55,000/-), beneficiary Radha (7, 26,000/-) and balance



Figure 28 Radha in front of the damaged house

amount were donated by three residents associations and two local philanthropists. Surplus materials from the old house is used for filling the basement.



Figure 29 New Home of Radha under CARE project

The main cause of disaster was water rising from the nearby canal and heavy rain. This led to the total collapse of the house. Considering this situation and preparing for the future, the basement was designed elevated from ground and the building was erected with pillar support, so that any flooding issues in the coming may not affect

them. The total built up area is 514 ft² which was contained in a land parcel of 12.4 cent.

The changes in their lifestyle are that now they have a well-furnished household and good ventilation. They were able to shift from wood to LPG and that helped them in avoiding respiratory diseases and reduced carbon footprint. They were able to overcome the problems created by the flood, now they have public water supply connection which helps them in availing them water even during the dry season, their new house is equipped with LED lighting which will reduce the usage of electricity and also greenhouse gas emission is reduced.



Figure 30 New CARE home of Radha

The time consumed in completing the paper works, permissions and all took three to four months and the time taken for completing the construction was 11 months. The joint effort of the cooperative banks, well-wishers, and residents' associations was a key element in completing the project within a short span of time.

CARE HOME-KOLLAM DISTRICT

Many parts in the district remained submerged during the downpour. The district administration had opened 25 relief camps in Kollam followed by torrential rains and multiple landslips in the ghat section. There were no train services in the Kollam-Shenkottai route. The public has been asked to stay alert in view of heavy storms forecast by the Met department in seven districts including Kollam. The district administration banned all vehicular traffic in Thenmala- Shenkottai route of NH 744 as multiple landslips were reported from the location.

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More than 2400 persons were moved to safer places in Thiruvananthapuram and Kollam districts following heavy rains and flooding. Traffic was disrupted as trees fell on to the road following a minor landslip. The authorities have warned that water from the Thenmala dam were likely to be released any time now as the dam under the Kallada Irrigation Project was quickly filling up. The Ithikkara River in Kollam district was in spate. A total of 370 houses were destroyed during the flood period. About 150 living near the Kerala Minerals and Metals Limited at Chavara were evacuated as waters contaminated with effluents from the factory flooded their homes. A lot of people had lost their homes and savings. To bring all the affected people back to normal life the CARE Home scheme have constructed and handed over 42 homes to the beneficiaries.

PRAKASHINI AMMA

Smt. Prakashini Amma, living with her son at Bharanikavu, Chavara in Kollam district is the beneficiary of this project. Before the disaster they lived in a brick house which was not plastered. The 2018 flood completely damaged the beneficiary's house which was already in a dilapidated condition. After the flood nearby locals help them to build a temporary shelter. Pattathanam Service Cooperative Bank was the implementing agency in building new home for the beneficiary. The new house is constructed at the same location as of the old house. Total built up area of house 645 sq. ft. House design is made by Abhilash Chandran. Total cost of construction is Rs.7 lakhs out of which the beneficiary's share amount to Rs 2,00,000/- and the rest from CARE fund allocated by Pattathanam Service Cooperative Bank and SDRF. Pacific Rosewood was used in making doors and windows. Materials from the old house were used for filling the basement and the partially damaged doors and windows were given to the neighbours. LED's lights and gas connection are provided in the new house. The



Figure 31 Temporary house of Prakashini Amma

time consumed in completing the approvals, permissions and other paper works took only one week, and the time taken for completing the construction was only two months. The major problem caused during the construction was the difficulty in carrying the materials to site. This was overcome with the help of the neighbours and the voluntary involvement of bank employees.



Figure 32 New Residence for the Beneficiary

The major changes in their life is that they have got good shelter including better sanitation facilities. The new home they have has more space and good ventilation than their old house. Shifting from firewood to LPG gas help them in avoiding respiratory diseases. They feel more secure and extremely thankful to the government and cooperative society for making her dream come true.

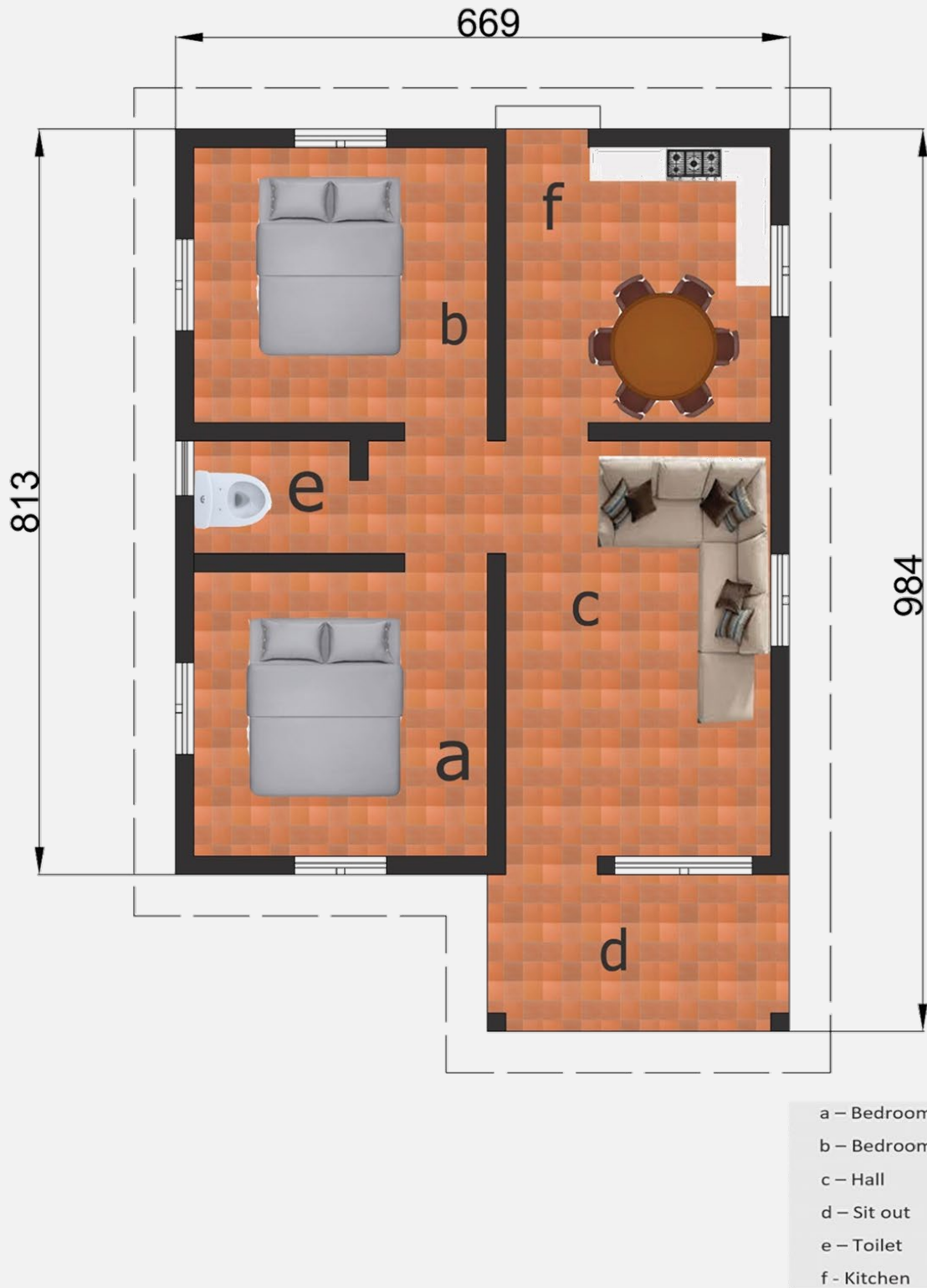


Figure 33 Rendered Plan of Prakashini Amma's CARE Home

OMANA AMMA

Smt. Omana Amma, living with her two daughters at Pallimon, in Kollam district is one of the beneficiaries of this project. Before the disaster they lived in an exposed brick house having tiled roof. The shabby condition of the house caused the collapse of the



Figure 34 Omana Amma's New home under CARE project

old house during 2018 floods.

Nedumana service cooperative bank was the implementing agency in building new home for the beneficiary. (8° 53'58.5"N, 76° 43'32.3"E) is the geographical location of the constructed house. The total built up area is 514 Ft² on a total area of 12.4 cent. Total construction cost of the project is Rs 6, 34,309/- out of which Rs 4, 95,100/- was provided by Nedumana service bank and an amount of Rs 25,000/- was donated by other banks and balance amount collected by the Nedumana service cooperative bank. It was inaugurated by fisheries minister G Mercy Kuttiamma on June 5th, World Environmental day and she planted trees besides her house. The design for the house was made by compass designers. Surplus materials from the old house was used for filling the basement. LED lighting and gas connection were made available in the newly constructed house.

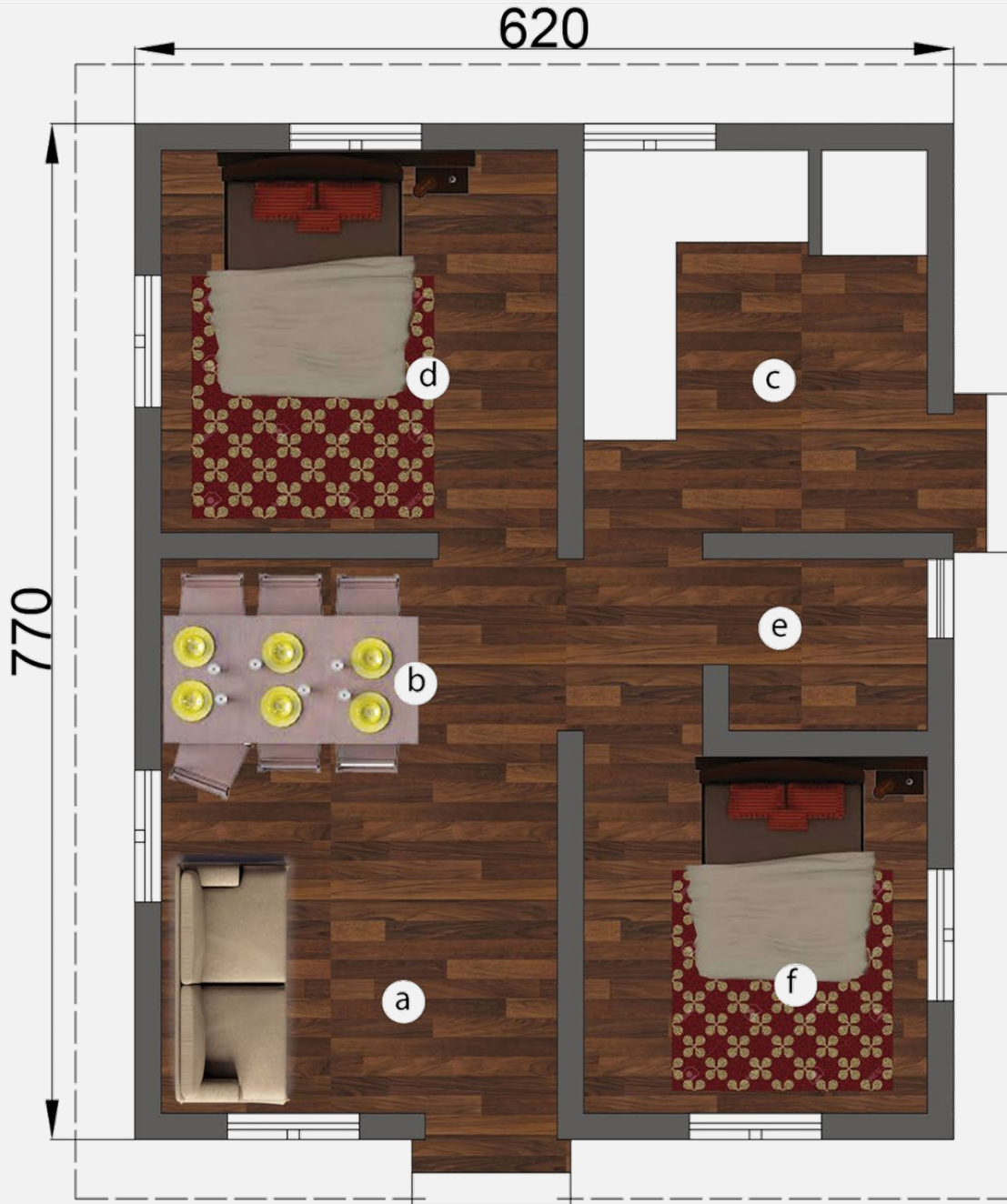
The time for completing the paper works took only 2 weeks and the construction was completed within 5 months. The major issue caused during the construction was the



Figure 35 Vegetable Garden set up by Omana Amma near the CARE home

difficulty in carrying the materials to site, but by the help of the neighbouring people and the involvement of bank employees they have found nearby land in loading materials. Voluntary help from the part of bank employees helped in achieving timely completion of the house.

The changes in their life is that they got good shelter which is making them feel safe and secure. Now one of her daughters got married and another one is studying in school. The new house has more space than the old house with Good ventilation. Omana Amma is thankful for the Government and Nedumana Service Cooperative Bank for their dream home.



- a LIVING ROOM
- b DINING ROOM
- c KITCHEN
- d BEDROOM I
- e TOILET
- f BEDROOM II

RESIDENCE AT NEDUMANA

Figure 36 Rendered Plan of Omana Amma's home

CARE HOME-PATHANAMTHITTA DISTRICT

With most of the roads were under water, transportation came to halt in Pathanamthitta district. Almost all the rivers in the district, including Pamba, Manimala, Kallar and Kakkad, breached their banks. Water level rose dangerously in Achenkovil River also. The shops on the banks of the Pamba River in Sabarimala were flooded. At Peringara, Niranam and Nedumbram in Upper Kuttanadu, all the low-lying areas were inundated. However, the most severely affected area in the district was Thiruvalla taluk. Niranam, Karakkal, Swami Palam, Peringara, Mepral, Nedumbram and Chathankari were flooded.

As many as 55 relief camps were opened in these areas, but the figure rose to 64. 3,418 people belonging to 1,201 families have reached the camps. In the taluk, 48 houses have been fully damaged due to the floods. Flood waters have partially submerged 25 houses at Ezhikode colony in Kidangannur village. A total of 1008 homes were battered during the flood. As a helping hand the CARE Home scheme have constructed and handed over 114 homes to the beneficiaries.

SASIDHARAN NAIR



Sasidharan Nair is living in Palliakara near Thiruvalla at Pathanamthitta district. He is a mason living with his mother who is an Asthma patient. This house got completely crumpled during 2018 flood. Before the disaster they lived in a house build of cement bricks and roofed with asbestos sheet. The new house has a total construction cost of Rs.4, 95,000/- where the major funders are the Government as well as Pullad Service Cooperative Board No 1375. Majority of the materials from old house were used for filling the basement.

New house is built in the same plot where the old house was situated. The building is 2 storied and total built up area of the residence is 210 Ft² which is built in 1 cent of land. The building is elevated from the ground and thus the major issues during flood is reduced.

Figure 37 Sashidharan Nair's home

Care home provided a better living with healthy and hygienic environment, such as shifting from woods to gas helped them in avoiding respiratory diseases and reduces carbon footprint. Flooding problem gets managed through elevating the foundation, new pipe connection reduced the difficulties in getting water during dry season and LED's were used for lighting purpose so that greenhouse gas emission is reduced.

There was no delay in paper works and the total time consumed was only 2 weeks. Hence the project was completed within 3 months. The effective supports from the bank employees, various political parties and voluntary support from labours resulted in obtaining a worthy residence.



Figure 38 Sashidharan's Care Home- Side elevation

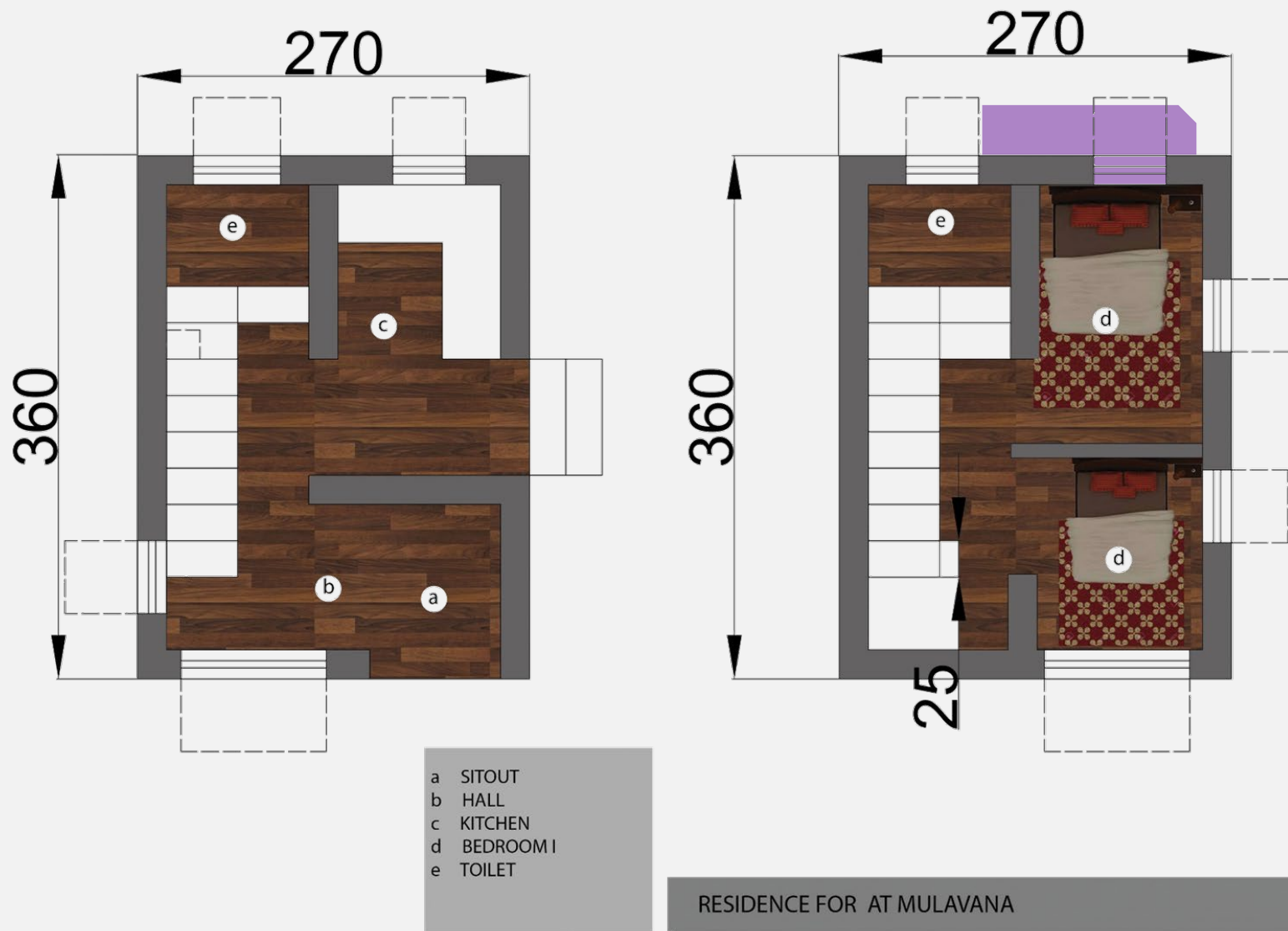


Figure 39 CARE home of Sasidharan Nair

KUNJAMMA

Smt. Kunjamma is living with family consisting of 5 members in Thevilezhayathu near Nedumbram at Pathanamthitta. Their old house was made of cement bricks and roofed with asbestos sheet. During 2018 Kerala floods, the entire house got collapsed. She also lost her 2 cattle's which was the major part of their income. The total construction of new residence cost Rs. 7, 15,000 out of which Rs. 5,15,000 was the contribution from the Government and Nedumbram service cooperative Bank. Rs 2,00,000 was contributed by the Beneficiary Kunjamma and an additional Rs 25,000/- by the bank employees for furnishing the house. The materials from the old house were reused for filling the



Figure 40 Collapsed home after floods

basement. The main cause of disaster was the rise of water from the nearby Manimala River and the heavy rain leading to the total collapse of the house. In order to prevent that condition, the new house was provided with an elevated basement and the building was erected with pillar support. The total built up area is 500 ft² which was encompassed in 10 cents.

Care Home scheme ensured a quality



Figure 42 New CARE Home of Kunjamma



Figure 41 Interior of CARE home

living in a well-furnished house with attached bathroom and proper ventilation. Some of the added advantages are provision for gas connection, water connection, and entire house is provided with LED lighting which helps to reduce greenhouse gas emission. There is also a provision for cattle shed. The new house can resist upcoming floods.

There was no delay in paper works and the total time consumed was only 2 weeks. Hence the project was completed within 3 months. The effective supports from the bank employees, various political parties and voluntary support from labours resulted in obtaining a worthy residence.

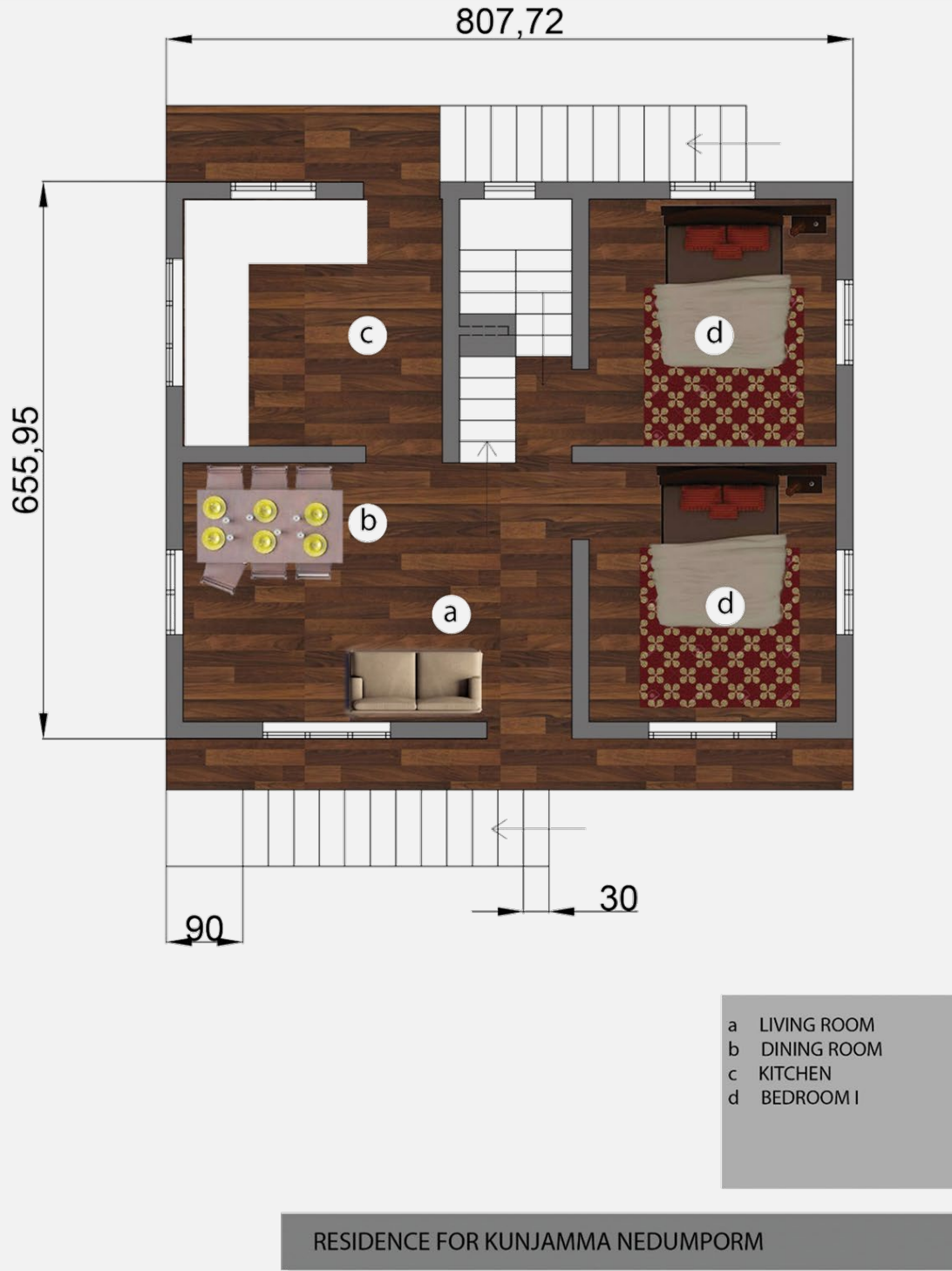


Figure 43 Rendered Plan of Kunjamma's CARE Home

CARE HOME-ALAPPUZHA DISTRICT

Alappuzha district experienced immense calamities in the monsoon causing significant damage to life and property. The entire series of events in Alappuzha can be divided into two distinct phases, the first phase started from 15.07.2018 and the second phase started from 15.08.2018. The first phase of floods was characterised by inundation of most of the villages in Kuttanadu area. The second phase was more furious with flash floods and inundation in hitherto unflooded areas in Chengannur area and flooding in many low-lying areas in the district. Alappuzha witnessed a rainfall departure of 29% excess than normal.

Several places in Chengannur, Kuttanadu, and Ambalappuzha taluks have been isolated following an alarming rise in the water level. Several people stranded at homes have been rescued and shifted to relief camps. The areas including Chengannur, Pandanad, and Edanad have been completely isolated. The flood situation remained grim at Thiruvandoor, Vazhar, and Mangalam.

More than 200 relief camps and 483 sub centres were opened in different parts of the district for 1.25 lakh people during the times of the flood. Around 2157 houses were destroyed during the devastating flood. As a helping hand the authorities of CARE Home scheme have handed over 154 newly built home to the beneficiaries

VALSAMMA RAJAPPAN, KOCHUPARAMBU HOUSE



Figure 44: Way to home

Smt. Valsamma Rajappan of Kochuparambu house, living in Champakulam which is in Alappuzha district is the beneficiary of this project. The implementing agency of the project was Nedumudy Service Co-operative society. They were provided with a 519 ft² house with Double bedrooms, Living Cum Dining room, Kitchen, Common toilet, and a Sit out. The house had a total estimate of - Rs 7,59,000 (Rs 459000 as per Care

scheme+250000 from Govt SDRF). The house had a unique design which was designed by CAPE Engineering College.

The house is built on elevated pillars. This idea was suggested by the local people and it was finalized by the designers. This elevated structure provided more space underneath their house so that they could incorporate mushroom farming which is very apt for the area and adopt various other farming practices. Also, they could store their fishing nets in the area. This place can be considered as a multi utility area.

Majority of the construction materials was transported in small boats which increased the cost of construction. The entire house was built by Valsamma's son along with 12 other co-workers, who worked contributed their efforts as voluntary participation without considering anything in return.



Figure 45 Valsamma's New CARE Home



Figure 46 Rendered Plan of Valsamma's CARE Home

SREE GOPALAKRISHNAN, CHERUVALLITHARAYIL

Sri. Sree Gopalakrishnan of Cheruvallitharayil, living in Karthikapally which is in Alappuzha district is the beneficiary of this project. The implementing agency of the project was Chingoli Service Co-operative society. They were provided with a 500 ft² house with a Double bedroom, Living Cum Dining room, Kitchen, and a Common toilet Outside. The house had a total estimate of - Rs

10,23, 303. The house was designed by Faculty from the Department of Architecture of College of Engineering Trivandrum.



Figure 47: Care home of Mr. Gopalakrishnan

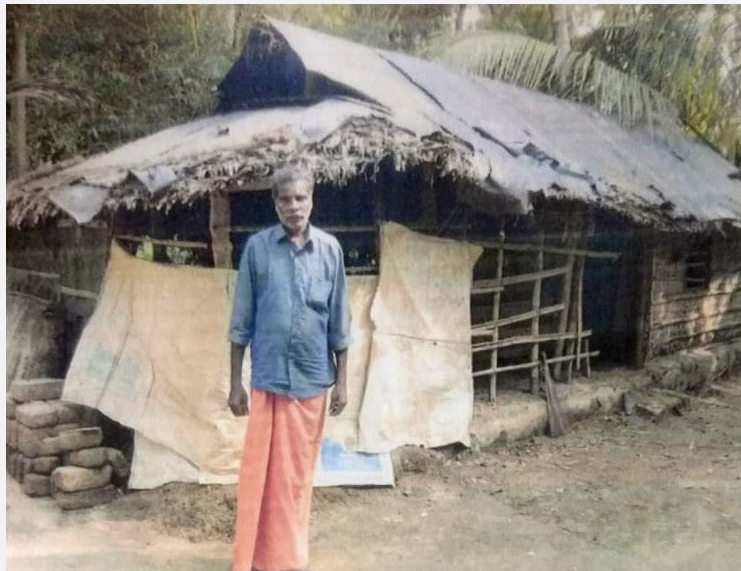


Figure 48: The old home of Mr. Gopalakrishnan

this house was designed with lightweight and long-lasting construction materials which can withstand flood and similar calamities

The house is an elevated structure with 1.5m height cement piles and pillars from the ground level. This height was fixed by determining the water level during the recent floods in Alappuzha. The walls are built using weightless mesh Crete AAMI blocks which floats in water. The roof is designed using weightless

30mm thick Oralium sandwich panel aluminium sheets.

The beneficiary Gopalakrishnan is living in Paandi farming village which is a part of Upper Kuttanadu in Cheruthana Panchayat, an isolated island and hence the construction materials were transported in small local boats.

This house wasn't affected in the subsequent 2019 flood and the family could live in the same house without facing much difficulties unlike the houses in the neighbouring areas. Soon this model became the trend of construction in the neighbouring areas. The house is having Electrical and water pipe connections as well.



Figure 49 : Transportation of construction materials at the time of construction



Figure 50 Different stages of Construction



Figure 51 CARE home of Gopalakrishnan -Rendered Plan

CARE HOME-KOTTAYAM DISTRICT

Flood waters mainly entered Kottayam town at the low-lying western areas. Areas bordering river Meenachil in Kottayam town remained submerged. According to the authorities, more than 33,000 persons was displaced from their homes and joined the 275 relief camps opened in the district. The traffic in the district remained paralysed as scores of isolated pockets even in high ranges remained inundated. Areas like Eranjal, Nattassery and Parambuzha was also got affected. Around 411 relief camps were opened in total and 27261 families were relocated to these relief camps. Pala town remained cut off from other major centres in the district as Pala-Erattupetta; Pala- Kottayam; Pala-Ponkunnam roads remained submerged in many stretches. Traffic to Idukki was also remained disrupted on account of landslides and trees being uprooted on the roads. A total of 734 houses were destroyed in Kottayam district. The CARE Home scheme have constructed and handed over till date a total of 83 homes as a relief to the flood affected people.

SUBHADRA, SINDHUNIVAS VAIKOM

Smt. Subhadra, a 69-year-old widow, lives in Ayyarkulangara which is located at Vaikom Taluk of Kottayam district is the beneficiary of this scheme. Her old house was a temporary settlement with tarpaulin sheet as the roof covering. The beneficiary used to go for work under MGNREGA scheme and receives senior citizens pension which helps to meet-up with her daily needs.

The flood in Aug 2018 had a devastating effect on her livelihood and had damaged her temporary settlement which was already in wrecked condition. The beneficiary for CARE-HOME scheme was selected based on the data collected from the collector's office.

The new house is constructed adjacent to the existed house and is made of cement concrete blocks having a total floor area of 413 sq. ft. The implementing agency of the project was Palliprathussery Service Co-op bank and the contractor assigned for the work was K J Constructions.

The approval process went on smoothly with the co-operation from Government officials. The funds were allocated and released in each stage by measuring the progress of the work at site. A total of Rs. 4,95,000 was obtained from government as Relief fund out of which Rs.95,200 is from CMDRF fund. The project foundation was laid on December and completed within a timeline of 3 months and that is by February 2019. The major constrain to the project was accessibility to the site for transportation of materials.

The beneficiary was provided with electricity and water connection, which was not available in the earlier settlement. The new house is well-furnished and offers her more security compared to the old house. She is very much happy and satisfied with the new house. She says, “the new house is the one, she couldn’t never think of in her lifetime”.



Figure 52 Newly constructed house of the beneficiary



RESIDENCE FOR SUBADRA AT KOTTAYAM

Figure 53 Rendered plan of Subhadra's CARE home

KUMARI VISWAMBHARAN

Smt. Kumari Viswambharan, a 60-year-old widow, living with her two sons at Kumarakom Panchayat is the beneficiary of the scheme. Earlier she had lived in a kutcha house and used to go for work under MGNREGA which helps to meet-up with her daily needs.

The flood in Aug 2018 had a devastating effect on their livelihood. During the flood they moved to the relief camp set up by the government. The floods had damaged their settlement which was already in destroyed condition. The beneficiary and her two sons had nothing when the reliefs camps were dispersed after the flood. With the timely action of the Panchayat they were moved to the Anganwadi for few days and with voluntary support from the people, a temporary settlement was made for them. Under the CARE-HOME scheme beneficiary were selected based on the data collected from the collector's office.

The implementing agency was Kumarakom Vadkkumbhagam Service Co-op bank. The new house is constructed adjacent to the existed settlement. It is made up of cement



Figure 54 Newly constructed house of the beneficiary

concrete blocks consisting of 2 bedrooms, kitchen, hall, sit out and an attached bathroom having a total floor area of 499.876Sq.Ft. Approval process went on swiftly with the co-operation from Government officials.

Total cost of the house was Rs. 7,83,427 , out of

which Rs.4,95,100 was obtained from government as Relief fund in which department of cooperative society provided Rs.4,00,000/- and the rest of fund were sponsored by Annikadu regional farmers Co-op bank(Rs.50,000/-),sponsors(Rs.71,333/-) and the Kumarakom Vadkkumbhagam Service Co-op bank (Rs.1,66,994/-). With the progress of works, funds were released in each stages of construction .The foundation was laid on 14th December 2018 and completed within a record timeline of 50 days (1st February 2019).The major constrain to the project was accessibility to the site for transportation



Figure 55 Remains of Kumari 's Home after the floods

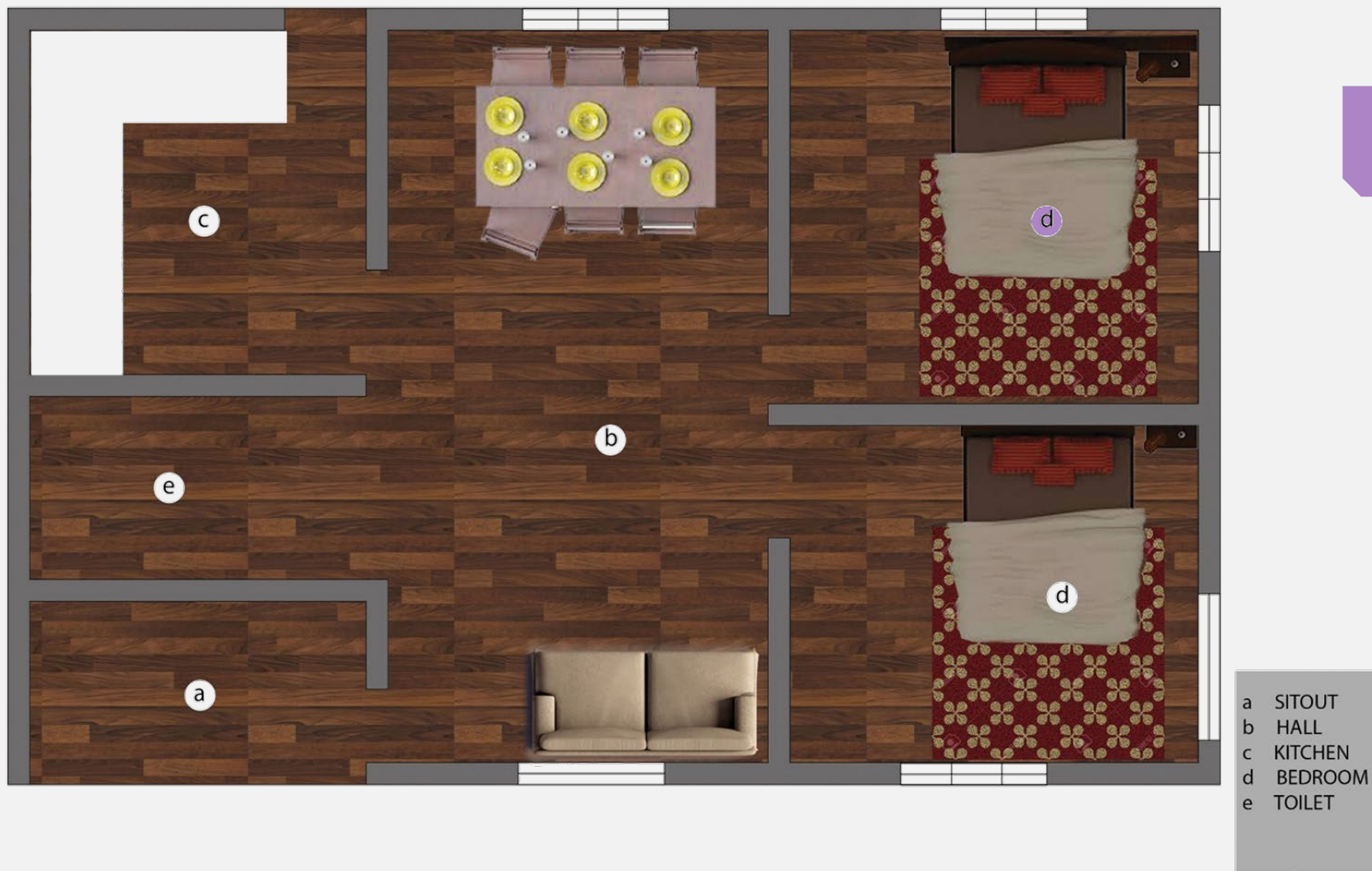
of materials and it was overcome by the voluntary support from the Govt officials, banks officers and the panchayat

The beneficiary was provided with electricity and water connection. The new house is well-furnished and offers her more security compared to the old house. One of

the noteworthy things she had pointed out while sharing her experience was that she wasn't affected by the 2019 flood and didn't want to move to relief camp for the first time ever in her life. She was thankful to all who helped her in achieving her dream home.



Figure 56 Voluntary support from College students while the construction of Kumari's home was ongoing



RESIDENCE FOR KUMARI VISHWAMBHARAN KOTTAYAM

Figure 57 Rendered Plan of Kumari Viswambharan's CARE Home

CARE HOME-IDUKKI DISTRICT

In 2018, the worst floods in 100 years have killed over 51 people in Idukki and forced 33,635 people to flee from their homes to the relief camps. As per the data available with the district disaster management authority, as many as 211 relief camps were opened across the district since August, with 52 at Devikulam, 24 at Peermade, 46 at Thodupuzha, 35 at Udumbanchola and 53 at Idukki taluk. Munnar lost its past glory. Munnar, called the Kashmir of Kerala, has taken a brutal battering, with boulders, mire and uprooted tea shrubs upending its green tea valleys. Residential areas, as well as famous tourist destinations, including Mattupetty, Kundala and Rajamala, were inundated. The landslides here heaped misery upon sorrow, killing at least seven persons and had doused out the expectations of various stakeholders of the tourism sector here. Even five-star hotels and resorts got submerged under water, roads became rivers as mud tore sky high buildings in half, ripped down trees and tumbled boulders like Legos.

As many as 3000 residents were forced to evacuate from their houses. A total of 1877 houses were battered to ground. To bring back the life of affected people the authorities of CARE Home scheme have handed over 210 newly built home to the beneficiaries of the scheme.

BABU T S



Figure 58 Babu's Care Kerala home during construction

Mr. Babu T S is an auto driver who lives in Idukki district. His old house was destroyed due to landslide during the flood that occurred during the 2018 monsoon season. Being an auto driver, it was difficult for him to construct a new house with his mere income. As part of CARE home, he was also included as a beneficiary under this scheme. The newly built house is



Figure 59 Babu ' s home after construction

existing on his own property. The total floor area of the house is around 600 ft² and is constructed as framed structure whose safety was verified by geotechnical engineers. The plan, section and elevation drawings were provided by the Panchayath as part of Life Mission. The implementing agency was Thankamani Co-operative Bank. The new house has LPG connection for use, a privilege that they have never experienced before. The construction commenced on January 2019 and completed on September 2019. His friends and neighbours volunteered to aid in the construction of the new house. The manpower offered by these people were a huge support to the crew. The active participation and initiations of Co-operative societies in the construction of houses helped in gaining more trust among people towards this scheme. The total cost of the construction was six lakhs (Rs. 6,00,000/-), out of which one lakh (100000/-) was an additional contribution from Higher Engineer's Development Society.



Figure 60 BABU's CARE Home- Rendered floor plan

RAJAMMA

The beneficiary, Smt. Rajamma lives in Idukki district. Her old house was completely battered down during 2018 monsoon floods. Their newly built CARE home is standing



Figure 62 Rajamma's home before the floods

on their own property. The plan, section and elevation drawings were provided from panchayath as part of the Life Mission project of the Government of Kerala. The total floor area of the new house is around 600 sq. ft. The home was designed & executed as a framed structure in order to give them better resistance against the forces of nature in case of any similar scenarios in the future. The implementing agency was Thankamani co-operative Bank and they provided a fund of Rs. Five lakhs (₹5,00,000/-) for the construction of building, alongside the contribution from the SDRF. This scheme has provided Rajamma and her family a complete support and strength to overcome the extent of shock that the flood had given them and gave hope to look forward for a better life.



Figure 61 Rajamma's home after construction via CARE Project

The home was designed & executed as a framed structure in order to give them better resistance against the forces of nature in case of any similar



- a SITOUT
- b HALL
- c BEDROOM
- d KITCHEN
- e TOILET

RESIDENCE FOR RAJAMMA AT IDUKKI

Figure 63 Rajamma's CARE Home rendered plan

SATHEESHAN



Figure 64 Satheeshan's CARE Kerala home

The beneficiary Mr. Satheeshan lives in Idukki district. His old house was destroyed when a tree uprooted during the heavy torrents during the 2018 monsoon. The newly built house as part of CARE home is standing on his own property. Life Mission project of the government of Kerala provided the plan, section and elevation drawings. The total floor area of the building is about 500 sq. ft and the implementing agency was Kanchiyar SCB Bank. The total cost of the construction was Five lakh rupees (₹5,00,000/-) and the construction of the house was commenced on January 2019 and completed on September 2019. His friends and neighbours volunteered to aid in the construction of the house. The manpower offered by these people were a huge support and inspiration to the CARE team to take up more projects like this in the area. The materials used for construction were transported manually through forest for around two kilometres which was the most challenging part of this project. The new house is equipped with solar panels as an alternate power source for electricity. By using solar panels, this scheme helps in promoting the use of one of the most reliable form of renewable energy source available.

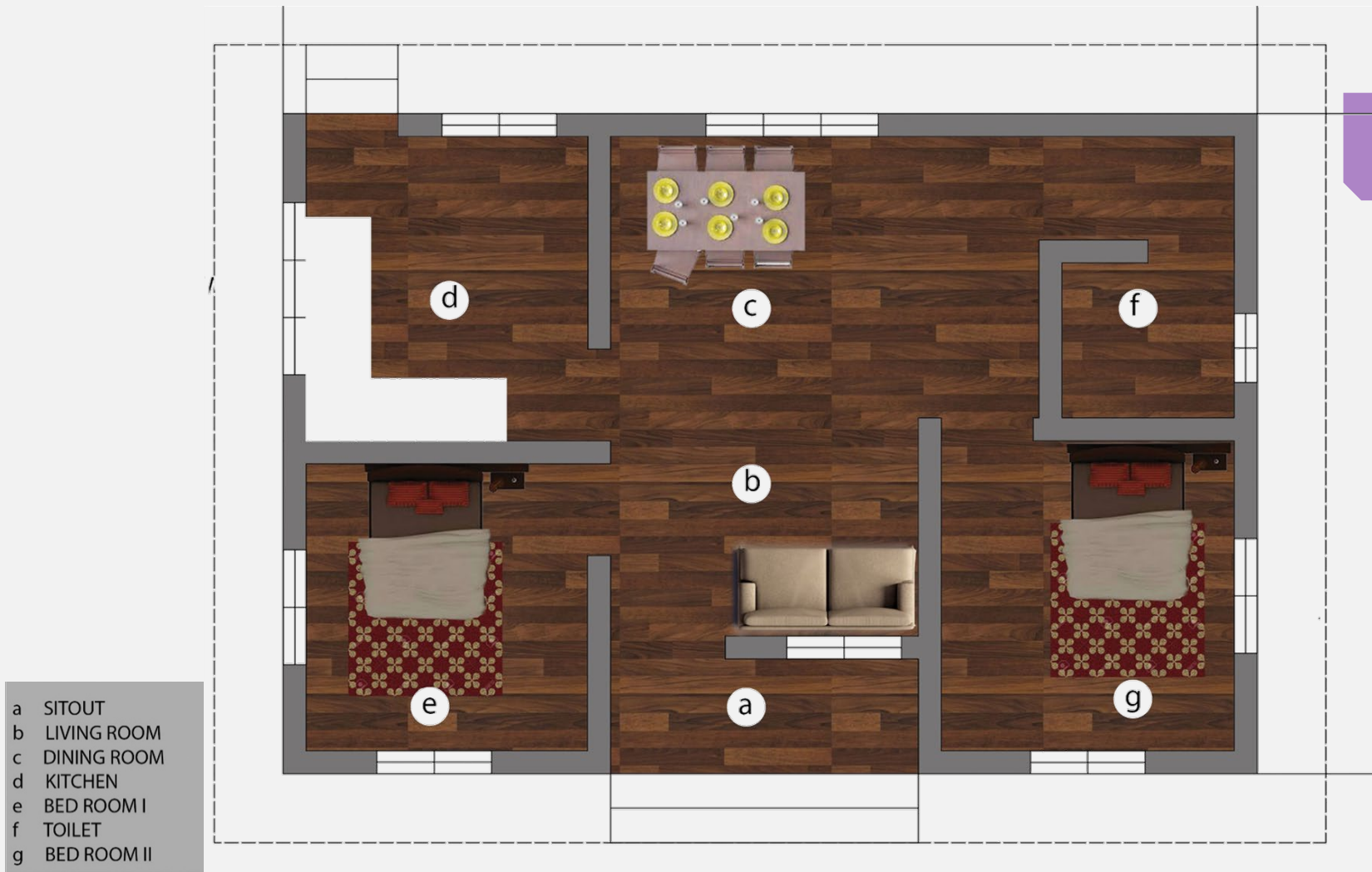


Figure 65 Rendered Plan of Satheeshan' s CARE Home

CARE HOME-ERNAKULAM DISTRICT

With heavy rain lashing the district for over 20 hours continuously, many parts of Ernakulam were flooded. The rise in water level in Periyar had a major impact on the flood situation of the district. The impact of the heavy rain and the resultant flooding was mostly felt in the eastern parts of the district. Flood waters marooned many houses and commercial establishments in Aluva, Paravur and Perumbavoor. Many families were feared trapped in their homes in places like Kadunagalloor, Thottakattukara, Karumalloor, Thuruthu, Desom, Kalady, Companypady, Manjali, Veliyathunad, Malikampeedika, Paravoor Kavala, Chowara, Eloor North Paravur, etc. Mobility in the district has been hit with most roads being inundated. Many interior roads were also flooded. Roads that take one to the neighbouring districts also flooded made the vehicular movement along the routes a risky affair. Rail services were suspended temporarily through the bridge number 176 between Aluva and Angamaly following the increase in water levels. Hundreds were shifted to relief camps in Aluva.

A total of 239 camps functioned in the district where 11,056 families had sought shelter. It is estimated that over 40,000 persons were shifted to camps. A total of 2976 houses were destroyed in the flood. From the CARE Home scheme 337 homes were handed over to the beneficiaries.

SREEMATHI

Sreemathi, a 58-year-old mentally challenged widow, has two sons and both are facing



mental disabilities. She is living in Edayapuram which is in Keezhmad panchayat in Ernakulam district is the beneficiary of the scheme. The Beneficiary's old house comprises of one bedroom, a hall and a kitchen made of burnt clay bricks. The only income generating person in the house is her younger son who is working as a hotel waiter. Their monthly medical expenses

Figure 66 Condition of Sreemathi's house after Kerala Flood 2018.



Figure 67 During Construction

are met with the generosity of their neighbour Sunil, who is a caretaker of their necessities.

The flood in August 2018 made a devastating effect on their livelihood. The floods damaged the house which was already in a dilapidated condition. After the floods the family was relocated to neighbour's home. The beneficiary for CARE-Home scheme is selected based on the data collected by the district administration.

The new house is constructed adjacent to the existed house. The newly constructed house is made of cement concrete blocks having a total floor area of 450.147Sq.Ft. The Architect of this project was TRACC (Tejas college of Architecture, Thrissur).

Approval process went on swiftly with the co-operation from Government officials. A tri-party agreement was signed between the District collector, Keezhmadu society secretary & beneficiary.

A joint bank account was started in the District bank in the name of beneficiary & society secretary. The funds were allocated in each stages of construction until completion. A total amount of Rs. 4,95000/- was obtained from government as relief fund, out of which an amount of Rs.95,200/- is from CMDRF fund. Along the progress of work funds were released in stages. Additional amount was provided by the Keezhmadu society. The project foundation was laid on 16-12-2018 and completed within a timeline of 3 months in February 2019. The major constrain to the project was accessibility to the site for the transportation of materials. The site was not level, it needed filling in some areas to attain proper level.



Figure 68 During Construction

Total built up area of residential building is 41.82 m². Kerala Panchayat Building Rules has been referred in all Village Panchayat in Kerala. Keezhmad Grama Panchayat has been notified as category-2 panchayat by the government. Hence no permit was

necessary for the construction of single-family residential building (number of storeys limited to two).

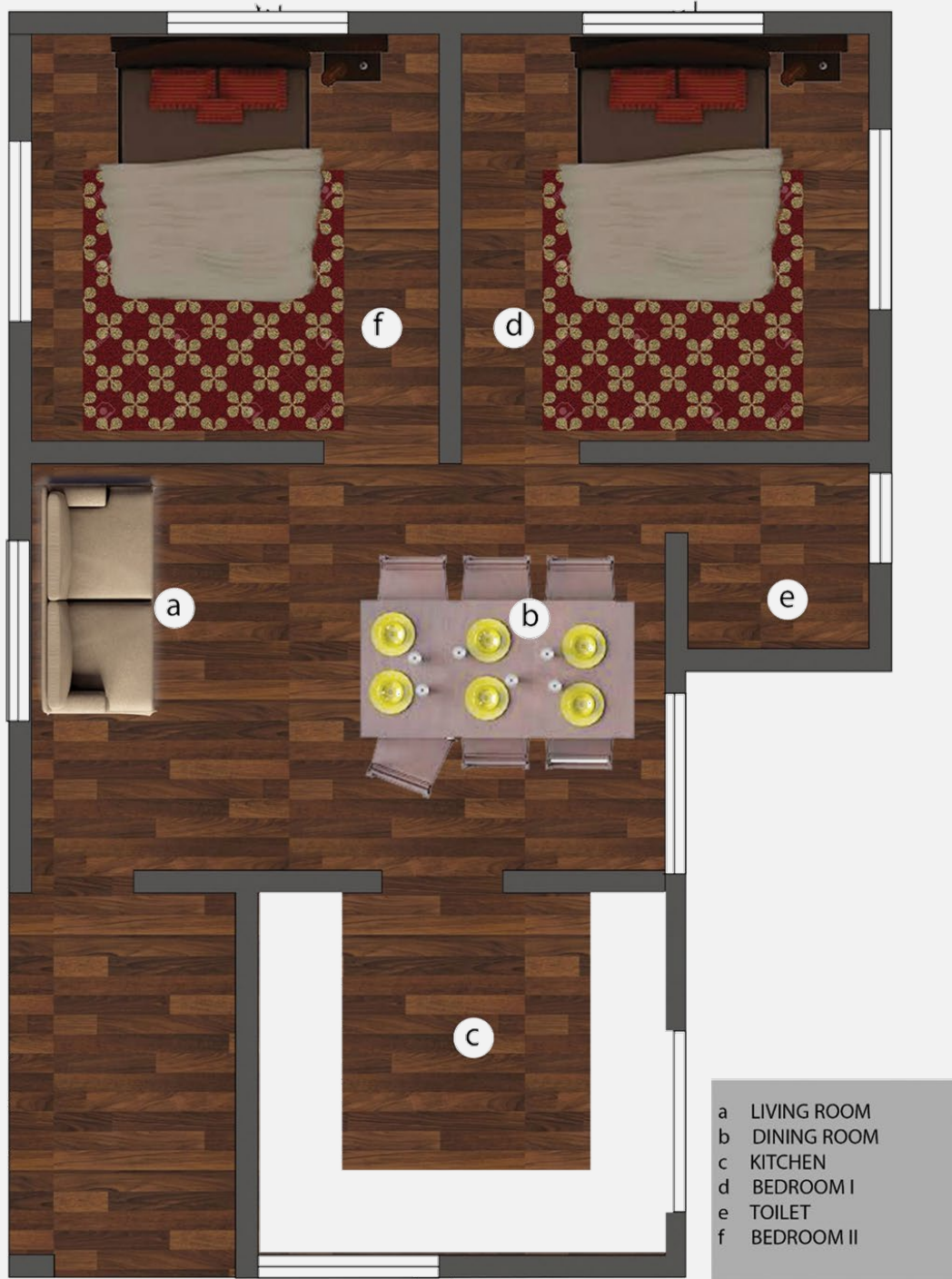
The beneficiary already had electricity and water connection, provided from the drinking water scheme of the panchayath. The new house offers her more security compared to the old house. The beneficiary is satisfied with the new house and she also pointed it out while sharing her experience that, the new house is the one, she couldn't think of, in her lifetime.



Figure 69 Completed Home of Sreemathi under CARE Scheme



Figure 70 Interiors of Sreemathi's home



RESIDENCE FOR SREEMATHI AT ERNAKULAM

Figure 71 Rendered plan of Sreemathi's CARE home

SANTHA SANTHOSH,



Figure 73 Newly Constructed House for Santha under CARE Scheme

was done in a timeline of 3 months (December-February). The house was built under the direct supervision of the bank right from the commencement of the project. The construction process was strictly followed by the plan and design right from the start. The house was built on an estimate of Rs.5,82,874/-. Laterite stones was used in construction.



Figure 74 Interiors of Santha's CARE Home



Figure 72 Interior view of Santha's CARE Home

As part of the post occupancy support, the implementing agency have started the Care Grace programme which includes counselling, Medical Camp etc.

The beneficiary is satisfied with the new house and it was a drastic transition in her life. She is extremely happy and conveyed her regards to all the helping hands behind the venture.



Figure 75 Santha's CARE Home- Rendered Plan

CARE HOME-THRISSUR DISTRICT

The heavy rain at the Thrissur district had caused extensive damage. Forty-two villages in and around the Kole fields and on the banks of the Cannoli canal and the Herbert canal had been inundated with the Karuvannur river changing its direction near the Arattupuzha temple and Ettumuna. Water was not flowing to the sea due to high tides. Floods destroyed the bund road from Arattupuzha to Karuvannur. Around 200 people from 30-odd families, from Pallissery-Panankulam to Arattupuzha bridge, were stranded. The Thrissur-Kodungallur road was submerged in floodwaters. More than thousands of houses in Cherpu, Arattupuzha, Ettumuna, Muthulliyal, Chenam, Inchamudi, Pullu, Manakody, Chettupuzha and Panankulam areas were submerged. All the rivers were overflowing. Many houses got isolated as the Manali and Chalakkudy rivers started overflowing.

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However, there was a decrease in rainfall at the catchment areas of Peechi. Meanwhile, the authorities have issued an alert about opening of the shutters of the Chimmini dam as the water level was fast reaching the maximum level. Landslip near the mouth of the Kuthiran tunnel was extremely hazardous. From the survey, after floods about 4,069 houses at Thrissur district were recorded as destroyed. About 460 houses were built by the Co-operative societies to the victims of 2018 floods.

SOBHANA

Smt. Sobhana, living in Pazhuvil is the beneficiary of the scheme. The Beneficiary's old house was a temporary settlement made of tarpaulin sheet. Her life is something we



can't imagine of. Her family consists of 2 unmarried sisters both being cancer patients. The elder sister is affected with brain tumour and is completely bedridden. The younger sister who had earlier recovered from cancer, is now cancer had relapsed into her lungs. The flood in 2018 completely damaged the only possession they had.

Figure 76 The Temporary Shelter provided during construction

Considering her life condition, she was selected with special interest from the collector's office. The Pazhuvil Service Co-op Bank was the implementing agency for the completion of the house. The banks staff voluntarily involved in the construction



activities, including transportation of materials. There was no proper access for heavy vehicles to reach the site. They involved in the process during their weekend, with full support from their Secretary. The new house was constructed on an elevated platform.

During construction they survived in a shelter constructed by Azeezia group. They were taken care by a distant relative.

Figure 77 Sobhana's New CARE Home

The total cost for the house was Rs.5,50,257/-, which was released from the CMDRF fund with validation of progress in different construction stages of the house. The construction was completed within a timeline of 3 months.

The newly built house was a quite relief from the agony and pain they were going through. A safe and well-spaced house fulfilled their dream. It was a happy moment in their life which they had never imagined of. They have got the determination to fight the disease. All necessary medications and periodical check-ups are provided by palliative care people.



Figure 78 Sobhana and Her sister in their new CARE Home

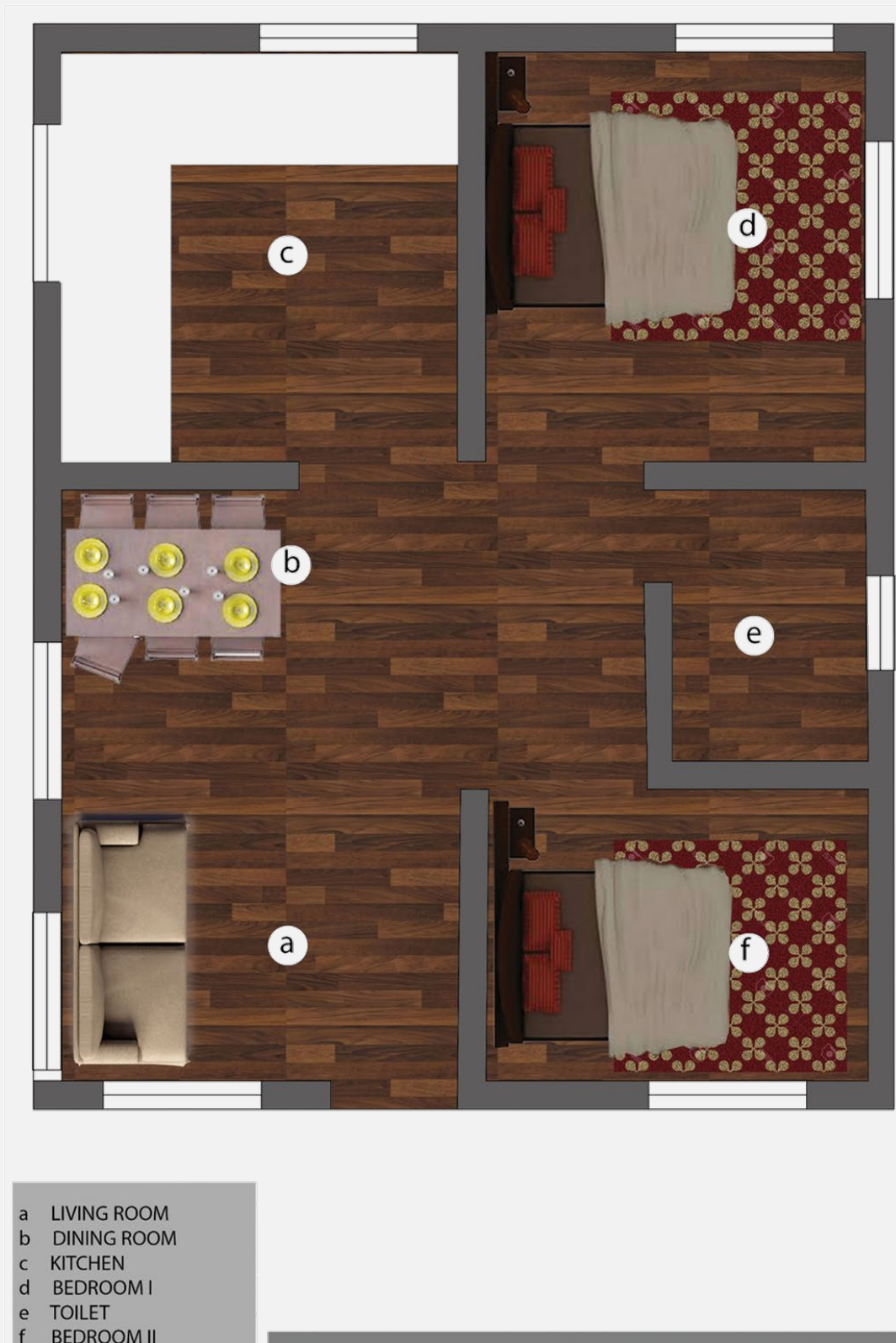


Figure 79 Rendered Plan of Sobhana's CArE home

VISWANADHAN

Mr. Viswanadhan, a mentally challenged person, had a small mud hut which was completely destroyed during Kerala floods of 2018. The Thanniyam Panchayath Service Co-op bank has built 5 houses under the CARE-Home scheme and one of them was given for Mr Viswanathan which



Figure 80 Handing over of CARE home key function in front of the house to the beneficiary



was a great relief for him.

The house was built on an estimate of 5,00,095/- which was completed within a timeline of 3 months.

Figure 81 Remains of the old Home of Viswanathan



RESIDENCE FOR VISHWANADHAN AT THRISSUR

Figure 82 Residence for Viswanathan's -Rendered Plan

CARE HOME-PALAKKAD DISTRICT

Although torrential rain in hilly regions unleashed a wave of landslips, including those in Attappady, no casualty was reported from anywhere. Many people living in vulnerable areas had been shifted to safer places. Most rivers in the district, particularly the Bharatapuzha, the Kalpathipuzha and the Kunthipuzha, were overflowing dangerously. Those living on the banks of the rivers have been asked to move to safer places. Several housing colonies in Palakkad town have been submerged. People were evacuated in boats.

The water level in dams in Palakkad district rose at an alarming rate. Train services between Palakkad and Kozhikode were affected as the tracks were flooded at Parali. Many families were evacuated as floodwaters submerged Ottappalam town and the neighbouring regions. All roads reaching the town were under water. Many houses, mosques and temples were submerged. After floods, it was estimated about 1824 houses were destroyed and as a result about 192 houses were constructed by the Co-operative societies in Palakkad district as part of rebuilding Kerala under the aegis of CARE project.

SMT. VISHALAKSHI AMMA- OMTHEINGIL VEEDU

Smt. Vishalakshi Amma of Omthengil Veedu, a 73-year-old widow living in Maruthoor which is located at Ongaloor Panchayath in Palakkad district is the beneficiary of this project. The Beneficiary's old house comprised of one bedroom, Hall and a kitchen made of burnt clay bricks, which wasn't well finished and less secured. The 2018 monsoon had wreaked havoc in Kerala. Beneficiary's house was completely damaged after a tree had fallen on her house.



Figure 83 Smt. Vishalakshi in front of her CARE home



Figure 84 Another view of the CARE home for the beneficiary

The new house is constructed in adjacent to the existed house. The preparation of plans was done by Namburipad Constructions, Mele Pattambi, Palakkad. The newly constructed house is made of cement concrete blocks having a total floor area of 448Sq.Ft. The total cost of construction was Rs. 5,28,950.00 out of which Rs. 4,00,000.00 was Cooperative department share, Rs. 95,100.00 was SDRF share, Rs. 30,000.00 Beneficiary's share and remaining Rs. 3,850.00 was fund collected by a

beneficiary support committee.

The agreement date was on 06-12-2018. The work commenced on 15-12-2018 and was completed and handed over to the beneficiary on 26-02-2019. There was no delay in construction. Pattambi service co-operative bank was the implementing agency and their proper project management lead to the timely completion of the project.



RESIDENCE FOR VISHALAKSHI AMMA AT MARUTHUR

Figure 85 Vishalakshi Amma's Home Plan Artistic Rendering



Figure 86 A view of the home at the time of construction

The beneficiary already owns an electricity connection as well as gas connection. One of the challenges faced by this locality is water scarcity. The beneficiary needs to collect water from the neighbourhood for her daily usages. In addition to that the new house offers her more security compared to the old house.

As part of the post occupancy support, the implementing agency have started the Care Grace programme which includes counselling, Medical Camp etc. The

beneficiary also attended a medical camp conducted on 04-01-2020, Saturday.

The beneficiary is satisfied with the new house and she also pointed out while sharing her experience that the new house is the one, she couldn't think of in her lifetime.

SMT. NABEESA OF AYYALIL VEEDU



Figure 87 A view of Nabeesa's Home

Smt. Nabeesa of Ayyalil Veedu, a 60-year-old widow living in Vilayur at Pattambi taluk, in Palakkad District is the beneficiary of this project. The old house in which she lived was dilapidated and hence there existed an issue of lack of security. The heavy rain in the year 2018 resulted in complete collapse of the building.

Koppam Service Cooperative Bank was the implementing agency, who stood as the backbone for the construction of new house at her existing plot. Preparation of plans was done by Mr. K. Vishwanathan, an engineer from Pattambi, Palakkad. The newly constructed house is made of laterite stone having a total floor area of 456 Sq. Ft. The total cost of construction was Rs. 5,20,950.00 out of which Rs. 4,00,000.00 was the share from Cooperative department, Rs. 95,100.00 was SDRF shares, Rs. 22,000.00 Beneficiary's share and the remaining amount of Rs. 3,850.00 was the fund collected by beneficiary committee.



Figure 88 Nabeesa in front of her CARE home



Figure 89 Image of Nabeesa's Home when construction was ongoing

The agreement for construction was signed on 06-12-2018 and the work commenced on 10-12-2018. It was completed and handed over on 26-02-2019. There was no delay in construction. With the efficient project management skills of the implementing agency in hand led to the timely completion of the project

by satisfying the triple constraints such as time, cost and scope.

The beneficiary already possessed an electricity connection as well as water connection. One of the noticeable things is that she got LPG connection by the construction of new house, which has minimized the usage of firewood for cooking. In addition to that the new house offers her more security compared to the old house. Again, the new house got affected by the 2019 floods as the house is located near the paddy field. But due to its design factor, it was able to overcome the calamity as well as to sustain for future giving it some form of resilience against the odds of weather

As part of the post occupancy support, the implementing agency have started the Care Grace programme which includes counselling, Medical Camp etc. The beneficiary had attended a medical camp conducted on 04-01-2020, Saturday.

The beneficiary is satisfied with the new house and it was a drastic transition in her life. Her heart is fulfilled with happiness and mentioned about many helping hands which starts from neighbourhood to the implementing agency.



Figure 90 Rendered Plan of Nabeesa's CARE Home

CARE HOME-MALAPPURAM DISTRICT

Flash floods triggered by incessant rains and landslips in the hilly forest areas submerged the eastern part of the Malappuram district, disrupting normal life and wreaking heavy damage to property and crops. The statistics of agricultural department says that the district suffered loss of Rs 12 crores in the rain .The Chaliyar river, which drains its waters into the Arabian Sea at Beypore by flowing in a westerly direction along the Kozhikode-Malappuram border, took the brunt of the devastation as water level rose by over 10 ft . Floodwaters submerged roads at Nilambur, Pothukal, Munderi, Mampad, Wandoor, Pandikkad, Edavannappara, Areekode, Edavanna, Vazhakkad, Kalikavu, and Karuvarakundu regions of the district. Several roads and footbridges were destroyed in the floods. Although the Bharatapuzha and the Kadalundipuzha too were swollen, they did not show the wrath displayed by the Chaliyar.The Bharatapuzha submerged a part of Mini Pampa at Kuttippuram.Many people lost their houses due to the devastating floods and the number of houses lost is about 793 in numbers according to the survey conducted. As part of rebuilding Kerala, the co-operative societies of the district constructed about 90 houses for those who were severely affected by floods under the CARE home banner

SMT. VALSALA, VEETIKKUNU COLONY



Figure 91 Care Home of Valsala- View 1

a veranda. Project was designed by ULCCS and **Mambad Vanitha Cooperative society** was the implementing agency.

Smt.Valsala a widow living in Pallipadam village of Nilambur taluk at Malappuram district is the beneficiary of this project. Basically, she belongs to a Tribal Community and rubber tapping is her main occupation. She lost her house in 2018 Kerala floods which was unbearable for her with her economic background and she was devastated. CARE home provided her a new house of 500ft²with two bedrooms, Living Cum Dining room, Kitchen, Common toilet and

The total cost of construction was Rs. 5,20,000.00 out of which Rs. 5,00,000.00 was Care home fund, Rs. 20000 was Pothu Nanma shares for material transportation. Material transportation during construction was difficult because of marshy land, hence an extra amount of Rs 20000 was required for transporting materials. Their livelihood is depended on the place they reside. They depend on stream water when there was no water connection. The new house has got Electricity connection and water pipe connection. She has two children and younger one is studying in college. The new house enabled the student to keep their study materials safe. Now they are happy with their new home, with secured living.



Figure 92 Care Home of Valsala- View 1



Figure 93 Images during Construction



Figure 94 Images during Construction



Figure 95 Key Handing over Ceremony



- a LIVING ROOM
- b DINING ROOM
- c KITCHEN
- d BEDROOM I
- e TOILET
- f BEDROOM II

RESIDENCE FOR VALSALA AT MALAPPURAM

Figure 96 Rendered Plan of Valsala's Home

ARUMUGHANS, POOSHALI HOUSE

Sri. Arumughan living in Pooshali house of Nilambur taluk at Malappuram district is the beneficiary of this project. He is old and sick, living with his wife and unmarried daughter who is suffering from mental disorders. He lost his house during the 2018 Kerala floods. The affected house was built in kutcha, tarpaulin sheets and partial cement walls with no water pipe connection and often had the threats from reptiles.



Figure 97 Arumughan and family in front of their Care home

CARE home provided him a new house of 500ft² with two bedrooms, Living Cum Dining room, Kitchen, Common toilet and veranda. Project was designed by ULCCS and **Wandoor** Service Cooperative bank was the implementing agency. The newly built Care home is equipped with public water pipe connections and electricity. The home was handed over to the beneficiary within 4-6 months. The source of water is Jalanidhi water connection (Public Water Supply). This house enables them to live in a safe



Figure 98 The remains of Arumughan previous abode

environment. They have a small banana plantation to fetch them some income. The beneficiary Arumughan's main source of income is from Karshakanidhi pension provided by the government of Kerala.



Figure 99 The remains of their previous abode



- a SITOUT
- b DINING ROOM
- c KITCHEN
- d BEDROOM I
- e TOILET
- f BEDROOM II

RESIDENCE FOR ARUMUKHAN AT MALAPPURAM

Figure 100 Rendered Plan of Mr. Arumukhan's Home

CARE HOME-KOZHIKODE DISTRICT

Heavy rain and strong winds in Kozhikode district caused extensive damage to homes and vast tracts of cultivated land. The upland region of Kozhikode district had been widely flooded and isolated, following several landslips and heavy rain that had caused several rivers to overflow. The landslips and flash floods had submerged many roads, including the Thiruvambady-Anakkampoyil Road. Vehicular movement had been disrupted in many interior parts of the district. Following minor landslips on the hairpin bends on the Ghat Road at Thamarassery, traffic has been stringently regulated on the section. Those in Chakkittapara, Koorachund, Kuttiady and Changaroth Grama panchayats were advised to shift from their houses near the river. The water level in the Iruvazhinji and Eengapuzha, river had risen further, while an islet at Elanthakkadavu had been completely submerged. Landslides occurred in the Marippuzha forest in Thiruvambady panchayat and at Nayadan Poyil in Koodaranhi panchayat. Several families had been evacuated from Nechoolipoyil, Karat colony, Payyadi colony in Karassery panchayat. After floods, it was estimated about 388 houses were destroyed and 44 houses were constructed by the Co-operative societies at Kozhikode district as part of rebuilding Kerala.

BHAVANA SURESH



Figure 101 Home of Mr/s Bhavana Suresh

Bhavana Suresh is a transgender woman married to Mr. Suresh. This house holds the privilege to be the first house built for someone from this community/category. Her previous house was damaged due to flood as it was in a marshy area. Therefore, it wasn't suitable for further repair and resettlement. They were completely traumatized by the devastating flood. The newly constructed house comes under CARE HOMES scheme which is situated at 4.5 cents of land and was donated by Cheleeri

Mammukutti (a philanthropist) in Mandhakav Laksham Veedu Colony.

The implementing agency of this work was Kaavunthara service Cooperative bank and the design aspects were done by Local Architects. The total estimated amount was Rs. Five lakhs fifty-two thousand (Rs. 5,52,000/-)

The house is built up in an area of about 500 ft², consisting of two bedrooms, a living Cum Dining room, kitchen, common toilet.

The home appliances such as refrigerator, fans etc. was donated by PUNARAJANI (Association for



Figure 103 Another View of Bhavana's CARE home



Figure 102 During Construction Stage

transgender community in Kerala). The new house is equipped with gas connection, electricity, water supply etc. through Jalanidhi scheme. Now they have setup a cattle farm and poultry farm in their land which helps them to earn their livelihood. This scheme has given them a light in an indistinct and dark scene. Now they can hope for a better future. The new house built is

safe and secure from floods and wasn't affected in the subsequent 2019 flood.

Figure 104 Construction stage.





Figure 105 Cattle and poultry Farming.



Figure 106 The happy transgender couple



- a LIVING ROOM
- b DINING ROOM
- c KITCHEN
- d BEDROOM I
- e TOILET
- f BEDROOM II

RESIDENCE FOR BHAVANA AT NADUVANNOOR,CALICUT

Figure 107 Rendered Plan of Mr/s Bhavana Suresh's Home

KUNHEEMA, AREEKUZHIIYIL

The beneficiary, Kunheema's house is located at Mavoor in Kozhikode district and she lives alone. She had lost her house completely in an unprecedented disaster in August 2018 in the form of flood that took the lives of two children (her relative's children), who were residing in Kunheema's house as their home were already affected by the floods. Her house was situated in a valley and due to landslide, it was destroyed.



Figure 108 Kunheema's Home

The Implementing agency of the project was Mavoor service

Cooperative bank and other design aspects was done by Local architect. The Total estimated Amount was Ten lakhs (5 lakhs as per scheme + 3 lakhs donated by her brother's son + 2 lakhs by relatives and local people).The house



Figure 109 Care home built for KUNHEEMA

is built up in an area of about 600 ft² house, consisting of two bedrooms, Dining room, Kitchen and common toilet with bathroom. It took 6-8 months to handover the keys to the beneficiary. The house is built in 5 cents of land which is donated by her sister in law. The previous land is not fit for housing due to the destruction caused by landslide. The registration was delayed due to Muslim community procedures and traditions in community after her brother passed away. DYFI Area Committee members and the local people volunteered to help in building her house. The roof of the previous house was tile paved and flooring was finished with red oxide. Earlier they used firewood for cooking after shifting they converted to use LPG fuel for cooking their food. For the purpose of future expansion, provisions like staircase are given, in lieu with the concept of incremental housing. The care home built for them enabled them to have gas connection and well-built strong house and made their life more safe and easier. The key was handed over to the beneficiary on 20th July 2019 by Kunnamangalam MLA PTA Raheem



Figure 110 Remains of the damaged home and the landslides that affected that area



Figure 111 Rendered Plan of Mrs. Kunheema' s home

CARE HOME-WAYANAD DISTRICT

Wayanad, a serene locale up in the mountains frequented by tourists was one of the districts on continuous red alert. Many hills, which defined the district, had been left scarred after being hit by 242 geological events - including landslides, landslips and land subsidence - disfiguring slopes and making large tracts of land unstable. The damages had left deep scars in the minds of the people who survived in the nature's fury. Houses, crops, water bodies, all destroyed after the monsoon wreaked havoc in Wayanad. People are yet to recover from the worst monsoon that hit Kerala. Thamarassery Churam (pass) which is the lifeline for people and goods to enter the tourist town- road closed signs, fallen trees and landslides were the common sight during those days. This had clearly frightened people resulting in a lesser inflow of traffic into that area. Wayanad is known for its varied cultivation, especially spices, tea, coffee, paddy and banana. But the harsh monsoon and the mismanagement of dams had taken a huge toll on their lives and property. From the surveys, after flood it was reported that about 743 people lost their habitat. Under CARE home scheme 84 beneficiaries got new houses at Wayanad district.

ANNAKUTTY

Smt. Annakutty living in Pathiparambil House at Valad of Wayanad district is the beneficiary of this project. During 2018 flood, a large tree uprooted from a high-level ground adjacent to the owner's house and destroyed part of the house due to heavy rain and winds. The whole of kitchen and part of the living room were destroyed. No kind of flooding happened in that area, but a series of uprooted trees were observed.



Figure 112 Temporary house of Mrs. Annakutty

The implementing agency of the project was Wayanad District Govt. Contractors Service Cooperative Society, Mananthavady, Wayanad. Plan for the newly constructed house was prepared by a local architect in Mananthavady.

The same site was chosen for rehabilitation as the beneficiary didn't own any other land and didn't get any as dower.

The new building stands on the exact same spot as that of the old one but everything was built from scratch, even the foundation.

While assessing future impact there are chances of landslides, but no major incidents were reported till date. Building a retaining wall at the back of the newly built house can resist the calamity to an extent.



Figure 113 Annakutty' s new CARE Home

The total cost of construction for the project is about 5.12 Lakhs for an area of 450 ft². The project completed within a scheduled timeline of four months (4/1/19 - 29/4/19). Local Panchayats were very much helpful in getting the approval with no delays.

Normal construction techniques were used with laterite masonry. Since the land is too far away from the nearest town and too inward from main roads, accessibility for transportation was difficult. Only few houses are present near the beneficiaries' land. Contributions from beneficiary includes the construction of a trussed roof with aluminium sheet on the front and left side of their house. Presently three people resides in the newly built house which is much smaller than the old one but more secured with RCC roofing instead of the trussed roof. The beneficiary is very much satisfied with her newly built house and are thankful to the implementing agency to make their dream come true.

- a SITOUT
- b HALL
- c KITCHEN
- d BEDROOM I
- e TOILET
- f BEDROOM II



Figure 114 Rendered Plan of Annakutty' s CARE home

MOHANAN

Mr. Mohanan living in Kizhakedath Veedu at Meppadi of Wayanad district is the beneficiary of the CARE home scheme. His old house was a single storied one. Foundation were damaged by the 2018 floods as the rain swept away the base of the house when landslide occurred. There was no retaining wall present and due to the rain, a tree also fallen over his house. No materials could be salvaged as all of it were damaged or destroyed by the heavy rain.

The implementing agency of the project was Thrikaipetta Service Cooperative Bank. The estimated cost for the building was Rs. 5.55 lakhs for about 470 ft² area and completed within a timeline of less than three months (Jan 28- March 15). Local Panchayat were helpful in getting the approval with no delays.



Figure 115 Mohanan' s CARE Home -the ramp for his access is visible in the image

The same site was chosen for rehabilitation as the beneficiary didn't own any other land and didn't get any as dower. Building is located at some distance away from the old one to avoid the flow of water during heavy rains. The new house is elevated at a height of 50cm above the ground level and normal construction techniques were used with laterite masonry. They also constructed an extra ramp and a veranda which was not included in the plan as the beneficiary Mr Mohanan is a disabled person with no legs. So, in order to enter and leave the house in his wheelchair, the society decided to construct an extra item. Provisions like solar panels, Rainwater Harvesting or other eco-friendly approaches were not used. The house has kitchen with gas stove instead of the traditional firewood which they were used in their old house.

According to Impact Assessment study, the area is prone to landslides without proper mitigation measures such as retaining walls. The current building is somewhat in a safe

side away from the flow of water. No faults of any kind in construction could be seen. Beneficiaries are very much satisfied with the new house and thankful to the implementing agency for fulfilling his dream.



Figure 116 Rendered Plan of Mohanan' s Home via CARE Project

CARE HOME-KANNUR DISTRICT

The hilly areas of Kannur district, affected by heavy rain, flash floods and landslides. High alert was issued in the district following the declaration of red alert during the 2018 floods. Houses were completely and partially damaged in the Taliparamba and Iritty taluks. Also, in the Kannur Corporation area, houses were affected by flooding at places like Thavakkara, Padannathode and Pallikkunnu. Flooding was reported from Madayi and Kadambur panchayats too. It caused widespread damage at Ayyankunnu, Nuchyad, Vayathur, Chavassery, Kolari, Vilamana, Kelakam, Aralam, Irikkur, Kottiyur, Erivessi, Chengalayi, and Ulikkal. Revenue authorities estimated crop loss caused by landslips at Erivessi, Ulikkal, Kealakam, and Ayyankunnu villages at over ₹1 crore. A landslip at Shanthigiri in Kelakam village damaged the Shanthigiri- Vendekkumchal road. About 181 homes were lost and some of them had been included under CARE home scheme. As part of that, about 20 houses were constructed by the co-operative societies.

LATHA KV



Figure 117 Latha's new home

Latha's old home (had one bedroom and kitchen) was made up of burnt clay bricks and completely damaged due to tree fall during 2018 monsoon season. The house is in Payyannur taluk, Kannur district.

Their new house is existing on their own property. The plan, section, elevation drawings were done by Buil-Tech builders. Total floor area is 800ft² which is better than anything offered under similar schemes. The construction material used was locally sourced

naturally occurring laterite stones. The construction was funded and monitored by Ramanthali Co-operative Bank. Works for the home started in December 2018 and was completed in February 2019. There was manpower contributions from political parties and from the people around the neighbourhood from of foundation work till completion.

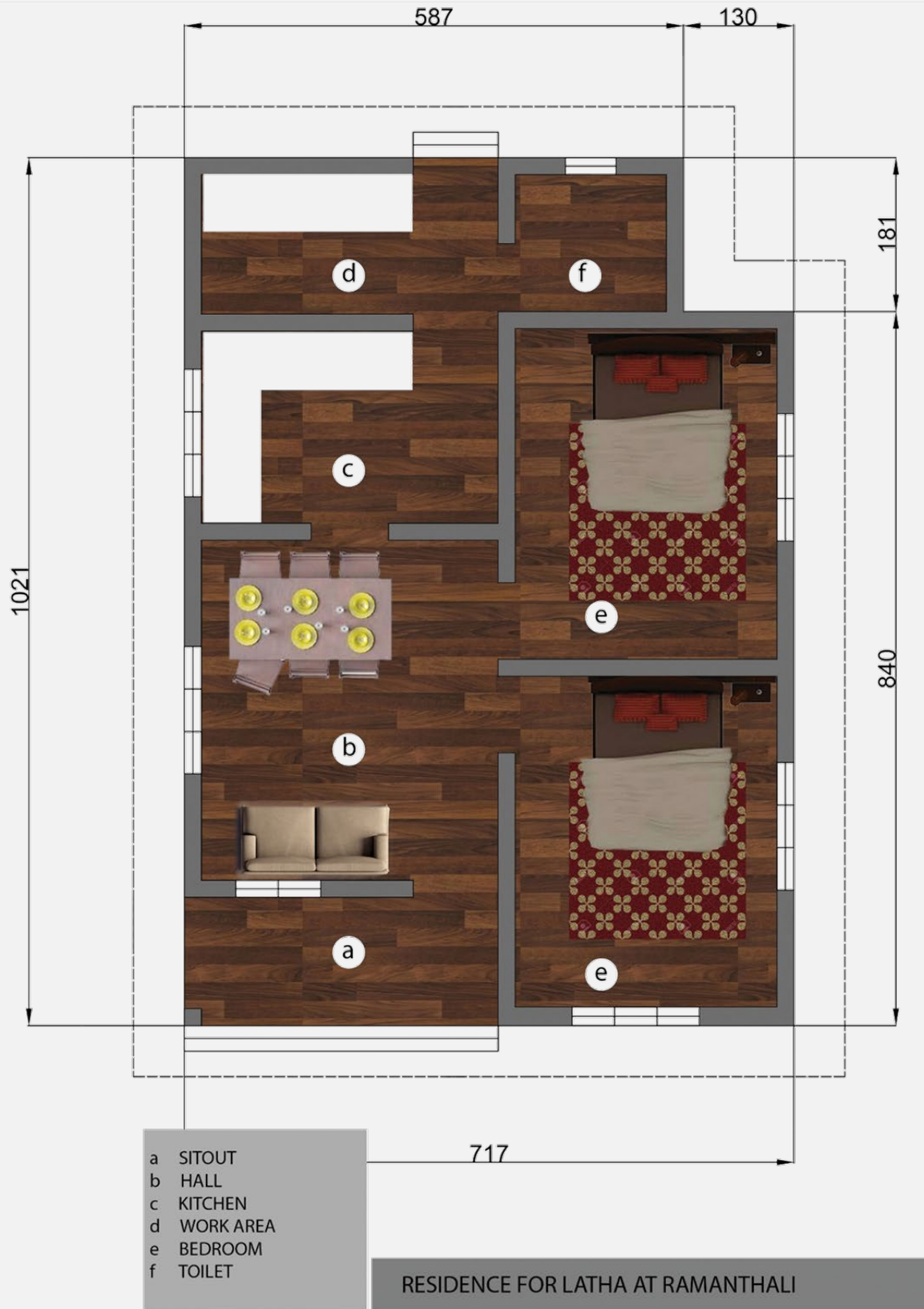


Figure 118 Latha's CARE home - Rendered Plan

Total cost of the construction was ₹920,100, Out of which four lakhs rupees was beneficiary's contribution and the remaining from Ramanthali cooperative bank and SDRF

And after moving into the new house they have started using LPG connection as a fuel source for cooking and received electricity connection. They came to a new and better living situation after they got into their new house

NIMMI ELIAS, THENPALLIL HOUSE

Nimmy is visually impaired and living with the support of her mother. When the floods damaged their old home in 2018, they had nowhere else to go. The old home which was made of burnt clay bricks washed away in the floods and in this scenario, CARE came into rescue by building them a safe and sound home. The house is in Payyannur taluk, Kannur district.



Figure 119 Home of Nimmy Elias

Their new house is situated on their own land. The plan, section, elevation drawings were done by Achu builders, an engineering design firm in the locality. The Total built-up area is 698 sq. ft, big enough to fit their requirements and needs. This new building was constructed using locally sourced laterite stones. The construction was implemented by Peringome Co-operative Bank. Works started in December 2018 and was completed by February 2019.



RESIDENCE FOR NIMMI ALIAS AT KANNUR

Figure 120 Nimmy Alias's new CARE Home

This was not at all a one man show, rather a collective effort from people from all walks of the society, there were Politically motivated people, their neighbours, cooperative society leaders and all involved in this process .Total cost of the construction of this home was Rs 6,34,947/-.Out of which Rs 1,39,847/- was spent from the beneficiary's savings and the rest from Peringome cooperative bank's profit dividend and SDRF

The quality of life of the beneficiaries changed when they moved into their new home. This is not just a statement because it was highly noticeable from their voices and feedback. They started using LPG as a fuel for cooking their food and received an electricity connection. Their dependence on less efficient fuels causing carbon footprint was removed

This Care home project provided them with a peaceful life and now they can concentrate more on health care treatments in improving the life of Nimmy

CARE HOME-KASARAGOD DISTRICT

The rivers flowing downstream from the border areas of Karnataka caused flash floods in the coastal belts. The continuous overnight rain the higher reaches of the river in Karnataka led to the swelling of the Chandragiri. Around 25 families living along the Chandragiri have been evacuated as the river started overflow. The remote villages in the eastern hill areas had been isolated with the people afraid to cross the rivers through the hanging bridges. The platform of the Kumbla Railway Station was flooded as the rainwater overflowed the railway station road. In Hosdurg taluk, there was extensive loss of crops in Panathady, Kodom-Belur and Panathur areas. Power distribution was affected as trees fell on power lines. Around 250 persons from 50 families were evacuated from their houses because of coastal erosion and overflowing rivers in the district. Water had risen in the western parts of Thalangara too. The residents of Korakkod, a low-lying area in Kasaragod - had been shifted to the houses of their relatives. Mangalore and Sulliya in Dakshinana Kannada areas were being battered by heavy rain. About 58 people lost their habitat at Kasaragod district and under CARE home scheme 7 houses were built and handed over the keys to them.

BEEFATHUMMA

Beefathumma, a widow living in Nellithadukkam at Kasaragod is one of the beneficiaries of this project. The floods of 2018 caused the abode of Bepathuma to be destroyed beyond repair. Being a widow and a mother meant getting a new home impractical, but CARE did care them.

Under the CARE project Beefathumma received a new home of more than 590 square feet built up area

The new home was constructed with Laterite stone as building block. Bellur Home builders, a construction consulting firm in the locality prepared the plan, section and elevation drawings were made by. Project implementing agency was Kadakam Co-operative Bank. The house was situated in a remote area hence transportation of materials for construction was difficult.

People's participation was key in the successful completion of the project. Political parties and bank officials joined their hands to complete building this home. Work started in December 2018 and was completed in February 2019 within the schedule prepared Total cost of the construction was Rs. 6, 60,000 out of which Rs.1,64,900 was Beefathumma's contribution. Contributions to this project

was made in the form of furniture's and fixtures like Cots and fans from the members of the bank and other kind-hearted residents around

Like the other homes in the project, a new home helped them investigate a higher standard of living. With a legally valid home, they had access to electricity connection, and it gave them access to fuel efficient LPG for use in cooking.



Figure 121 Beepathumma's old home after the floods



Figure 122 Beefathumma's New CARE Home



Figure 123 Rendered Plan of Beepathumma's CARE Home

MUHAMMAD, KUTTIPALAM HOUSE

The beneficiary Sri.Muhammed is living in Kuttipalam House near Muliya at Kasaragod district. He lived in a home made up of burnt clay bricks which was not safe and secured. The 2018 Kerala floods results in the damage of the house.

The construction of new house under CaRe Home was implemented by Kasaragod Public Servants Co-operative Bank.



Figure 124 Muhammed Kunhi's new CaRe home

New home has a total floor area of 620 ft² and constructed using laterite stones in the same plot.

The efficient project management by the implementing agency results in the completion of project within the stipulated time; Construction started in December 2018 and completed in February 2019. Until the completion of the work, enough manpower was contributed by the neighbourhood.

Total cost of the construction was Rs.6, 42,970 out of which Rs.94, 520 was beneficiaries contribution and Rs.53, 350 was contributed by servant's committee.

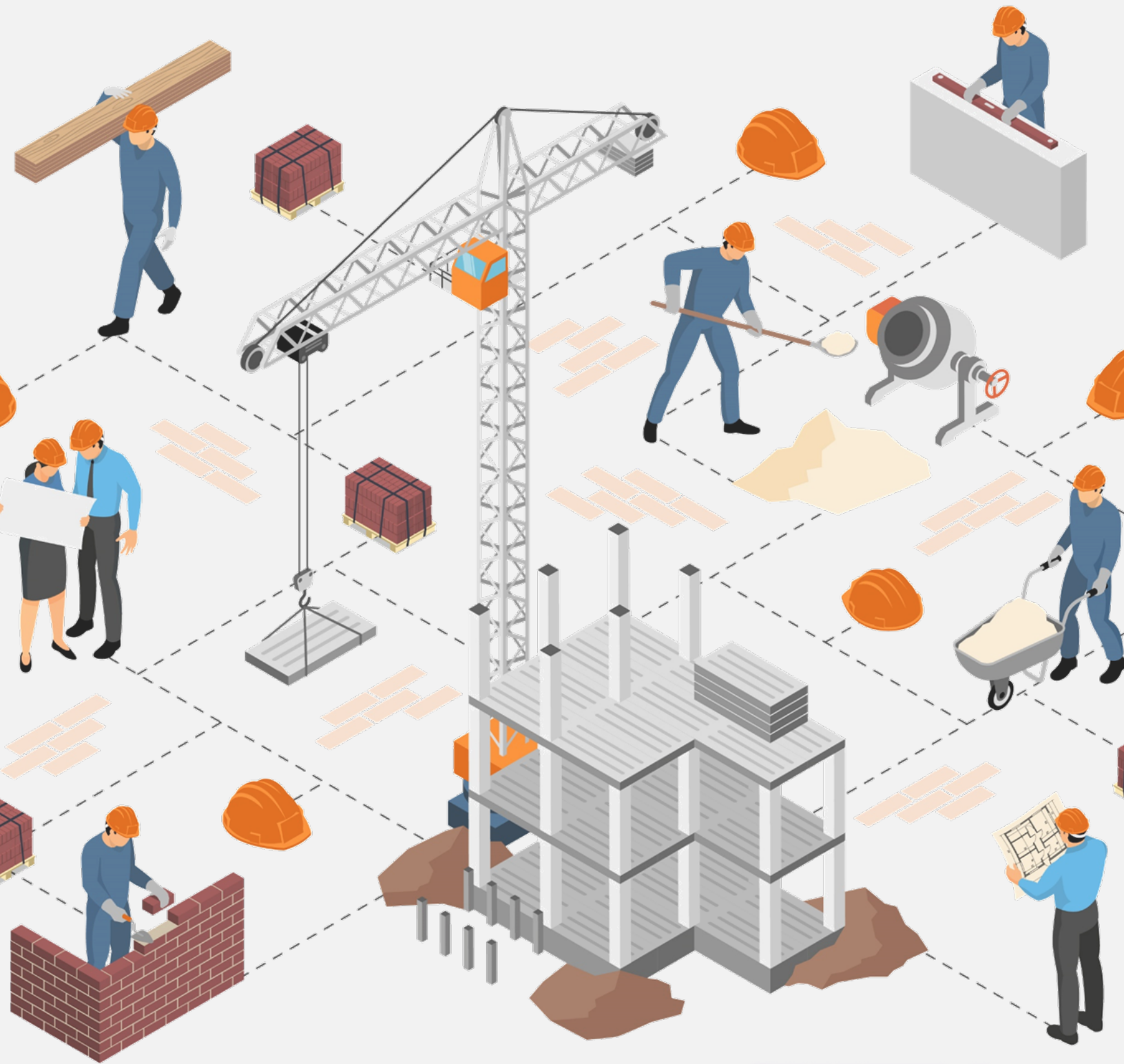
After getting into the new house they have started using gas connection and electricity connection which was not there in their old house. Care Kerala home scheme help to improve their standard of living.



- a HALL
- b KITCHEN
- c BED ROOM
- d TOILET

RESIDENCE FOR MUHAMMED KUNHI AT KASARGOD

Figure 125 Rendered Plan of Muhammed Kunhi's CARE home



CHAPTER 6

CARE -CHALLENGES & FUTURE

THE START AND NEED

This project was developed because of a cause, the cause being the need for rehabilitation of the affected after the floods. The people who lost their valuable and treasures earned after a lifetime of hard work overnight were faced with a dilemma, whether to survive or to end their life. RCS without considering the caste, creed or religion joined hands with the government to give homes to those affected. The 1917 homes constructed is not the work of a single person or an organization, whereas it was a collective cooperative effort to lend a helping hand at the reckoning of a fellow human being. This cooperative model of social development is the need of the hour in tackling the ill effects of disasters and poverty. The project catered the housing needs irrespective of their gender, even considering the needs of the affected transgenders, widows, mentally challenged, disabled and people suffering from ailments such as cancer and such vulnerable diseases.

DESIGN AND SUSTAINABILITY

The uniqueness of the project is the integration of housing with livelihood support services within a short span of time. The spontaneous action of the Co-operative Department and the co-operative societies helped Kerala bounce back faster in disaster rehabilitation. Usually the affected get their homes only after a few years, but in the CARE Project the beneficiaries who lost their homes got a new home within a year. Construction and resource mobilization happened in a very short span. This along with the add on CARE Grace and CARE loan projects helped them to get their homes as well their livelihood back care loan insured interest free loan of Rs.1lakh to each family for urgent needs. Care Grace considered the mental strain of the disaster affected and helped them with medical camps, counselling, assistance in getting the legal documents and certificates back. This integrated approach was innovative in the sense it helped the victims of the flood to get back to normalcy. A unique approach was followed in the housing designs also. The designs were not standard or fixed, they were customized to meet the needs of the beneficiary and to meet the challenges of the site. Emphasis were given in designs to help those with disabilities enter their homes easily. Sustainability concerns were also incorporated in the design and building process

The designs and the materials used were a drastic change from what the beneficiaries were used to from the previous lifestyle. This can be clearly understood from the graph depicting the comparison of roofing materials used

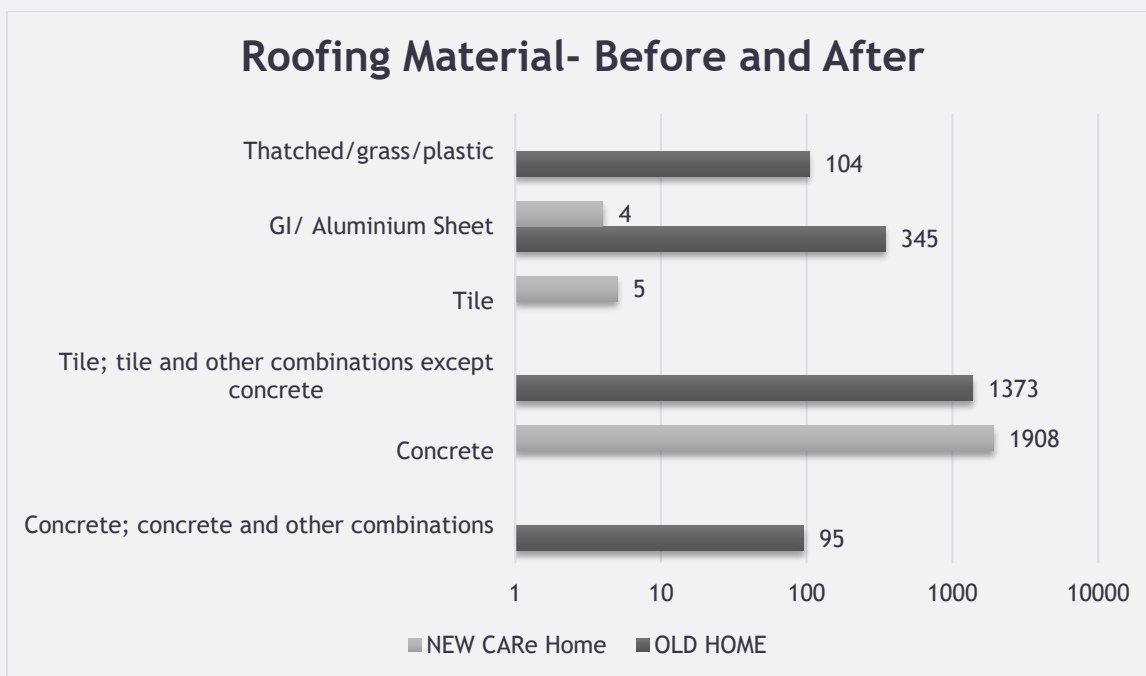


Figure 126 Roofing Material Used-Comparison

The homes constructed via CARE project have tried to incorporate sustainability concerns. Greenfield development was avoided to protect the existing tree cover. The homes were built at the same site, except in cases where the land was unstable owing to terrain and soil features. In flood prone areas like Kuttanadu, the homes were built as elevated structures, since the entire area was below sea level and had a frequent threat of floods. Seventy percent of the beneficiaries who were depending on firewood as cooking fuel were given LPG connection. Many of the homes which were built on the existing land used recycled building materials. In several cases old wooden roof materials- rafters and purlins were converted to furniture in their homes. Many of them were given solar powered emergency lamps in order to help them cope with power outages as well as to help them in general lighting. In many houses, wells were cleaned, and waste management devices were established. Thus, the homes were unique and environment friendly.

Also, if we analyse the overall land used for housing, it didn't bring much change in the green cover as rightly explained in the previous paragraph. This means that these homes are constructed on the same land the beneficiaries had their previous home, that awakens the question of resilience of the structures. Yes, these buildings are resilient, because they are new and made of stronger materials, as most of the flood related housing damage was because of the fact they were in a dilapidated condition or became obsolete.

Housing them in the same premises meant one thing and a very important thing, adaptability. Most of the disaster and related public housing relied on uprooting one’s home and placing in far and distant land where they had no connections and had to start from ground zero. By placing them in the original area, the beneficiaries had the ability to continue their life in a normal fashion.

Those who were relocated had a different set of reasons, the same is visualised in the graph below

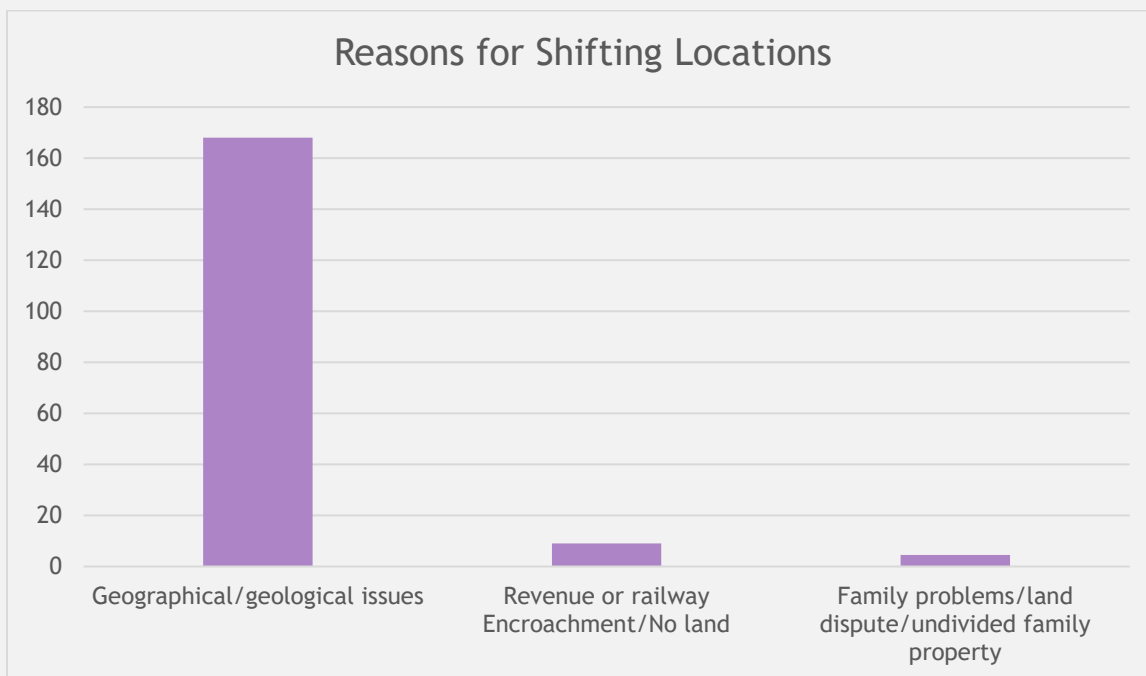


Figure 127 Reasons for shifting the homes from the original location

Around 184 homes were shifted from their original location. Most of the homes were changed to a new location due to soil properties which restricted construction in those areas

THE FUTURE

This model of development can be replicated in several scenarios, be it poverty eradication, disaster management and rehabilitation. This method of gathering a social capital for development is a better option rather than getting a dedicated fund for this purpose from the government or individuals, which is less effective, time consuming and in some scenarios discriminatory. The collective ownership of the project can bring in wonderful results like this, where the people joined their hands in helping their fellow human beings with the meagre funds. The transparency in terms of fund handling and beneficiary selection can be made as a project parameter and taken up in

developing future projects of such manner. The collaborative effort of the bureaucracy in clearing the legal hurdles in a time efficient manner is also a key point of this project.

This project is not designed as a one-time project, CARE is a vast project spanning a holistic development, this project in its first phase had completed around 2000 homes. These homes were constructed for people who had their own land or were given a piece of land by kind-hearted people. But there are a lot of people in Kerala who doesn't have land of their own, we are designing a project to bring them all under a roof by constructing apartment complexes across Kerala. This is a big step in achieving the UN SDG's 11th objective of sustainable cities and communities. Funding for this project is expected to be sourced from the profit dividend of Cooperative societies, like the exercise carried out for the completed 2000 homes. As said earlier, the project will not be just constrained to construction but a holistic development by providing livelihood support in the form of interest free loans and all. A policy level decision is being made to ensure that all future constructions by the cooperative societies shall be directed to achieve sustainability in all aspects.

ABBREVIATIONS USED

1. UNDP- UNITED NATIONS DEVELOPMENT PROGRAM
2. KWA - KERALA WATER AUTHORITY
3. PWD- PUBLIC WORKS DEPARTMENT
4. GoK- GOVERNMENT OF KERALA
5. RKI-REBUILD KERALA INTIATIVE
6. CARE KERALA- COOPERTIVE ALLIANCE TO REBUILD KERALA
7. KSDMA-KERALA STATE DISASTER MANAGEMENT AUTHORITY
8. KSRTC - KERALA STATE ROAD TRANSPORT CORPORATION
9. MGNREGA-MAHATHMA GANDHI RURAL EMPLOYMENT GUARNTEE ACT
10. RAY-RAJIV AWAAS YOJNA
11. IAY- INDIRA AWAAS YOJNA
12. PMAY-PRADHAN MANTHRI AWAAS YOJNA
13. LIFE-LIVELIHOOD INCLUSION AND FINANCIAL EMPOWERMENT
14. BSUP-BASIC SERVICES TO URBAN POOR
15. IAS- INDIAN ADMINISTRATIVE SERVICE
16. Er. - ENGINEER
17. Ar. -ARCHITECT
18. SC- SCHEDULED CASTE
19. ST- SCHEDULED TRIBE

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GOVERNMENT OF KERALA
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