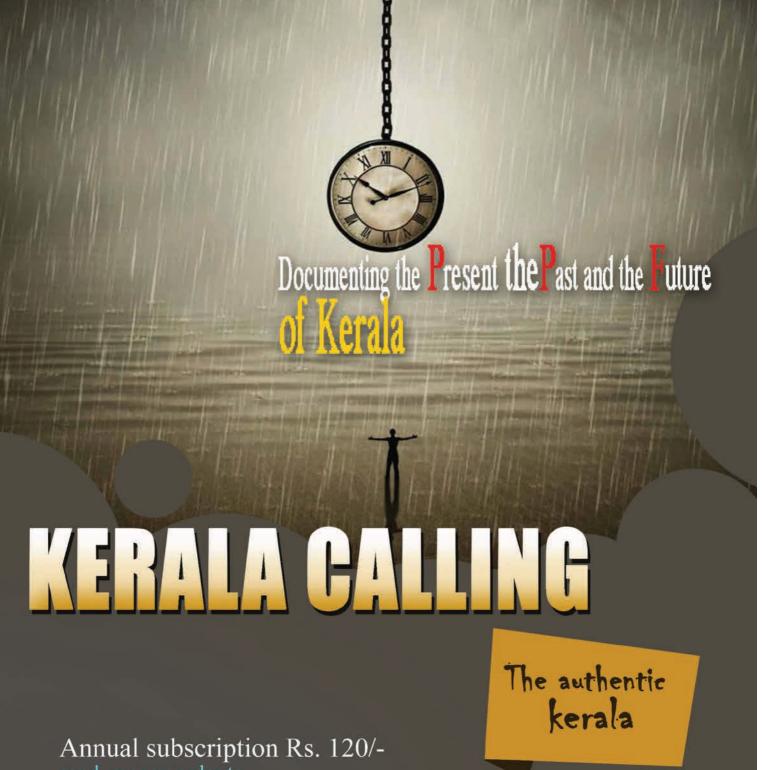
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 REVIVING THE AFFECTED SECTORS

KERALA CALLING

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he Spirit Of Survival

It has been a year since the State witnessed the deadliest monsoon that triggered unprecedented events in the history of Kerala. It was the worst flood that heaped misery in Kerala after the 'Great Flood of '99' took place in the year 1924. Many people lost their lives and livelihood. They were rehabilitated. Hundreds of homes were totally destroyed. Many were partially damaged. Such a heavy rainfall in a short span of time and landslides became a big threat to the people of Kerala. The monstrous flood

took away everything and caused immeasurable losses which were catastrophic. Nevertheless, the State Government has initiated successful measures and activities to rebuild Kerala that had gone astray. The State Government had launched Rebuild Kerala Initiative, an extensive development programme with an envision to revive our God's own country, a move towards moulding Nava Keralam.

Under RKI, Rs.692.181 crore had been expended for emergency financial aid; Rs.1661.084 crore had spent for rebuilding houses which were completely or partially damaged. Adequate measures were taken to revive the education sector. Timely initiatives had been taken to invigorate infrastructure projects such as roads and bridges. Satisfactory policies and aids breathe life into the agriculture sector.

Post-flood initiatives of RKDP (Rebuild Kerala Development Programme) such as Care Home Project, Ujjivan Loan Scheme, State Disaster Response Fund, and many other rebuilding activities with the State's timely intervention brought life back to uniformity. A conclave had been organised to mobilize funds from international-national agencies such as World Bank, Asian Development Bank, Japan International Co-Operation Agency, UNDP, Hudco, Rural Infrastructure Development Fund and so on.

These revival activities are aimed to reconstruct a much more resilient Kerala which we can only achieve through the dynamic spirit of unity. The August issue of Kerala Calling features the rebuilding initiatives of State Government of Kerala in various districts and departments in the wake of a year.

U.V JOSE I A SEditor-in-Chief

KERALA CALLING

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LIFE Mission – Rebuilding Kerala

U.V Jose IAS



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Cover Photo: **Saajitha with her son Muhammed Subhan** (Saajitha was airlifted by the navy and she delivered Subhan at the Force's hospital during the deluge.)

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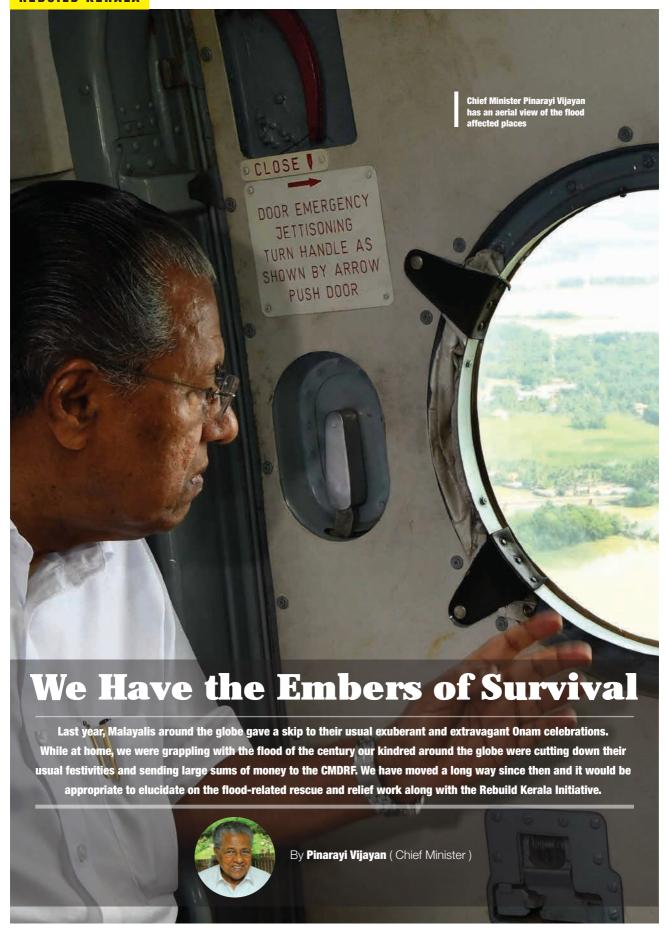
Committed to implementing Our MoU With the State Government: Nissan

The Kerala Government is helping Nissan Motors to develop a Digital Hub in the State capital Thiruvananthapuram. Nissan is satisfied with the Government's policies for the Global Digital Hub, which was inaugurated in December 2018 after an agreement signed in June. Nissan had sent a letter to the State Government pointing out that it was promised single-window clearance to set up the Hub and related facilites. The issues raised in the company's letter were discussed in a meeting with the officials of Nissan and Chief Minister Pinarayi Vijayan.

The company is expecting that there should be a flight connectivity between Tokyo and Thiruvananthapuram. The State Government alone cannot do that. But the Government have taken necessary steps. The Government had met the Civil Aviation Secretary after the Parliament session. A meeting between the Civil

Aviation Secretary, State Government officials and airline companies will be held in Thiruvananthapuram. "Nissan is fully aware of this and they are satisfied. The Government aims to keep the company here itself by taking all the necessary steps. That is required for the future of Kerala." An official of the Nissan Hub said. The Government has supported the carmaker to expand to 600 employees in a year's time.

Nissan has been provided land at a very low cost and the Government exempted them from import duty, stamp duty a week back. Nissan when decided to set up a shop in Thiruvananthapuram, took this decision knowing well that a Tier-2 city like Thiruvananthapuram has its many advantages and some development initiatives will take time.



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KERALA CALLING AUGUST 2019

limate change is posing a real and immediate challenge to our state. According to IMD, thus far we've only received half the rainfall we were supposed to receive. However, last year we experienced unprecedented rains, especially in the second quarter of the monsoon. It means that climate change is upon us. Therefore, we have put forward the idea of a climate-resilient Nava Keralam. We are trying to rebuild Kerala as a new state with the potential to survive severe droughts and floods. That is what we are trying to achieve through the Rebuild Kerala Initiative. It is a special intervention that cares about the future of our state. More than a typical government project, it is a program with unique and far-reaching dimensions.

Although the rescue, recovery and rehabilitation were carried out satisfactorily on a mission basis, it should be noted that the floods affected one-sixth of the State's population. It will take time and determined efforts to ensure recovery and all-round growth. The fact that we could ensure that there was no major health-related epidemic the post floods stands testimony to the effectiveness of the community-based health care system which the state has nurtured over a period of time.

Understanding the geographical sensitivity of the region and quantum of losses of such calamities we have endeavoured to take this as a challenge and as an opportunity to rebuild the State to ensure better standards of living to all the sections of the society. This 'Build Back Better and Fast recovery strategy' rests on the four pillars of-

- 1. Knowledge, innovation and technology
- 2. Inclusive and people-centred approaches
- 3. Eco-sensitive and risk-informed approaches to land use and settlements
- 4. Integrated water resource management

This build back better philosophy is in-line with the State's 'Nava Kerala karma padhathi' under which we had launched four missions in November 2016, for comprehensive development in the fields of health, education, housing and water conservation-sanitation-sustainable agriculture.

To create the vision for rebuilding a resilient Kerala, RKI and all the State Departments have collaborated to outline the roadmap in the form of the Rebuild Kerala Development Programme (RKDP). RKDP was developed through a consultative and inclusive approach of public and expert consultations and is based on both Post Disaster Needs Assessment (PDNA) and Joint Rapid Disaster Needs Assessment (JRDNA).



RKI is one of the largest programmes ever implemented by the state and will take three years to reach its completion. This, in turn, is a continuation of one of the most extensive rescues and relief efforts in the history of Kerala. More than 5,00,000 people were rescued during the floods. More than 10,000 relief camps were opened and more than 15 lakh people got temporarily displaced.

Restoring power and water supply were the immediate priority. Within weeks after the floods 16,158 transformers, 19 power stations and 50 substations were repaired and restored. KSEB lost infrastructure worth Rs.820 crore. Floods damaged water pumps, mud pipes and even drain pipes. Initially, the water authority delivered freshwater through tankers. After the floodwaters receded water supply system was completely restored. As part of relief efforts, 6,91,463 houses were cleaned. Carcasses of 14,657 animals and more than 6,00,000 birds were safely buried in three days. The entire water source including three lakh wells was disinfected. Thousands of tons of solid waste was

removed. As a result of such vigorous activities, not a single epidemic was reported after the flood. This earned worldwide recognition.

Rebuilding of Kerala began with the restoration of infrastructure lost during the Flood. As part of that, 16,954 km of flood-damaged roads were restored of which 7,602 km of the road had to be built afresh. PWD restored 656 culverts and 127 bridges.

A total of 6,96,617 families returning home from relief camps were provided with a pack containing 22 essentials items. 7,08,656 families received food items worth Rs.500 each. Emergency assistance of Rs.10,000 was given to 6,92,181 families and Rs.200 crore was provided as relief to farmers. An amount of Rs.21.70 crore has been provided as compensation to 27,363 families who lost their livestock. Adalats were conducted to issue new documents to those who lost certificates and ration cards.

The next phase of the restoration was making homes inhabitable. 15,521 houses were completely destroyed in the floods. Of these, 10,665 families are building homes on their



own with government funding. Cooperative department's CARE Home project is building 2,000 homes of which more than 1,500 have been completed already. 1,259 houses are being built under the direct sponsorship of organizations. A total of 6,186 houses have been completed under various schemes. There are 532 families who lost both their lands and homes and 1,110 people in 'puramboke' land lost their homes. Government is implementing measures to rehabilitate them considering their convenience and interest

A total of 2,63,529 homes were partially damaged. Up to 31 July 2019 out of the 1,33,054 houses which were considered 15 per cent damaged, 1,29,868 families got financial assistance of Rs.10,000 each. Of the 78,778 homes, which were damaged between 16 and 29 per cent, 75,352 were given Rs.60,000 each. Out of the 36,104 houses damaged from 30 to 59 per cent, 31,927 houses were provided with Rs.1.25 lakh each. Of the 15,593 houses damaged from 60 to 74 per cent, 14,353 houses got financial assistance of Rs.2.5 lakh each.

The vast majority of the people in flood-affected areas had lost their livelihoods. Creating a sustainable livelihood for them is vital. Under Kudumbasree, interest-free loans worth Rs.1397.41 crore was sanctioned to normalize the lives of those who lost their livelihoods in the floods. For these loans, the government has agreed to pay the interest as per the Resurgent Kerala Loan Scheme. Total 1,65,769 people

in 24,753 neighbourhood groups were benefited through these loans. Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREG) spent Rs.559 crore to benefit 10.87 lakh families. A bank revitalization scheme is being implemented to revive small and medium enterprises, commercial establishments and shops. Rs.92.83 crore has been provided as loan assistance to 1.223 MSMEs and SHGs.

Government has announced a moratorium on farmers' loans for a year to withstand the losses caused by the floods in agriculture. An amount of Rs.287 crore has been disbursed as compensation for crop losses and to make land fit for sowing. These interventions paid rich dividends; Kuttanad had a record paddy harvest after the floods. Rs.40 crores were utilized for the revival of the aquaculture sector.

Rs.4,000 crore for emergency reconstruction was made available from the 2018-19 plan outlay of various departments. In the current budget elements for reconstruction is given emphasis. Priority is given to sustainable livelihoods, employment generation and strengthening public amenities. Rs.4,852 crore is earmarked for job creation and Rs.335 crore was set apart for self-employment projects. It aims to create jobs in the areas of agricultural and rural development. As part of this, around 50,000 persons are being trained in the ARISE (Acquiring Resilience and Identity through Sustainable Employment) program. So far, 47,105 people have registered for it so far.

Rebuilding of Kerala began with the restoration of infrastructure lost during the flood. As part of that, 16,954 km of flood damaged roads were restored of which 7,602 km of road had to build fresh. PWD restored 656 culverts and 127 bridges.

All this is made possible by the generous support extended by Malayalis and the lovers of Kerala from around the world. As of 30 June 2019, the CM's relief fund has received Rs.3,861.98 crore. Rs.2,600.62 crore was donated by individuals and institutions. Rs.834.99 crore came through Salary Challenge, Rs.117.69 crore from the bonus and Rs.308.68 crore from the Beverages Corporation.

Rs.1917 crore was allocated for various needs till May 31. The districts allotted Rs.692.181 crore for providing emergency relief. The total allocation for the rebuilding of 2,47,897 houses in the districts was Rs.1318.61 crore. The Co-operative Department has allotted Rs.44.98 crore for the care home project. Rs.54 crores have been allotted as loan assistance to farmers. have 42.73 crores has been allotted to the Civil Supplies Department for providing food packets. The government has also decided to allocate Rs.1,398 crore to relocate 18,655 fishermen families to safer locations.

In this manner, we are moving into the Rebuilding Kerala Initiative. We have brought international organizations together under the leadership of the World Bank on one platform to help us. As a preliminary step, the government held a Development Partners' Conclave. The government sought to secure the necessary financial and technical assistance. Sector-wise financing talks were held in the Conclave with organizations such as World Bank, ADB. JICA, KFW, UNDP and DFID. The Conclave held a series of discussions on the areas in which resource mobilization and technical assistance could be required and provided. We have secured World Bank's first installment of Rs.1.724 crore and KFW's first installment. The first level of involvement will be on rural roads and other areas that have been affected by floods.

Essentially through comprehensive efforts, we are taking lessons from history in this colossal task. We are trying to build a sustainable future. Just like how we overcame the floods together we can emerge victorious in the rebuilding efforts as well, provided we stand together. Let our unity be our biggest strength, as we realise a Nava Keralam.



erala faced an unprecedented challenge in its history as floods during August last year. The disaster crippled lives and livelihoods of people. The unprecedented resolve and coordination during the rescue operations by Keralites was unparalleled. Now we have to rebuild Kerala to Nava Kerala, a resilient sustainable state which can withstand the unprecedented. Government had been swift, collaborative, comprehensive and effective in rescue and relief operations. Kerala Government

established the Rebuild Kerala Initiative (RKI) to "bring about a perceptible change in the lives and livelihoods of its citizens by adopting higher standards of infrastructure for recovery and reconstruction, and to build ecological and technical safeguards so that the restructured assets could better withstands floods in the future".

The RKI's mandate is to develop, coordinate, facilitate and monitor the Rebuild Kerala Development Programme (RKDP) through a participatory and inclusive

process. The RKDP constitutes the State's strategic road map for a Green and Resilient Kerala. The RKDP encompasses crosscutting and sector-based policy, regulatory and institutional actions as well as priority investment programs. These are critical for resilient and sustainable recovery and rebuilding of the State. It aims to catalyse rebuilding of Kerala in a way that addresses key drivers of floods and other natural disasters and climate change risks. Simultaneously, it strengthens the preparedness against future disasters. Activities aimed at reconstructing

ADB welcomes and supports the Government of Kerala's Rebuild Kerala Initiative (RKI) that will guide the State's vision of building green and resilient Kerala. RKI sets out clear short- to medium-term roadmap to build the State's assets and institutions with people's participation and environmental conservation to ensure their sustainability withstanding future disasters and climate change impacts.



Kerala are progressing on the basis of well-laid plans. An International Development Partnership Conclave held on 15th of July 2019 at Leela Raviz, Kovalam. It was a major step towards rebuilding efforts. RKI organized the conclave to explore synergies between development partners and Kerala government. The potential partnership would help the state in meeting its overall reform agenda as identified in the RKDP. The areas of Integrated Water Resources Management, livelihoods related sectors of Agriculture, Fisheries, Animal Husbandry, etc., infrastructure sectors of roads, bridges, water supply, etc. and some cross-cutting sectors of Disaster Risk Management, Environment, Institutional Efficiency and Open Data were focused in the meet.

At the conclave, World Bank representative Junaid Ahmed announced that the state is going to emerge as an Indian state with World Bank Development Partnership. The World Bank has been identified as a development partner rather than a typical project partner and is assisting with the restructuring of Kerala. After many years, the World Bank has made the state a development partner.

The World Bank, ADB, JICA, KFW and New Development Bank have pledged their support and assistance for the reconstruction of the state. The NABARD and HUDCO agencies said they would provide assistance to the urban water supply and roads. The Tata Trust,

the Bill and Melinda Gates Foundation, and the IFDC Foundation have also announced their support for specific decision-making projects and to support the efficiency of various departments. The Conclave included various stakeholders in the restructuring process of the state in keeping with the RKDP. Chief Minister Pinarayi Vijayan said that the conclave's experience is proof that we can move towards that goal with a firm foothold.

RKDP aims to build a new Kerala that is environment-friendly and resilient. Representatives of various national and international agencies participated in the conclave expressed great interest towards Kerala. We will be receiving loans and financial and technological aid from the agencies. The participants of the conclave communicated with ministers and department secretaries. CM elucidated on the steps taken in terms of leadership and the developmental interventions as part of RKI.

Through the long term RKDP, a development perspective that involves fundamental reforms and a novel approach is proposed. One of the foundation stones of this project is to set up a comprehensive risk management system. Reducing the impact of environmental and climatic changes is another one of the objectives. Enhancing the capability and protection of the related institutions and the open data system are the two of the other objectives. Support and basic amenities provided by the government immediately after the disaster were explained in the conclave. The attempts of government to recuperate the means of livelihood were highlighted. However, rather than what has been done so far, attention was mainly paid to what is to be done hereafter. Kerala proposed an idea to make this crisis an opportunity to identify potential disasters and reconstruct the state in such a way that it can face any similar challenges. It is on this basis that the fundamental principles, styles and plans for rebuild were adopted through RKI.

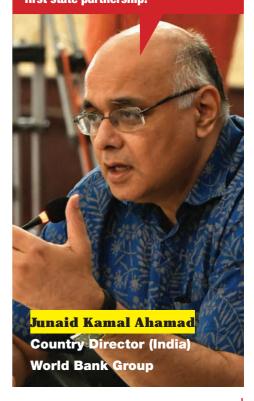
Areas and projects discussed in the conclave.

WATER DISTRIBUTION

There is a plan to set up 10 water treatment plants, which will be in 10 municipalities, through water authority. For the basic amenities, development of water distribution in rural areas, there are 12 projects in consideration.

The completion of water authority's incomplete projects, the use of non-conventional energy including solar, replacing of inefficient pumps, electrical system etc is also proposed. A detailed plan outline will be prepared for developing a sewage-septage system for Kochi and Trivandrum. Joint Water Resources Management The post-flood repair work of dams, regulators and canals, modern technological system for the removal of sand from dams and reservoirs etc will be undertaken as part of joint water resource management project.

To resilient Kerala, I believe that the honourable Chief Minister of Kerala and the State itself are on the right side of the history. The Government has invested in protecting the very nature which is what Kerala is all about. Resilient Kerala is the right vision, and we are ready to invest in Kerala's vision. Today, we hold the first state partnership.





Kerala narrates the story of courage and resilience that highlights how improved we have been, driving resilience across all infrastructural projects. This is an ambitious, convincing vision.

SOIL AND WATER PRESERVATION

Preservation of ponds, soil health mapping at ward level, watershed management and region based micro water irrigation will be carried out as part of soil and water preservation.

ANIMAL HUSBANDRY

Manufacturing preventive vaccines for rabies, comprehensive insurance package for cattle, margin free veterinary medical shops, elaborate plans for manufacturing cattle food, formation of dairy zones, etc. are the part of this section.

ROADS AND BRIDGES

Institutional road map for road management will be made for the Public Works Department. Road maintenance management system that involves geo-spatial mapping will also be created. Micro surfacing and the use of coir geo-textile for

roads will be considered.

The entire development world

is looking to Kerala. This will

development for other states

be another Kerala model of

and countries; it is a great

vision, great example and

great model.

SANITATION

Septage treatment plants, e-waste, plastic management system, facility for glass waste recycling and categorizing, collection centers at government offices, district level facilities to collect and categorize non-biological waste etc. will be part of waste management system.

URBAN DEVELOPMENT

Water distribution projects, sewage-septage management facility, storm-water drainage, urban transportation projects, reconstruction of roads ruined in urban local bodies etc have gained prominence in the urban development projects.

LIVELIHOOD

There will be policy intervention to ensure effective implementation of livelihood projects. Additional days of employment for the members of Mahatma Gandhi National Employment Guarantee Scheme, skill training for the youngsters that will be conducive for different employments, community enterprise fund for Kudumbasree and community disaster management force in every ward are part of the plan.

Support will be given for projects aiming to protect natural forests as well as the small forests and groves. Priority will be given to nourishing the native flora. The forest department will implement projects with people's participation, to preserve rivers, wetlands, and the forest on their banks, and will connect this to people's livelihood.

FISHERIES

Special arrangement will be made for raising fishes in water reservoirs and growing pearls and the likes. Priority is being given to creating employments in the rural areas. Preserving the local varieties of fish will be emphasized.

AGRICULTURE

Strengthening of village markets, comprehensive and sustainable agricultural development programme for Attappadi, Athirappalli tribal valley agricultural project, and programme to control floods in Kuttanadu and Kole fields are the priorities in the sector of agriculture.

<mark>Job Zachariah</mark> **UN Recovery** Coordinator

We are very keen to contribute to rebuilding Kerala initiatives, and we are very much interested in infrastructural sectors like urban development, water and sanitations, solid waste management, flood control and any investments related to climate and disasters. We look forward to discussing the next steps with the Government of Kerala.

Toshiaki Keicho

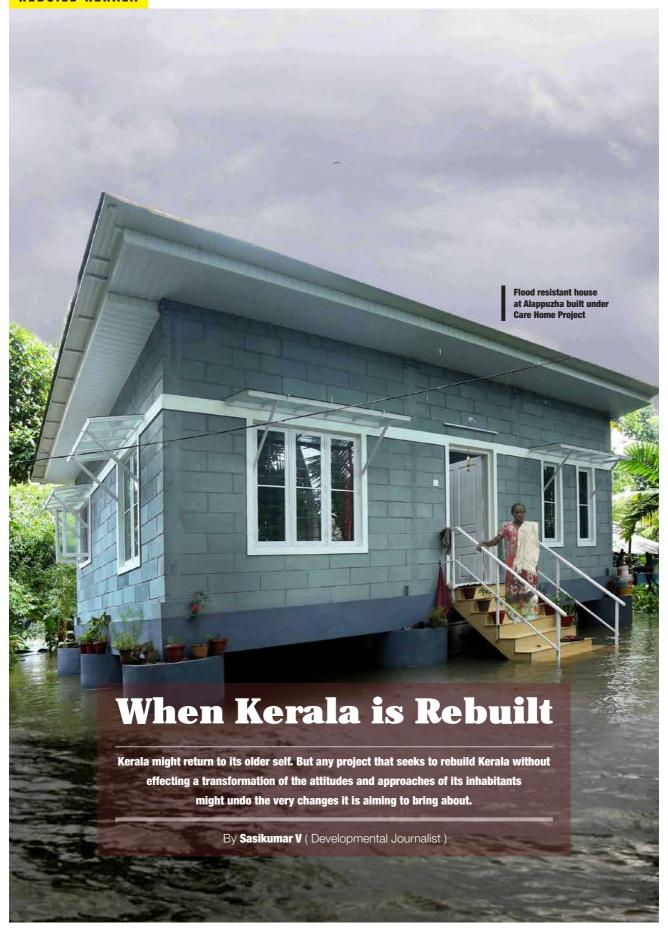
Sr. Investment Operations Specialist-Urban, AIIB

TRANSPORTATION

Technical Directorate of Transportation will be established for the management and renovation of transportation sector and attracting investments. Green bus corridors will be set up across the state.

In short, we are turning the challenges rising from the disaster into opportunities to withstand any future challenge. 100





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It is these same people who suffered during last year's floods and they continue to suffer in this monsoon season too. If these roads obstruct the channels of water flow, their reconstruction should undo this mistake which was a major factor that brought about the tragedy.

The lack of local geographical knowledge including the course of water on the part of the planning officers of the region was telling; it is more than evident that their planning was done within the four walls of their offices. It would be wiser on their part to gather knowledge from the elderly locals who are familiar with the natural course of water in the region and prepare maps accordingly.

hese are a few thoughts emerging from my experience of travelling across flood-hit areas last year and witnessing the damage and human suffering.

Chengannoor, Ranni and Pathanamthitta received considerable global attention thanks to the relentless and extensive media coverage which portrayed these regions as worst-hit by the floods. If one were to visit these places today, almost all of the big, rich people's houses have been reconstructed and it appears as if nothing of the likes of a flood ever happened there! Those who have experienced the flood at its worst, in refurbishing their houses spared no thoughts about the possibility of another flood and rebuilt the walls and gates and rooftops.

During the floods and later when the relief operations were being carried out, the disaster management wing had instructed people to mark the flood levels for the benefit of future planning. These suggestions have been discarded and houses and walls now stand with fresh coats of paint.

While it took months for the residents of Kuttanad region, which had been submerged underwater for a longer time, to return to their normal lives. Besides, they engaged themselves in agriculture without taking their hardships to the media. They reaped a good harvest. And have already begun planting the next crop.

After the floods, voluntary organizations and government agencies had focused on cleaning the aforementioned large houses of the rich in the regions of Pathanamthitta, Chengannoor and Ranni and rehabilitating them

While the children of Kuttanad survived the trying circumstances and came out in flying colours. Though the government offices, schools and banks were flooded, most of the documents in these buildings could be preserved thanks to the sincere efforts of the common people and officials of the region. The Krishi Bhavan at Chambakkulam, the Cooperative Society at Kainakari, SNDP School, all of these buildings had risen from the floods.

Any vision to rebuild Kerala has to take lessons from the aforementioned experiences. It is not that all corporations, municipalities and panchayats have not had masterplans. However with lopsided development programmes, and the vested interests of politicians, streams carrying water became roads; roads began to crisscross paddy fields. Water did not have any egress points and overflowed in the culverts. For instance. Ambalapuzha – Edathva road on the south to Kayamkulam - Punaloor road on the north were laid out by blocking the natural channels of water flow. While political representatives who claimed the credit for the construction of these roads continued to win their posts.

It took months for the residents of Kuttanad region, which had been submerged underwater for a longer time, to return to their normal lives. Besides, they engaged themselves in agriculture without taking their hardships to the media. They reaped a good harvest. And have already begun planting the next crop.

As we look back to the floods last year, it should not be reduced to a mere anniversary moment. Nor should the occasion be used to make tall claims that celebrate Malayali's survival spirit. It should rather be a time to reflect on making memory a tool for a meaningful future.

When the state goes overboard with its developmental ambitions with scant regard to the environment, it is we the people who should raise alarm and make the state accountable; it is our responsibility to initiate the state to take steps in the direction of bridging the man made gap between human beings and nature.



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he floods destroyed 2836.8 hectares of crops. An amount of Rs.6.55 crore was spent for the revival of the agricultural sector in the district. 11,133 farmers were given distress relief assistance. Animal Husbandry Department suffered a loss of Rs.22.6crore. 4,587 dairy farmers were given financial aid.

KERALA STATE ELECTRICITY BOARD

The power sector faced a loss of Rs.47.4 crore. 82,656 power connections were restored at an expense of Rs.14.46 crore. 228 transformers were restored at a cost of Rs.6.27 crore. Rs.18.61 crore expended to reinstall electric lines up to a length of 507 km.

DAIRY DEVELOPMENT DEPARTMENT

The Dairy Development Department has disbursed a sum of Rs.2,429 crores for the dairy farmers. 145 farmers were allotted financial aid of Rs.47,85,000 to purchase cows; 97 farmers given aid of Rs 64,02,000 and 65 farmers were provided with Rs.32,50,000 to set up cattle sheds. Mineral salt mixture worth Rs.70,000 was distributed. A total of 407 farmers were provided immediate relief of Rs.84,50,000. Under the three-tier panchayat scheme,Pulikizhu, llanthoor and Koyipram block panchayats distributed cows at a cost of Rs.22,90,676; Rs.2.50 lakh; and Rs 1.10 lakh respectively.

ADDITIONAL FINANCIAL AID OF RS.25,000

The State Disaster Management Authority will provide additional assistance of Rs 25,000 under 'Pratyudhanam', a resurrection programme to help people whose houses were fully or partially destroyed (15%-100%) in the flood or landslides. 1,100 persons in the district will get aid under the scheme.

31 NEW HOUSES SANCTIONED, 4 COLONIES TO BE RENOVATED

Thirty-one flood victims belonging to SC community in the district who lost houses were sanctioned new houses by the Scheduled Caste Development Corporation. 31 houses in 6 blocks were allotted for the community.



Priya along with husband Jayalal and son stand in front of her new house built under Rebuild Kerala project.

PRIYA IS ALL SMILES IN FRONT OF HER NEWLY BUILT HOUSE

Horrified at seeing the destructive flood taking away their house, Priya did not have much option but to escape safely along with her husband Jayalal, who is a workshop labourer and their children Ajay and Abhay. The family which led a humble living had to surrender all their little earnings to the nature's wrath. Kuttoor village in Pathanamthitta was one of the initially flood-affected areas. Angry water gushed into their shack on the banks of Manimala river all of a sudden. Priya ran to the relief camp along with her family, and stayed there for more than five days. On reaching the spot after the floodwaters receded, they could not find any of their belongings.

It was at that time the State Government extended a helping hand by granting them Rs 95,100 from the State Disaster Response Fund and Rs 1,52,450 in two installments from Chief Minister's Distress Relief Fund. The family built a new house in four months using the Government aid of Rs 4 lakh.

Priya wears a smile on her face as the month of Karkkidakam showers pitter-patters on her new stronger Aikaraparambil House, in the 4th ward of Kuttoor village, narrating the hellish days of the great deluge last year.





econstruction of 837 houses out of the completely damaged 2516 houses in the flood was done. Financial aid was allocated for the maintenance of 88,140 houses out of the 1,00,547 houses. A total of Rs.380.26 crore were spent. Rs.32.44 crore expended for the construction of 430.93 kilometres of roads, 20 bridges and slabs. Relief assistance was provided to 62,726 farmers for their 18,460 hectares of damaged farmlands.

Financial aids were provided to farmers such as crop insurance to 3,827 farmers, monetary aid to 40,240 farmers for removing dirt, 52,365 farmers were given paddy crop assistance, soil conservation aid for 21,137 farmers, and also 2,57,288 farmers were benefitted under the Horticulture Flood Special Package. An amount of Rs 10.46 crore were distributed for reviving agrarian.

Rs.51,36,000 was spent for the revival of the educational sector. 23,529 dairy farmers were financed; 468 cows, 1265 goats and 94.37 metric ton feed were disbursed.

Six hospitals were renovated with an expense of Rs.60 lakh. Re-installation of 32,341 electricity connections were done utilising Rs.1.74 crore and amount of Rs.1.06 crore were spent to re-install transformers. 1,469 posts were re-installed and 179.62 km of electric lines re-laid.

3,779 people who lost their vital documents in the flood were provided through adalats. Rs.348.65 crores were provided to 40,638 women through Kudumbasree.

Rs.63,65,300 were given to 122 people through Ujjivan Scheme.

Rs.218 crore have been allocated via the Public Works Department for rebuilding roads, bridges. Rs.25 crore was already allotted for emergency works and Rs 193 crore was allotted for long term re-construction activities.

The State has approved Rs.25 crore for 144 projects for emergency maintenances; Rs.23 crore for roads and Rs.2crore for bridges. The PWD has okayed all the 132 projects so far. The maintenance works of 12 bridges have also been completed. 430.93 km of roads were re-laid and opened for public.

For long term reconstruction of roads, Rs.193 crore has been sanctioned by the department under 18 projects in the district. An amount of Rs.150 crores has been particularly sanctioned for the reconstruction of Alappuzha-Changanassery road.

CARE HOME

201 houses are to be constructed in the district in the initial two phases incorporating the Care Home Scheme. The taluk-wise statistics of houses are as follows, 11 in Chertala, 75 in Kuttanadu, 35 in Ambalappuzha, 24 in Karthikappally, 28 in Mavelikkara and 28 in Chengannur. Over 59 houses of these constructed as per the list of beneficiaries received from the Collectorate, District Planning Office and Assistant Development Commissioner Office, were handed over. The third phase is in progress.

RS.1000 CR TO 10 LAKH PEOPLE

As post-flood relief, Rs.1000 crore has been disbursed to 10 lakh people. Rs.400 crores more will be given. Chances will be provided to those who couldn't apply for the same earlier. Adalats will be constituted in this regard.

DISTRICT LEVEL ADALAT RY FISHERIES

A district-level adalat was organised by the Fisheries Department for those who lost their fish seed cultivation in the flood. A sum of Rs.1.75 crores was given from a period during post-flood till March. 141 farmers from six taluks participated in the adalat which was divided into four units.

I AM FOR ALLEPEY SCHEME

Fifty cycles distributed through the I am for Allepey Scheme to class X students belonging to backward and deprived sections.

FINANCIAL AID TO 18,794 FARMERS

The Animal Husbandry Department provided financial aid of Rs.6,00,89,330to 18,794 farmers. Compensation was provided for the 559 cows, 1005 calves, 4,481 goats, 2,10,880 hens, 1,52,242 ducks and 955 cattle sheds that got lost or were dead in the flood. Rs.2.35 crore and Rs.1.74 crore were compensated in Kuttanad and Chengannur.



ajor 5 hydro-electric projects which come under Kerala State Electricity Board such as Lower Periyar, Idamalayar, Peringalkuthu, Peringalkuthu Left Bank Extension, Panniyar, and 14 Mini Hydroelectric Projects of Vellathooval, Ranni-Perunadu, Adyanpara, Barapole, Chembukadavu II, Mattupetty, Perunthenaruvi, Lower Meenmutty. Peechi. Chimmini. Urumi II. Vilangadu. Poozhithodu, Malambuzha came across with fatal destructions due to flood and related landslides. All the above mentioned hydro-electric projects except Vellathooval mini hydro-electric project have been rebuilt.

TRANSMISSION SECTOR

About 50 substations were completely or partially damaged caused by the monstrous floods. Major transmission substations such as Punnapra- Pallam, Kuthungal-Neryamangalam, Pallivasal- Aluva, Chalakkudi- Pullazhi, Madakathara- Kunnamangalam, Idamalayar- Ayyampuzha, Idamalayar- Malayatoor, Aluva- Chalakkudi and Chalakkudi -Traction substations were de-functioned because of the deluge.

TRANSFORMER SECTOR

The power supply in the districts of Pathanamthitta, Kottayam, Alappuzha, Ernakulam,

Idukki, Thrissur and Wayanadu was completely diffused in the floods. About 1700 distribution transformers over 300 electrical sections have been immersed and damaged in the surge. More than 10000 transformers were shut down foreseeing the dangerous situation and risks behind it. The power supply of 16158 transformers was hindered in the deluge and it affected about 25.60 lakhs consumers in the districts. 1735 power supply transformers and 5275.80 km of electric lines had to be replaced to restore the power supply. More than 1 lakh electric posts were restored. About 3 lakhs of single-phase electricity meters and 50,000 three-phase electric meters were completely tattered. E.L.C.B was established to rebuild electric connections over 3 lakh households.

DECREASE IN ELECTRIC SUPPLY

The power supply was decreased about 400 MW following the flood. Meantime, the shrinkage of charcoal supply in other states also made the situation more aggravated.

SECURITY

The flood has created an excessive loss in the sector though it did not cause any significant impact on the lives of the public and employees from KSEB's power installations. As a safety measure, over 50 substations

With the intention to restore power supply, the State has implemented a special action

programme called Mission Re-connect and appointed special volunteers in the state, circle, and section levels. The Mission aimed to temporarily restore power supply in buildings of areas where water level fell during the end of last August. All service connections that were lost before August 31, 2018, were

The total expenditure of KSEB for rebuilding activities and its goals are the following:

Hydro-electric power plants

Post-flood reconstruction efforts

₹12.55 crore

Power transmission sector

Reconstruction of transmission lines and substations damaged by flooding

₹29.77 crore

Power supply sector

SDRF programme

₹85.03 crore

KSEB's own fund

₹167.53 crore

TOTAL **AMOUNT** ₹294.88 crore

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Kottayam. 328.55 km of the road was reconstructed. About 24.101 electricity connections including houses and institutions were restored. The Government has allocated an amount of Rs.7.23 crores for installing 15 transformers, 855 posts and 66.34 km of electric lines.

Financial aid of Rs.80.52 lakh was granted to 483 people from the fisheries sector. Rs.66.33 lakh was distributed to 141 people who had lost their cattle and Rs.22.50 lakh given to 41 people for recovering cattle sheds. Apart from the above, 125 people were allowed financial aid of Rs.62.50 lakh.

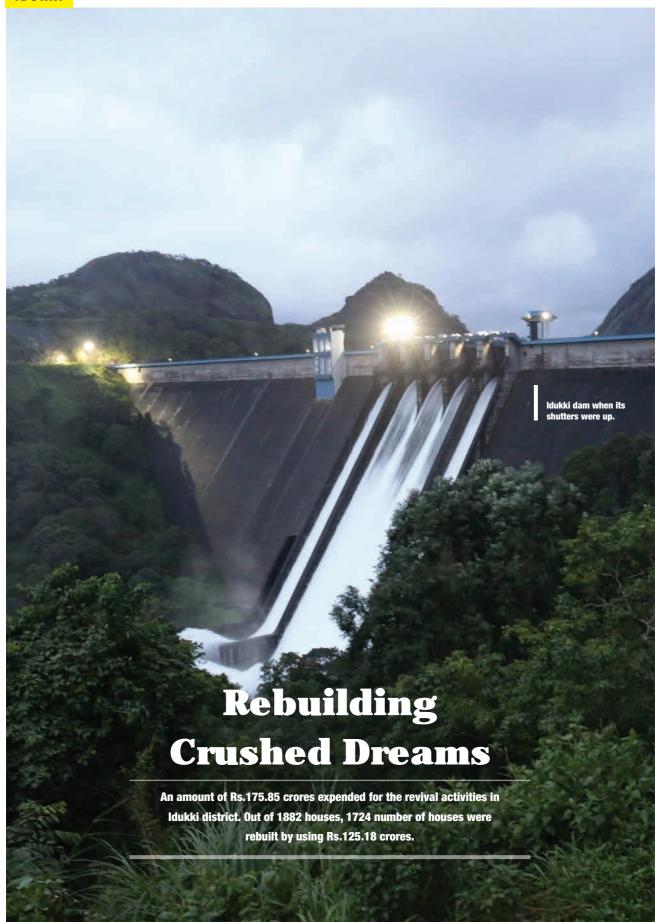
As an aid to partially damaged houses, Rs.10,000 each was given to 8602 houses, Rs.60,000 to 4785 houses and Rs.1.25 lakh to 2513 houses and Rs.2.50 lakh given to 1170 houses. The construction of 134 houses has been concluded out of the 841 completely damaged houses. The construction of the remaining is in different phases. The construction of 83 houses under the first phase of Care Home Project has been completed and keys have been handed over. members of ayalkkoottams as a loan under the Resurgent Kerala Loan Scheme. Loans were provided to 19 small scale industries and shops as part of the Ujjivan Project. Rs 192.22 crore was allotted as family loans to 29,269 women. Rs 192.22crore was allotted to 29,269 people as linkage loan to purchase home appliances.

The Agriculture Department offered assistance with an expenditure of Rs.37.55 lakh in various forms such as horticulture special package for 1,272 farmers, soil protection for 1,585 farmers, paddy seeds for 12,468 farmers and so on.

Under MPLADS Pooled Fund Rs.126.04 lakh was given to construct toilet facilities in 10 schools of Thiruvarpp, Aymanam, Kallama, Vechoor and Thalayolapparambu panchayats and Rs.42 lakh was given to 16 schools in Kumarakom to construct Reverse Osmosis Plants. SSLC certificates for 479 people and university certificates for 327 people who lost the same were made available via special adalats. To

CARE HOME PROJECT: TEN HOUSES COMPLETED AT CHANGANASSERY

The co-operative sector has constructed houses as part of the Care Home Project. Under the initiative of the Ithithanam Janatha Co-operative bank, the houses were constructed on nine erected pillars to fight against the natural swamp formed as a result of the deluge. This has been done under expert advice. 10 houses were constructed in Changanassery Taluk under the Care Home Project. The co-operative sector has spent a total of Rs.49.51 lakh in Changanacherry. The other houses were constructed under the initiatives of Thuruthi, Vazhappally, Cheeranchira, Thrikkodithanam, Kurichi and Changanacherry North co-operative banks.





n amount of Rs.175.85 crores expended for the revival activities in Idukki district. Out of 1882 houses, 1724 number of houses were rebuilt by using Rs.125.18 crores. Partially demolished 6735 houses were funded with Rs.50.66 crores. Construction of about 170 houses was completed under the Care Home Scheme. As a part of this scheme, the Government planned to build a total number of 212 houses in the district that costs five lakh each. The construction work of those 170 houses was completed in five stages; 147 houses were handed over. About 57 houses over the district were escalated under the initiative of NGOs.

CARE HOME GAVE AWAY KEYS OF 23 HOUSES WITH CARE

The Minister for Cooperation Kadakampally Surendran handed over the keys of 23 Care Home houses. Keys were distributed in a public meeting of the beneficiaries that was organised at Kattappana as part of the post-flood reconstruction measures. Keys of 9 houses under the Senapathy, Shanthigram, Koottar, Nedunkandam, Malanad Co-operative banks of UdumpancholaTaluk, those of 5 houses from Pampanar, Malabar, Chenkara, Amaravathi cooperative banks under Peerumedu Taluk and that of 4 houses from Muttom, Arakkulam, Vannappuram banks under Thodupuzha Taluk and also those of 4 houses from Kanjikkuzhy, Vellathooval service cooperative banks under Idukki Taluk were distributed. Care Home is a project initiated by the State Government incorporating the cooperative societies for the post-flood reconstruction of Kerala. The construction of 170 houses in the district is completed. A total of 212 houses are to be built as part of the same in the district. The construction of 170 houses was done in five phases and the keys were handed over. The keys of 23 houses were handed over yesterday in the Janakeeyamee Athijeevanam Programme at Kattappana. Co



VAIGA AND VAISHNAV TO A NEW HOME

Vaiga and Vaishnav couldn't control their happiness of having a new home. Glimpses of happiness were flashing through their eyes when they recieved the key of their new home.

Vaiga and Vaishnav together with their parents received their new home that they got through the Care Home project. The house of Rajesh got completely damaged in a heavy rain and thunderstorm during the flood. They stayed in relief camps for ten days and a temporary shed thereafter. Koottar Service Cooperative bank built a home for them as part of the Care Home project. Rajesh, his wife Regha ,their children vaiga the third standard student and Vaishnav the first standard student although of losing their shelter they lived for years, they are happy to have a new home with all the facilities.

FLOOD SURVIVOR



Thakkudu: The Star Among Survivors

By Ajitha KG (Information Assistant, Idukki District information office)

The water began to gush over Cheruthoni bridge when the shutters of Idukki dam were unlatched following a heavy rain last night. Nearby tall buildings have been already occupied by media and other photographers to capture unusual sight of water out-bursting over the Cheruthoni bridge.

National Disaster Response force was rushing to the hospital with a sick boy named Suraj (also known as Thakkudu) over the Cheruthoni bridge ahead of the bursting water which later engulfed the bridge completely. This heart breaking sight was captured by the media and reported with great importance, as soon as Thakkudu became an issue of dialogue over social media. This made him to attain a copious attention and wide recognition to spread the magnitude of the monstrous flood hit on the state.

Thakkudu is the beloved son of Vijayaraj and Manju of Karaikad Puthenveedu in Cheruthoni Idukki colony. Vijayaraj was returning home after watching the shutter opening of Idukki dam with his friends, was astonished with news of his three year old son suffering from severe fever and illness. He stepped out of the house ignoring the heavy down pour having a sole aim to get his son to the hospital whatever it takes. On reaching near the bridge the Police officials informed that there is no way that they could get into the other side. However on understanding the bad condition of

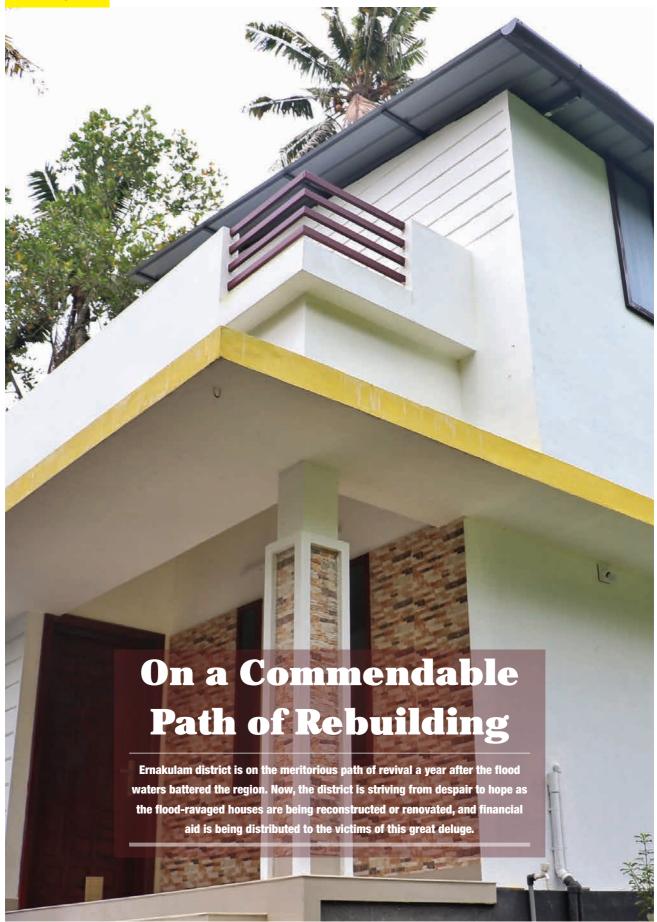
the child, the officials informed the Circle Inspector in- charge and under his guidance the boy was taken to the other side expeditiously with the accompany of National Disaster Response Force on hotfoot. On looking back from the other side after boarding an auto, the bridge was seen to be under the bursting water, the sight is still terrifying, recalls Vijayaraj. He still remembers the Police officer who lent him money from his own pocket in that situation when he had not even a single penny to spare. Cheruthoni bridge was completely covered with water by the time they returned with Thakkudu from the district hospital causality. Many of the nearby roads were also blocked due to the deluge, water logging and landslides. Then they had to travel kilometres on a relative's bike via Karimpan bridge to reach home.

Whenever Vijayaraj sees smile on his son's face, it reminds him of the people who have helped his son to get immediate medical care; wanting to meet the members of the Response Force and the policeman once again. They live with Thankaraj and Yeshamma, Vijayaraj's parents now. Thakkudu welcomes those who come to see him with his innocent playful smile even if he doesn't know the part that he played to let the world know about the intensity of the flood in Idukki. He is now a LKG student of the Idukki New Man School.

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KERALA CALLING AUGUST 2019



n amount of Rs.429.26 crores had been disbursed in the district to rebuild destroyed houses and restore partially damaged houses. In the first phase, 2,519 houses were found to be destroyed. The affected families who undertook construction activities on their own were given funds based on the progress of work and 1,719 houses were provided with the first quantum of funds, 1,567 houses the second portion of the money and 1,387 houses the third tranche of funds. In total, a sum of Rs.61,01,45,950 was disbursed. An amount of Rs.3,64,27,10,000 had been given to 94,265 families whose houses sustained 15 to 74 per cent damage.

CARE HOME

The Department of Cooperation took the responsibility of building 337 houses under the Care Home project of the Government of Kerala. Out of the 337 houses, the construction of 280 houses had been completed. As many as 113 houses will be rebuilding through sponsorships of which work on 84 houses had been completed.

DATA ENTRY OF SECOND PHASE APPEALS COMPLETED

The Government received 1,06,319 more applications after the time limit to appeal for flood relief was extended. The data entry of these details was also completed. Out of the 1,06,319 applications, close to 74,984 requests are eligible for consideration. As many as 31,335 applications were found to be duplicated. Field verifications are progressing on a war-footing.

IMMEDIATE FINANCIAL ASSISTANCE FOR 1,79,879 FAMILIES

An amount of Rs.10,000 each was released to 1,79,879 families as immediate financial aid. All water-logged houses were given financial aid without considering the poverty line criteria.

DISTRICT ADMINISTRATION CHURNED OUT 2.25 LAKH KITS WITH PEOPLE'S SUPPORT

The district administration distributed 2.25 lakh kits containing essential commodities such as rice, grains and sugar to flood-affected people who were returning to their homes from relief camps. The kits were prepared at Thrikkakara community hall, KBPS Kalamassery and Collectorate. People from all walks of life including students, retired officials, IT professionals, housewives and Kudumbashree workers were part of the kit-preparing process. The kits that came out of Kalamassery were all prepared by Kudumbashree workers.



The flood-ravaged house of Rhavani



The key of the new house, which was constructed under the Care Home project, being handed over to Bhavani.

SURGING WATERS COULD NOT WASH AWAY HER SPIRIT

Bhavani from Muvattupuzha, a woman of 75, was struck down by cancer when the surging waters washed her home away in August last year. Bhavani's small house was devoured by the floods as the Kaliyar river was in spate during the deluge. The Government of Kerala through the Care Home project has built a new house for Bhavani and other eight families. The Enanalur Service Cooperative Bank took the responsibility of constructing a house for Bhavani under this project.

A new house for Bhavani was built in four months and the key was handed over to her. The Care Home project provided nine houses in various parts of the taluk to families who lost their homes in the flood. The Enanalur Service Co-operative Bank built two houses and Mekkadambu Service Co-operative Bank constructed four houses for the flood-affected people as part of the project. One house each was constructed by Payipra, Valakam and Maradi service co-operative banks under the project. These families are now staying under the safety of a roof heaving a sigh relief as they have been put behind the trauma unleashed by the August floods. The construction of the houses commenced in December and was completed in May 2019. The concerted efforts of the governing members of the co-operative banks, employees and officials of the Department of Co-operation helped hands for the completion of building houses in a short span. The banks were directly involved in the construction.





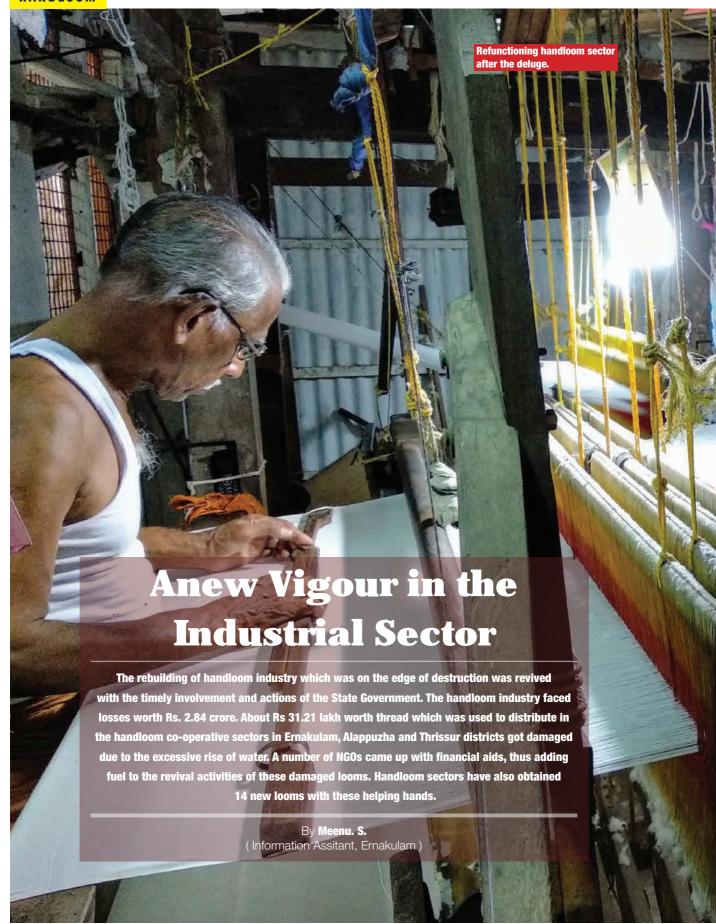




DONATE A COW PROGRAMME

55 cows and 250 livestock are donated to the dairy farmers in Wayanad who had lost their livelihood cows in the flood through the 'Donate a Cow' programme. 585 dairy farmers have got helped through other schemes. 1,300 kilograms of the mineral mixture, 66,000 kilograms of fodder, 25 tons each of silage and green fodder, 12 tons of straw and 10,700 kilograms of fodder as sub-

sidy are made available.Rs.97,96,800 was given as compensation to 894 farmers.506 goats were distributed to 46 farmers. 68.9 tons of TMR feed, 9 tons of fodder, 26 tons of green grass, 10.92 tons of silage, 14.595 tons of straw, 2,000 kilograms of the mineral mixture, 10 tons of limestone and 2.5 tons of bleaching powder were supplied free of cost and 5,276 animals were treated in 61 camps.







he flood that had hit Kerala last year had created massive losses, catalysing nine handlooms co-operative sectors in Ernakulam district, Yarn Bank and the Khadi sectors in Chendamangalam. More than 250 looms in the industry were impaired. Co-operative products, raw materials, dye-house, work shed and furniture were all damaged. Due to these reasons, there was a deflation of employment in the handloom sector for about four-and-ahalf months. About 300 weavers, 25 related workers and dependent families were faced with drastic economic crises. The revival of this industry has been gradually done. The rebuilding of handloom industry which was on the edge of destruction was revived with the timely involvement and actions of the State Government. The handloom industry faced the destruction of Rs 2.84 crore. About Rs 31.21 lakh worth thread which was used to distribute in the handloom co-operative sectors in Ernakulam, Alappuzha and Thrissur districts got damaged due to the excessive rise of water. A number of NGOs came up with financial aids, thus adding fuel to the revival activities of these damaged looms. Handloom sectors also obtained 14 new looms with these helping hands.

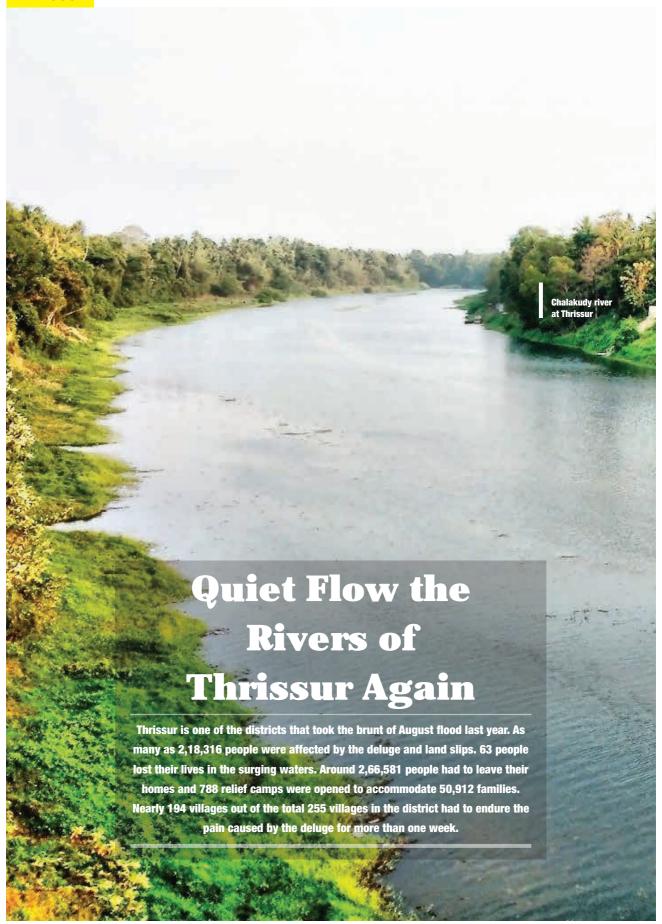
A Common Facility Centre (C.F.C.) under the certification of the State Government is to be established aiming at the revival and rebuilding of the handloom co-operative sectors in Chendamangalam district. C.F.C. facilitates yarn bank, dyeing unit and drying block at a cost of Rs 2.35 crore. A consent form has been handed over to Chendamangalam yarn bank to hold the lease of 30 cents of their

owned property for 15 years. The State Government has earmarked Rs 50 lakhs for the current fiscal year.

SURVIVAL OF KHADI SECTOR

Around 19 spinning units, seven weaving units, one Khadi Grama Soubagya, two Khadi Soubagya and three Grama Soubagya sales units are facilitating under Ernakulam District Khadi and Village Industries Office, headed by the Kerala Khadi and Village Industries Board. About a number of 370 employees are working in the Khadi production centres. The deluge affected the Khadi production centres of Karimpadam, Muravanthuruthu, Paliyamthuruthu, and Karumalloor (street weaving). The excessive surge of water in the flood-damaged products and equipment in Muvattupuzha Khadi Soubagya, Malayattoor Gur and Khandsari Industrial Co-Operative Sector, Kerala Khadi and Village Industries Federation, and Gandhi Memorial GramaSeva Kendra. The Khadi sector suffered a total loss of Rs.2.58 crore.

Cochin Shipyard allotted an amount of Rs.21,11,00 from the CSR fund to repair and replace the damaged spinning wheels and looms in the Gandhi Memorial GramaSeva Kendra. Out of these damaged types of equipment, 54 spinning wheels and 9 looms were replaced with brand new ones. The ruined 107 spinning wheels and 49 looms were made re-functioning. Along with this, the Bharat Petroleum Corporation Limited has imparted a capital investment of Rs.6.8 lakh for the purchase of raw materials.



s many as 3,478 houses were washed away and 27,627 houses were partially damaged all around the district. Close to 1,389 houses were rebuilt under six schemes, financial aid was given to 24, 068 partially damaged houses and the State Government had channelled Rs.263.33 crore for the purpose.

Government's main scheme was one through which Rs.4 lakh was disbursed in three instalments to the beneficiaries to build a house. Nearly 2,378 people came forward to be part of this scheme; 786 houses had been constructed. An amount of Rs.69.64 crore had been disbursed in the district under the scheme.

The Care Home project is the second scheme of the Department of Cooperation, opted by 500 families. A number of 411 houses had been constructed yet. The construction of the remaining houses and the apartment complex to accommodate 100 families in the second phase is progressing at a much greater pace. There are 20 families who have lost their homes and land. The land has been earmarked for 15 families. As many as 223 families staying in unsettled land lost their houses. Out of them, there are 49 families who either possess private land or had constructed a house in unsettled land with the help of private parties. The remaining 174 families had to be rehabilitated. The process of rehabilitating 124 families had been completed and the remaining 50 families will be rehabilitated without any delay. Nearly 138 houses are being built through sponsorships from various institutions and the work







on 73 houses has been completed. Close to 20,874 houses were partially damaged, and Rs 159.79 crore had been distributed to the affected people.

ANIMAL HUSBANDRY SECTOR BOUNCES BACK

The animal husbandry and dairy development sectors are on the path of revival after 60 per cent of the cattle were lost in the floods. The loss incurred by the dairy development segment is close to 76 metric tons. Relief had been extended to 6,533 cattle farmers. Around 25,000 chicklings were distributed to 500 students, fifty each, via school poultry clubs. About 11,900 kilograms of fodder for 3,300 cattle worth Rs 32.95 lakhs were distributed and the Dairy Development Department gave 392 metric tonnes of cattle feed to the cattle farmers

PROJECT TO REVIVE AGRICULTURE

The deluge inundated 4.745.8 hectares of agricultural land resulting loss of crops. The Agriculture Department had spent Rs.23,56,79,834 from its own funds to revive the farming sector. The special flood package under the Mission for Integrated Development of Horticulture project had spent Rs.3.14 crore for 5,000 farmers. As many as 23,792 farmers were aided financial assistance. Nearly 2,407 farmers were also aided by the Crop Insurance Scheme. About 6 lakh farmers were given vegetable seeds and saplings. Close to 33,445 farmers also got help through the Soil Ameliorants in Selected Districts project.





Four hospitals, ravaged by the floods, were refurbished. A project was implemented to succour 9,542 people who were mentally battered by the floods. Renovation works to the tune of Rs 88.90 lakh are being carried out at 12 subfamily health centers. An amount of Rs 1.25 crore was expended to revamp the hospitals in the district. The State Government distributed Rs 1.45 crore worth of medicines directly and also gave away medications worth Rs 25 crore sourced through voluntary organizations.



owing to the exposure to flood water. **PWD RESTORES 38.3 KM ROAD**

The Public Works Department has rebuilt 38.3 km road at a cost of Rs.103 lakh. 226.88km roads were restored at a cost of Rs.5,050 lakh. The roads extending to 61.9613km that come under the limits of village panchayats were reconstructed. Village panchayats has so far spent Rs 13,49,80,856.

Repair works were carried out in 2.250 km road under Shoranur municipality limits, 600 metres in Ottapalam municipality and 30 roads in Cherupulassery. Shoranur municipality has spent Rs 36,67,641 for roads and Rs 11,35,179 for culverts, respectively for road maintenance. Ottapalam and Cherupulassery municipalities have spent Rs 6 lakh and Rs 3 lakh respectively for the same.

KSEB RESTORES 9,593 LINES

The Kerala State Electricity Board has restored 9,593 electric connections at a cost of Rs.2,87,79,000. 3,135 posts and 39 transformers which were either completely or partially destroyed were replaced. An amount of Rs.1,25, 40,000 and Rs 39 lakh were spent for restoring electric posts and transformers, respectively. Electric lines

up to 550.89 km were restored at a cost of Rs 2,75,44,500.

49,754 FARMERS WERE GIVEN RELIEF AID

The Agriculture Department distributed distress relief aid to 49,754 farmers. The department has spent Rs 31,32,500 up to June to rebuild agriculture sector. SDRF has allotted financial relief to seven farmers. A total of 55,718 farmers got the benefit of Soil Ameliorants in Selected Districts scheme and 4,542 farmers were granted assistance of Rs 21,11,847 as flood special package under Mission for Integrated Development of Horticultural project. 11,805 farmers were given aid through a crop insurance scheme. Kudumbashree spearheaded 'Samrudhi Sangha Krishi' campaign to strengthen the rebuild activities initiated in the sector.

193 FARMERS GET RELIEF FROM ANIMAL HUSBANDRY, DAIRY DEVELOPMENT DEPARTMENTS

193 farmers, who lost cattle and pet animals and shed to floodwaters, were allotted financial aid through Animal Husbandry, Dairy Department. 20,000 kg cattle feed, 2000 kg mineral mixture and 50,000 eggs were distributed free of cost.

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who purchased land and those who were allotted land registered in their name. The Revenue Department has so far spent Rs 43.63 crore to build houses for the flood victims whose houses were completely destroyed; and spent Rs 2.96 crore to help 52 families to purchase land. A sum of Rs 51 crore was sanctioned for 7,121 to repair the partially destroyed houses. 23 families received an assistance of Rs 4 lakh. The Government

has spent Rs 8.60 crore to give immediate

relief of Rs 10,000 to each of the 8,609 fami-

lies, whose house appliances were damaged

alloted financial grant for 1,276 persons to

the fund disbursal and construction for the

The construction of 183 houses out of the

206 was completed under the Care Home

initiated the construction of the flat complex

to relocate the 71 families living in unsettled

and who have lost their houses. Registered

purchase land. An amount of Rs 6 lakh each

living in an unsafe environment. An additional

amount of Rs 4 lakh will be granted to those

was provided to 38 persons who had been

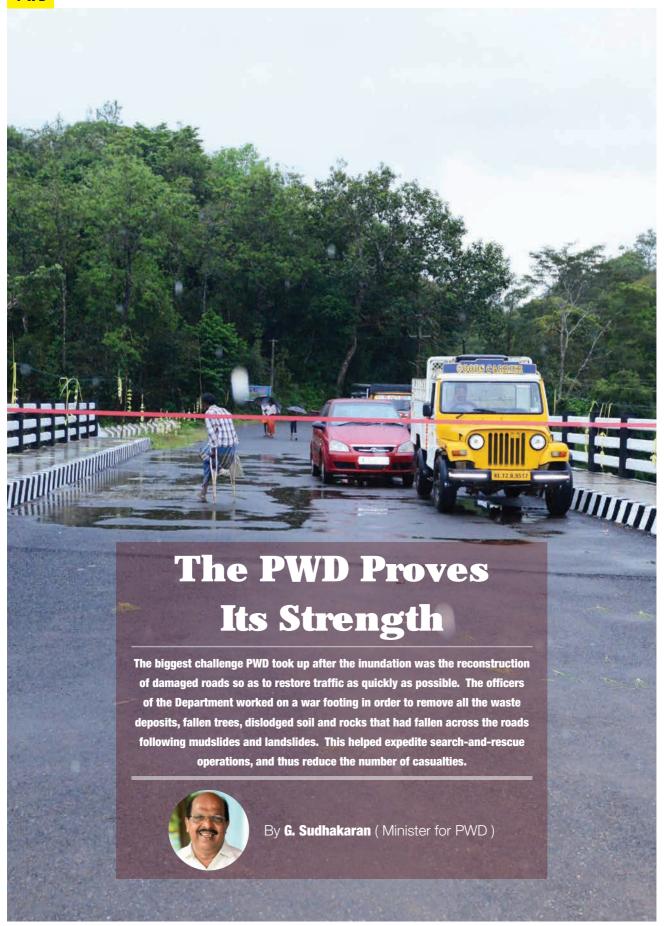
land was allotted to two persons and a

sum of Rs 6 lakh allotted to 9 persons to

project. The Revenue Department has

build houses on their own; as a result of which 784 persons could build houses, while

remaining victims are in progress.





256 km of retaining walls were damaged. Nearly, 51760 cubic metres of organic and inorganic waste material got deposited on roads, bridges and culverts; and nearly 208000 cubic metres of mud and rocks got dumped due to mudslides and landslides. The fact that roads in areas which were completely devasted in Idukki district in this natural disaster were made traffic-worthy in a matter of days is the evidence of the efficiency and sincerity of the Department. Roads that lay submerged underwater for days on end in Kuttanad were repaired in a time-bound manner; the Alappuzha-Changanassery road was reconstructed and upgraded at the cost of Rs 9 crores; many roads and bridges that had been taken away by the rushing waters were restored to traffic – all due to the diligent effort of the PWD.

A meeting chaired by the PWD Minister was convened in order to chart a master plan for the reconstruction and repair of roads and bridges, and instructions were given to draw up plans for each constituency. In order to avoid any time delay, it was decided to invite limited tender as per the PWD Manual, and give the Chief Engineers the responsibility of coordinating the reconstruction activities. A consensus was reached at the meeting about giving due consideration to eligible candidates among local contractors who had the required equipment, technical know-how and labour to execute the plans. This meeting made an assessment of the post-flood condition of roads and decided that 8116 km of road required urgent repair in order to be made traffic-worthy and 8840 km of road needed to be reconstructed.

The total expense for the reconstruction of roads and bridges destroyed in the flood is estimated at Rs 10000 crores. The ad-

The Public Works Department is marching forward with the aim of completing the post-flood road-reconstruction activities within the shortest possible time span.

ministrative sanction was given for Rs.1567 crores from the Plan Fund for completion of 724 projects in order to restore 2316 roads. These projects are underway. By now, 4429 km of road have been restored under 656 projects, using Rs.882 crores from Non-plan funds. Different kinds of reconstruction activities are progressing, utilizing Rs.801 crores received from the Central Road Fund, which includes Rs.450 crores that were sanctioned following a meeting with the Central Minister of Surface Transport. Post-flood reconstruction work worth Rs.115.26 crores was undertaken as part of NABARD project. Several activities in various districts, using Rs.220 crores officially sanctioned under the Sabarimala Package, are nearing completion. Post-flood reconstruction work worth Rs.3765 crores has been sanctioned by

the administration so far. The DPR of the reconstruction of the Alappuzha-Changanassery Road, that is built to withstand floods, is being prepared. All the required steps are also being taken to construct roads at a high level in the low-lying areas of Alappuzha district; and to construct roads in certain areas in Idukki and Pathanamthitta districts, keeping in mind their vulnerability to landslides. Repair and reconstruction work, based on the reports submitted by the Bridges Section after a detailed examination of bridges that sustained damage in the flood, is also progressing. Over and above all these, construction of roads to match international standards, with financial support from the German Bank and other international agencies, are going on under the aegis of the Rebuild Kerala Initiative.

The Public Works Department is marching forward with the aim of completing the post-flood road-reconstruction activities within the shortest possible time span. As it tries to live up to the expectations of the people of Kerala, the support given by the Chief Minister as well as the public has been tremendous. Having internalized the tag line – "New Age, New Construction" – of Nava Keralam, the PWD is attempting to co-ordinate the activities of various departments in order to bring the reconstruction projects to successful completion.



By Dr. Relfi Paul (Researcher, Gulati Institute of Finance and Taxation (GIFT), Thiruvananthapuram)

he KFC is expected to generate additional revenue of Rs.600 crore annually, which would be used only for the reconstruction and rebuilding the flood-ravaged State. Although various agencies have come up with different assessments on the losses and damages incurred in the flood, the State Government put forth a requirement of about Rs.38.000 crore for the reconstruction. In spite of the requests made by the State, it received Rs. 3048 crore only as central grant, which is far less than the State's requirement and expectation. Moreover, the Centre rejected clearance to receive foreign assistance offered by some of the Middle East Countries. These reasons compelled the State to find other sources of revenue. The implementation of the Goods and Services Tax (GST) limited the State's autonomy over the additional revenue mobilisation through tax. Hence, the State approached the GST Council, which is a constitutional body for making recommendations to the Government on issues related to GST, seeking permission to levy cess. Kerala became the first state to approach

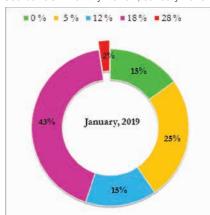
the Centre requesting for cess under Article 279,4(a)(f) of the Constitution that permits State Government to raise additional resources during any natural calamity or disaster.

The 30th GST Council meeting has decided to set up a seven-member Group of Ministers (GoM) to look into Kerala's demand in detail. After deliberate discussions, the GoM, under the chairmanship of Sushil Kumar Modi, decided in favour of Kerala. Subsequently, the 32nd Council meeting held on 10 January 2019 permitted the State Government to levy 1 per cent calamity cess applicable only on retail transactions within the State for two years. The cess should be levied on the goods and services coming within the GST brackets of 12, 18 and 28 per cent, and a 0.25 per cent cess on all goods coming under the fifth schedule of GST, including gold, silver and platinum ornaments, on the value of supply for a two-year period. However, the Government decided to exempt commodities like rice and vegetables drawing 5 per cent GST to

avoid price hike of essential goods. Similarly, restaurant services drawing 5 per cent of GST were also exempted to prevent the price hike of hotel food. Moreover, the KFC is not applicable to the firms, which opted composition scheme.

The share of goods and services coming under various tax slabs is given below:

Source: GST Monthly Review, January 2019.



The State was compelled to extend the date of implementation of KFC twice due to the amendment required in the Central Goods and Services Tax (CGST) Act. The cess should be included in the value of supply of goods or services or both as per Section 15 of Central and State Goods and Services Tax Act. It means there should be a cascading effect, which is against the spirit of GST. The State Goods and Services Tax (SGST) Act was amended through the Finance Bill of 2019--20, and the State approached the GST Council to make necessary amendments in the CGST Act to avoid the cascading effect of tax due to the implementation of cess. The 35th GST Council held at New Delhi on 21 June 2019 has decided to amend the CGST Rule as requested by the state. A new section, 32A, was inserted to provide that the value of supply of goods or services or both on which KFC is levied only on the value of goods or services or both. Hence there is no cascading effect of tax due to the implementation of cess. For instance. if someone buys a product with value of Rs.1000, the KFC calculation is as follows:

- Rs. 1000.00 Sale value **CGST @ 9%** - Rs. 90.00 SGST @ 9% - Rs. 90.00 KFC @ 1% - Rs. 10.00 - Rs. 1190.00

Under Rule 61 of the Kerala GST Rules 2017, all taxable person liable to pay the cess should file a monthly return in form 'KFC- A' on or before the due date for filing of GSTR-3B return. C



he Department of Cooperation had executed projects worth Rs.9.46 crore to rehabilitate families in Malappuram who had lost their properties and livelihood.

As many as 87 houses had been constructed under the Care Home project in the district, and 82 houses had been handed over to the owners. Houses are being built for 90 flood-affected families as part of the project.

RS.36.80 CRORE SPENT BY THE AGRICULTURE DEPARTMENT

The Department of Agriculture had spent Rs 36.80 crore to revive the farming sector in the district. As many as 6.95.710 farmers were given assistance in one form or the other. Nearly 19,078 farmers who lost crops were given Rs.28.26 crore as compensation.

PROJECTS RESTORED

As many as 36 projects, which were damaged due to the deluge, out of 41 projects coming under the Kerala Water Authority's PH Division had been restored. Close to 33 works that were under Rs 1.50 lakh were included in the State Disaster Mitigation Fund and the State Government approved Rs 13.52 lakh for the same. Money was released from the State Disaster Mitigation Fund and by the State Government for the eight works that were above Rs 1.5 lakh. Later, 34 works were completed in a time-bound manner and all the drinking water projects are functioning without a glitch. The work relating to changing the pumping main of the Mundavilpadi drinking water supply project at Kootilangandi and repairing of the well and pumping house of the Edakkara drinking water supply project has been completed.

DEPARTMENT PROVIDES RS.46.58 LAKH ASSISTANCE

The Animal Husbandry Department had approved aid of Rs 46,58,852 lakh to the farmers in the district. As many as 697 farmers got financial assistance in the district. The Animal Husbandry Department suffered a loss of Rs 5,64,27,636 due to floods in the district. Financial aid was given to eligible farmers after sourcing Rs 10 lakh from the district collector's fund. Apart from this, the department had also distributed free of cost 83 cases of milk powder, one load of cattle feed and medicines to various flood relief camps for cattle.

TOURISM: RS.10 LAKH WORTH OF WORKS COMPLETED

Works to the tune of more than Rs 10 lakh had been completed in ten tourism centers in the district. The restoration works



had been carried out at Adyanpara, Vandoor town square, Vaniyambalam town square, Minipampa, Cherumbu eco-village, Keralamkundu waterfalls, Nilayoram park, Padinjarekara beach, Kottakunnu park and Santhitheeram park. An amount of Rs 20 lakh had been sanctioned from the relevant fund to rebuild various tourism centers in the district. The total work completed around the cost Rs.10,26,382.

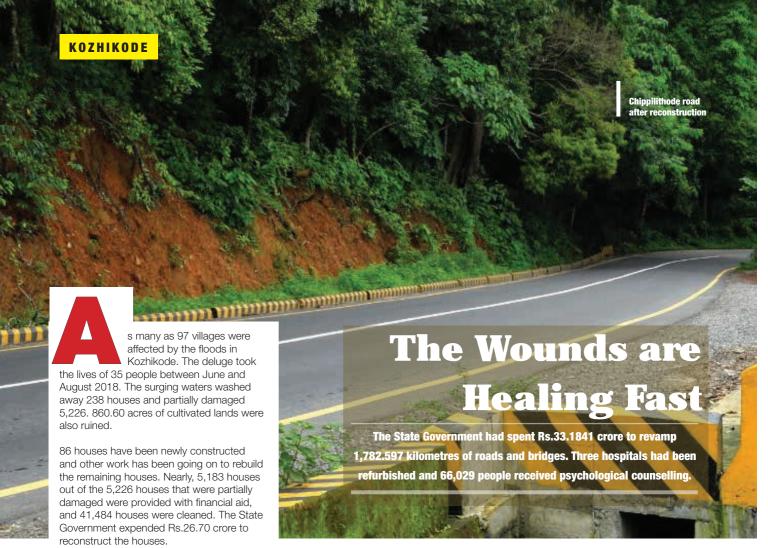




SUCCOUR TO THE FISHERFOLK

The Fisheries Department released Rs.1,69,000 to fishermen who lost their fishing equipment in the district. An amount of Rs.4,40,025 lakh had been distributed to fishermen through Matsyafed to fix boats that were damaged during rescue operations. Twelve fishermen got compensation. An amount of Rs.27,42,982 for 334.51 hectares of land had been approved for farmers who suffered losses in fish farming.

The floods had inflicted a loss of Rs.437 lakh on the district's inland fishing sector. In order to overcome this precarious situation, the Fisheries Department had announced restoration packages for integrated carp fish farming, integrated fish farming, Assam Ribbon fish farming, Re-circulatory Aquaculture System and integrated saltwater fish farming. As part of the 'Oru Nellu Oru Meen' project, an amount of Rs.22,05,160 had been approved for nine paddy fields.



Close to 2,311 women got loans through Kudumbashree, and Rs.20.14 crore was channeled for this purpose. An amount of Rs.4.7632 crore had been disbursed to small scale enterprises and shops to tide over the crisis. Assistance had been given to 23,115 farmers following crops losses. As many as 90 farmers got aid to remove mud and sludge. About 14,954 farmers also got help through the Horticulture Flood Special Package. An amount of Rs.3.23 crore had been spent to revive the agriculture sector.

Nearly, 289 people received assistance in the animal husbandry sector. 11 transformers, 769 electric poles had been replaced and 9 power connections restored along with 47.61 kms of electric lines. The State Government had spent Rs.65.5 lakh in the power sector in the district.

1,782.597 KMS OF ROADS REVAMPED

The State Government had spent Rs.33.1841 crore to revamp 1,782.597 kilometres of roads and bridges. Three hospitals had been refurbished and 66,029 people received psychological counselling. A new building with state-of-the-art facilities is being constructed for the Kakkodi primary health centre in an acre at a cost of Rs.3.5 crore.

13 flood-affected anganawadis are being rebuilt and educational assistance was given to 1,550 students who had lost study materials in the deluge.

As an emergency financial aid Rs.10,000 each was distributed to 25,223 families. The State Government had spent Rs.25.223 crore for the purpose. As many as 13,492 kits, each containing 22 essential items, had been distributed in the district.

AGRICULTURE SECTOR REVIVED

Awareness programmes had been conducted under the 'Karshika Punarjani' scheme with the aim to revive the farming sector and boost the spirits of the farmers who had been bogged down by the havoc wreaked by the floods. 'Punarjani' kits had been distributed through 12 block panchayats in a bid to restart agriculture. As part of the scheme, 49,000 saplings, 10,940 seed kits and 100 'punarjani' seed kits had been distributed to the farmers. The Agriculture Department had spent Rs 2.61 lakh for this purpose. 12 metric tonnes of paddy, 57,694 vegetable seed kits and 7,000 vegetable saplings had been distributed.

The agriculture sector incurred a loss of Rs.1,951.665 lakh in the district. The surging waters destroyed crops in 860.68 hectares

of land. The State Government had announced a moratorium of 12-18 months on current loans and extended the repayment period of current loans by 1-5 years. The Government had also provided succour to farmers who lost domestic animal and farming equipment in the floods.

New loans had been sanctioned, as per the requirement, to purchase cattle, farming equipment and to meet other agriculture needs. The loans had been released without any collateral security or guarantee.



Around 1,06,080 litres of milk were sourced through 253 dairy groups in 2017-18 in the district. But, there was a spike of 11 percent in the daily procurement of milk at 1,18,200 litres in 2018-19. Through this, the villages are yearly getting Rs.152 crore. The Dairy Development Department has pumped Rs.4.98 crore for the sector.





SALIM AND SAREENA MOVES TO THEIR NEW HOUSE WITH POIGNANT MEMORIES

A new light of peace and calmness reflects in the face of Abdul Salim while standing in front of his newly constructed house at Karincholamala, Kozhikode district. Salim had lost his two children in the landslide occurred during the deluge. Salim's family including five members was saved as a result of two long hours of rescue operations. Eventhough, Salim's wife Sareena and his son Muhammad Sammas had a narrow escape, the flood had taken the lives of Dilsha and Muhammad Shanas, their children.

As they were not able to reconstruct a new house in the landslide prone area, they bought a new land with the financial assistance of Rs.6 lakh by the Government. Salim also got financial aid of Rs.4 lakh for the construction of new house from the Government. Along with the help of NGOs, they were able to build a new house within a year. They are planning to move to their new house in this month itself. Salim has been advised to take two years of bed rest as his backbone is injured badly in the landslide.



SAFEEDA (ERNAKULAM) THANKFUL TO THE STATE

By CV Kavitha (Information Assistant, Ernakulam)

In the prolonged rain, the water first reached the surrounding fields though it was ignored as a normal rainy season flood. Unfortunately, the water levels escalated within minutes. The roads and paths were submerged and water gushed into their house sinking the stairs. It was then that Safeeda and her family realized that it was no ordinary outburst but a disastrous deluge to come. By that, they came to know about the relief camps at the nearest possible distance. Safeeda, with a bun in the oven, escaped to the camp along with her husband Shafeeq and parents, leaving all their precious goods in the flood.

The ground floor of the house where Safeeda took shelter filled with water. She had to spend three days with an elderly relative on the top floor of the house, leaving no other option. She could just listen to the sound of water flowing around. Long lightless nights with terrors surrounded. At long last, a rescue boat of the Indian Navy came to the rescue operations. After much hard work and suffering, Safeeda was finally located by the Navy forces.

Safeeda gave birth to a girl child, Amina Ifra on October 18, 2019. It is not known to Safeeda about who all helped her that day. All were unfamiliar and faceless to her. Safeeda and her family pays her gratitude to the State Government, other officials and fishermen who had sacrificed, had lent a helping hand to bring back people like her to life; saved the state from being devastated by the flood.



ocal Institutions and district authority had excellently worked to facilitate compensation to those deprived of shelters, land, farming, other livelihoods, and bringing comfort to those who are affected by the flood. There were 30 camps in Iritty and Taliparamba taluks to accommodate the flood victims. Nearly, 2615 people from 825 families were displaced to these camps. District authorities and local bodies have won in facilitating better treatments for the flood victims, such as food, clothes, medicines and so on. The authorities also succeeded in giving emergency financial help of Rs.10,000 at that time which was announced by the Government. In addition, 649 emergency kits containing 22 items and 176 kits worth Rs.500 were distributed to the flood victims.

In the flood, 173 houses were completely demolished and 1422 houses were partially damaged all around the district. Of these, 33 families lost their homes and lands. Construction of 20 houses has been completed and have been handed over through Care Home Project. In addition, 19 houses have been also completed. The State Government, along with Hindustan Unilever Limited has begun the construction work of 15

houses on an acre of land at Vilamana worth Rs.35 lakh, for those who have lived in unclaimed lands at Kiliyanthara.

The involvement of the fishermen in the district was very significant. Food items, clothing, stationery and medicines were flowing from various parts of Kannur to the district administrative center. 162 lorry of loads has been received to the Collectorate and the Taluk Center.

The first installment has already been issued for 119 homes. Of these, 78 people have received second installments and 45 have received third installments. The disbursement of financial assistance had done to 1422 persons whose houses were damaged. Last year, 31 people lost their lives due to floods and monsoons in the district. The Government also timely provided financial assistance of Rs.4 lakhs to their families.

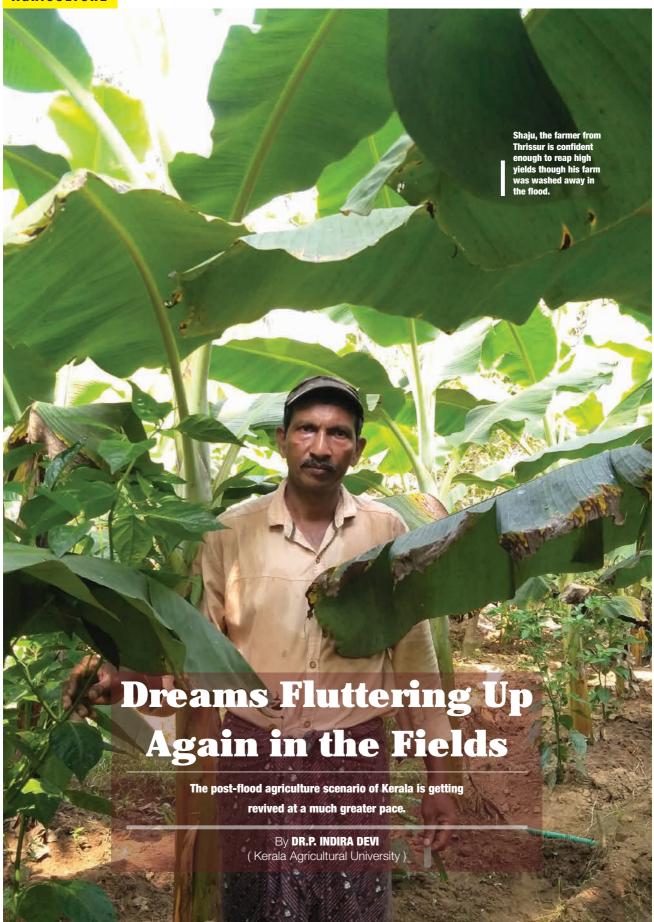
The destruction of 996 hectares of farmland in the floods affected 8473 farmers. They

nave already been given financial assistance of Rs.6.5 crore. In addition, 2259 people were provided with crop insurance, 132 people were aided for land mud removal, 15,000 were provided rice seeds and 11,522 were given aid for soil conservation. In addition, 6743 farmers received financial assistance under the Horticulture Flood Special Package.

The 2,259 km of roads and two bridges that were damaged in the floods were reconstructed. The KSEB has restored 5 transformers, 856 posts and 9088 km of the affected lines at a cost of Rs 45 lakhs. In order to cover the damages caused by the flood, 22 women have been given a loan of Rs.19 lakhs as a family assistance and Rs.63 lakhs for 14 persons were provided through the livelihood support scheme.

The Irrigation Department has started work in 54 places to construct protective walls for rivers that had changed course during the flood. In addition, the Minor Irrigation Department has also prepared 166 various projects worth Rs 8.37 crore for protection of canals. Funds for 39 people who lost their livestock and crib have already been distributed.

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loods of 2018 had impacted all sectors of life and left strong, haunting memories in the minds of all. For most of us, it still hurts because the rains did not bring joy. The crisis teaches us lessons to learn and shows us, models of care, selflessness, hope, courage, positive attitude and revival, to follow on. The farmers of Kerala themselves became the best models and showed us ways of facing challenges and re-emerging from the ashes, like the mythical bird Phoenix. They sprang into action once they were back in their homes, after the floods.

The farmers explored every available option in order to resume farming, like starting the subsequent crop, rescuing the standing crops, planning the future course of action for reviving agriculture, and so on. The farmers of Kuttanad wanted the bunds to be strengthened, and water to be drained. They were ready to start the farming operations and go ahead with the cropping activities. The Kole farmers of Thrissur also were in the fray, ready to experiment with double-cropping possibilities, despite the hardships caused by the floods. The spirit of farming was strong; the levels of hope and confidence were high. Farmers did not brood over the past, they were focused on the future, and new hopes sprouted in their hearts like new blooms after winter. These are lessons to be learnt from our farmers. lessons of life and lessons for life. Let us look up to our farmers as models for our life attitudes – all positive. They learn from nature.

WHAT ABOUT THE DAMAGE TO THE AGRICULTURAL SECTOR? It is to be seen not only in terms of the value of crop loss, which is direct and visible. It includes indirect effects as well as short- and long-term damage. The direct damage, however, is easily recognised, as it is immediate and visible. The 2018 floods ravaged the land. Crops ready for harvest were lost irretrievably. The rice fields were flooded, making it impossible to start the next crop on time. Many coconut palms were uprooted and farmlands were washed away. The vegetables grown for the Onam season were all gone.

Indirect and long-term damage is not easily perceived. For instance, huge investments are required for rebuilding bunds in the main paddy growing areas, plugging the breaches, draining the water and removing the deposited waste and silt. Though floods are known to improve soil structure due to organic matter deposits, there are reports that floods also cause nutrient leaching (especially potash) and there can be an imbalance of secondary and micronutrients. The capital assets in the agriculture sector were completely lost or damaged. The stakeholders were not



only farmers but farmworkers and market intermediaries as well.

Now, reports show that the agricultural sector of Kerala is growing!! The farming area has expanded. The Kuttanad and Kole farmers are happy with bumper harvests, the average yield estimated to be higher by 30-34 %. There are reports of productivity of even 10-12 tonnes per hectare!!! The Kole farmers had continued with the task of double cropping despite all odds. More importantly, the farmers have taught great lessons to society and set up models which we can emulate.

Floods have taught us to introspect, relook our land-use practices, cropping patterns as well as consumption and growth perspectives. We have understood that our Wayanad should remain as Wayalnadu, the natural reservoir of water flowing from hills and hillocks. The mixed cropped homesteads have to exist along with trees,

The farmers of Kerala themselves became the best models and showed us ways of facing challenges and re-emerging from the ashes, like the mythical bird Phoenix. They sprang into action once they were back in their homes, after the floods.

shrubs and grass and also the spreading undergrowth which protect our soil. The mixed cropping models of coffee and pepper suit the ecological economical safety of the region. The same is the case of Idukki district. The cardamom hills, tea gardens and homesteads were carefully designed systems to ensure ecological safety and reasonable livelihood to the residents. We have understood the worth of the traditional wisdom, which was refined through years of experience and observation, and we are humbled by the realization.

We have learnt that tourism can be promoted only if the natural beauty is protected in a sustainable manner. We have realised that Kuttanad without the green paddy fields, Idukki without spices and tea, and Wayanad without coffee and pepper, will not enchant the visitors.

We have learnt that welfare is not to be measured in terms of income alone. There are many more dimensions of human values, Nature's services, attitudes and approaches than we knew existed. It is high time we stopped counting welfare in terms of income alone and started thinking of non-monetary services of ecosystem and human value systems. While we move on to a Nava Keralam, we aim at a Nava Haritha Keralam which can be attained only through farming, which means greening not only the land but our minds too. Let the slogan "Padam onnu, ellavarum paadaththekku" [Lesson One - Let's all turn to farming] be one for all of us to follow ... forever...

Rebuilding the Water Network

The State has been in the mouth of the atrocious floods that hit Kerala last year. State Water Authority had gone through a rough patch during the deluge. The state water authority is embarking a milestone by overcoming the drastic losses and damages caused by the torrent. It was done through the timely and effective actions, that made successful the disbursement of freshwater to thousands.



By **K. Krishnankutty** (Minister for Water Resources)

he Water Authority took up the operation to get adequate fresh water to the relief camps and flood-affected areas which was considered a herculean task. About 9.15 lakh litres of freshwater was supplied to nearly 1822 regions via tanker trucks. 7 districts suffered hardships due to contaminated water resources and damaged pipelines, particularly to provide fresh water in these regions. In particular, kiosks with the capacity to hold 1000/2000 litres of water were installed in Kuttanadu and Chengannur regions. About 483 drinking water schemes were engulfed in the torrent. Within a couple of days, about 200 programmes were reinitiated. It made possible to restart production within 15 days, except the two per cent of total production.

About 26 bore wells were used to supply water in Kuttanadu taluk; four sank in the deluge. Water refinery with a storage capacity of 14 lakh litre had to be shut down for 72 hours. Water pump, motor and other machinery in several pump houses were out of order. The repairing was done on war footing as water level decreased; ensuring freshwater supply to all regions. The water is dispensed in Kuttanadu by using four R.O plants donated by Government of Telangana

ten R.O plants by Piramal Foundation and few R.O plants from Water Authority. Also, there are water reservoirs with the storage capacity of 1000/2000 litres. 8 new tube wells were made in the region. About 70 community water filters of 25 litres were given to anganwadis. With the help local self- governing bodies, about 1,10,000 jer-rycans of 15 litres were distributed to supply fresh water from kiosks to households; also ensuring 176 kiosks in association with LSGBs. Water authority directly installed 40 reservoirs/kiosks and ten new tanks in various regions. Residential chorine levels were measured in 685 points, and 1200 leakages have been identified and repaired. Water samples brought by people were examined freely, and super-chlorination was conducted in water supply schemes.

WATER DISTRIBUTION AT SABARIMALA

The Water Authority received applauses for the successful supply of drinking water in Sabarimala after floods. Pumba- Thriveni pump houses were made re-functional on a war foot basis. In addition to 40 lakh litres of water reservoir at Nilakkal, 3 steel panel tanks worth 5 lakh litre capacity, and 215 LL- DPE tanks of 5000 litres were installed. 25.75 lakh litres of water was stored and supplied, distributing 130 lakh litres of water per day. Through 39 R.O. plants, over 12 lakh litres of freshwater provided every day. It was done through 834 taps in 331 kiosks. Facilities were arranged in major zones for undisrupted water supply. Pilgrims were provided with adequate water over 12 dispensaries.

SAFE DRINKING WATER

Rs. 8503 lakhs were provided for 1661 post-flood rebuild activities and 1031 were completed. Water Authority of Kerala launched 189 rebuilding activities worth Rs. 25,832 crores. Proposals worth Rs. 11,340 crores for the major 128 schemes were submitted to RKI. 55 schemes worth Rs. 1901 crore was earmarked in flood-hit seven districts. Water supply can be provided to 55,000 families through the implementation of 12 schemes worth Rs. 301 crores.

EMERGENCY ACTION PLANS FOR DAMS

IDRB is preparing an emergency action plan draft for the 13 out of 16 dams and one barrage under the Water Department following the guidelines of Central Water Commission. Integrated reservoir operations and flood warning system are sanctioned for implementation in Pamba-Periyar reservoirs under the guidance of Australian Water Partnership and Japan Water Agencies. Rule curves of seven out of 13 dams were prepared and Flood Warning Systems will be included in the National Hydrology Project to install the same in river basins of Periyar, Chalakkudy, and the rivers flowing towards Kuttanad. A bid has been issued following the guidelines of World Bank for this purpose. The installation of instrumentation and surveillance in dams were sanctioned under the Dam Rehabilitation and Improvement Project. Real-time Data Acquisition System in 44 rivers in the state wasfreshwater providedimplementation.

RESPONSIBLY WATER DEPARTMENT

The Water Authority also faced challenges in the fury of the massive deluge. With proper operations and subsequent precautions, the agriculture sector was secured with adequate water supply. KC





ith resilience and endurance as backbone, we are slowly but surely treading the path of survival and resurgence. Concerted efforts helped us to overcome the challenges posed by the worst flooding in the history of Kerala. Though the deluge was nightmarish, we faced the adversities with equanimity, and this Kerala model was a focus of study for many countries.

Kerala was pounded by the damaging floods after the debilitating drought of 2016 and the ominous Ockchi cyclone of 2017. It was the worst flooding in nearly a century. The ground reality is that the agriculture sector of the state was wiped away in a matter of few days. The farmers, who were eyeing the lucrative Onam market, were left in the lurch. As per the preliminary estimates, the agriculture sector incurred a huge loss of Rs 1, 458.5 crore, and Kuttanad was worst hit. Farming in many regions at Alappuzha, Kottayam and Pathanamthitta bore the brunt of the surging waters. 'Viruppu' farming in thousands of hectares of land was destroyed, and the floods also dealt a heavy blow on the state's spice farming. The districts of Thrissur, Palakkad and Wayanad suffered heavy losses. The pepper cultivation of Wayanad and Idukki districts was washed away in the floods. Now, we have the arduous task of rebuilding the agriculture sector which is in a shambles.

The Agriculture Department has drawn up Rs.1,200 crore comprehensive action plan to revive farming with allocations from the Center and State Government. The plan has been prepared with stress on cultivation of paddy, plantains and vegetables. The Soil Survey and Conservation Department has presented Rs.200 crore project to conserve soil of the regions that were hit by landslips. Moreover, efforts are taken to learn more about the reasons that triggered landslips and actions have taken to study more about areas prone to landslides.

Many projects aiming to restore the agriculture, which is the mainstay of Kerala, have been presented before the Finance Department. One of the important projects include Rs.95.53 crore one to put in place 2 bio control labs and renovate the state bio control lab at Mannuthy to produce beneficial insects in a bid to reduce the dependence

UJJIVAN LOAN SCHEME

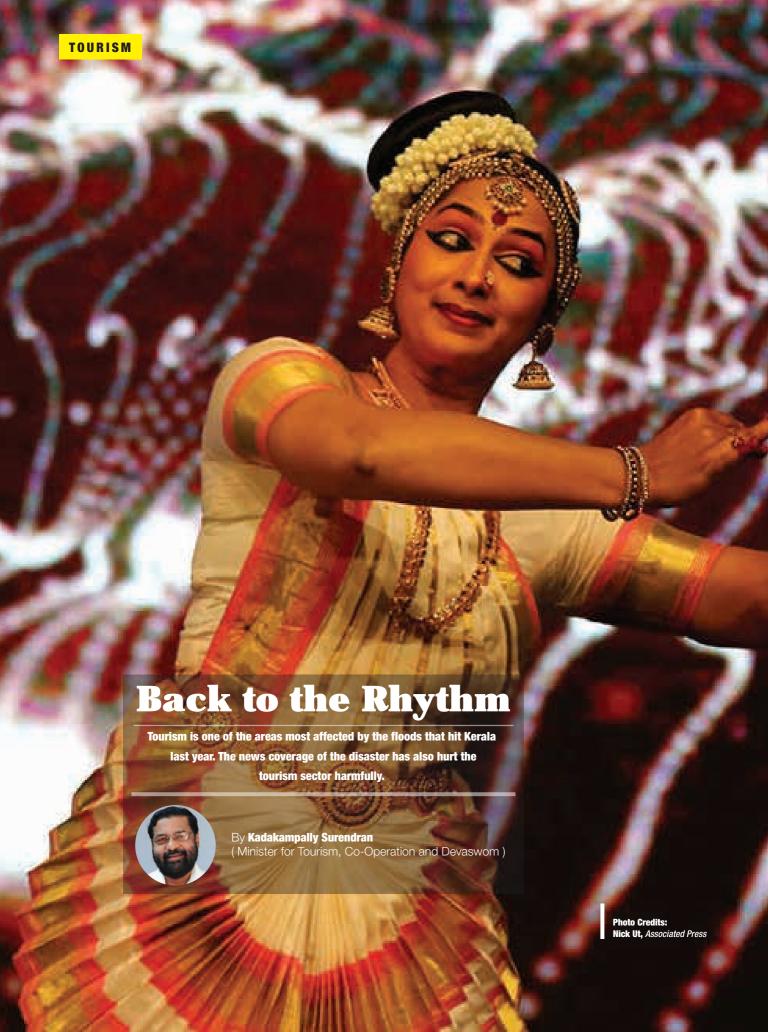
The Ujjivan Loan Help Programme launched by the State provides loans to flood affected farmers and entrepreneurs. The scheme envisages to provide financial assistance to farmers and traders to rebuild their lives. The benefits of this loan programme was availed by 298 units. The Ujjivan scheme aims to offer



assistance at various levels of repayment schedule by arranging margin money, discount on interest rate charged on the loan, and a support scheme.

on chemical fertilizers and eventually get rid of the use of chemical fertilizers in a phased manner. Other major initiatives includes establishing 4 tissue culture labs at a cost of Rs 56.86 crore; an Rs 13.38 crore project to develop value-added products from jackfruit, the State fruit of Kerala, a sustainable agriculture development project for Attappady, a special sustainable development project worth Rs 50 crore for district agricultural farm at Neriamangalam, Rs 8.462 crore for Athirapilly Tribal Valley Agriculture Project, a special project to stop flooding in wetlands to encourage paddy cultivation, operation coal double, coconut development project worth Rs 378.55 crore, Rs 2.91 crore special project for the sustainable development of Kuttanad and environmental conservation through paddy cultivation and a special project for the cultivation of pepper, paddy and plantains, among others.

Reviving coconut cultivation is an integral part of the agriculture sector revitalizing programme. State Coconut Council has been formed, and efforts are being taken on this front. Even while ruminating on the huge losses in the farming sector, we should keep in mind the value of large quantities of silt (ekkal) deposited by the great floods. The farmers can reap a good harvest, without depending on fertilizers and pesticides, if they use silt for cultivation. The excellent harvest of last season vouches for this as the farmers got outstanding produce from Kuttanad and wetlands without using much fertilizers and pesticides.





ourism is one of the areas most affected by the floods that hit Kerala last year. The news coverage of the disaster has also hurt the tourism sector. To overcome this, the Tourism Department launched a marketing campaign to tackle the downturn in tourism following the flood. As part of this, advertisements were made in electronic media, newspapers, radio and films all over the country. And also organized a special campaign on social media during this period. The department also explained the situation by calling press conferences in and out of Kerala. As a result, the situation was quickly reversed. In addition, the floods wreaked havoc on infrastructure projects created by the tourism department resulting in a loss of Rs.100 crore. Special attention has been paid to infrastructure projects, so as to bring the whole tourism centers to the previous stage.

CO-OPERATIVE SECTOR IN FLOOD-RELIEF

The co-operative sector is at the forefront of relief and was propped up in the face of the natural disaster. CARE Kerala (Co-operative Alliance to Rebuild Kerala) has announced its plan to help the flood-affected. The CARE Home Project is accelerating through the State's co-operative sector, providing a sum of Rs.5 lakh each to 2,000 families who have lost their homes in the floods. As of July 22, 2019, 1667 houses were handed over to beneficiaries. Plans are underway to provide 2000 flats in the first phase and then build another 2000 flats in the second phase.

The co-operative sector has played an integral role in the construction of the New Kerala State by providing over Rs.500 crore through co-operative banks as RKLS interest-free loans under the Care Loan Scheme.

DEVASWOM

The flood created a high degree of havoc in Sabarimala and surrounding areas. Many buildings including the Annadana Mandapom and Rama Moorthy Mandapom of Pampa and two bridges were completely damaged. Pampa had shifted its course and the vast shores of Pampa completely disappeared. The reviving of Pampa was a herculean task. The shores of Pampa were connected and the Thriveni bridge that was under the sand was recovered on war foot basis. All the roads and conservative walls that were eroded was reconstructed. The damages in Pampa accounted to about Rs.200 crores. The revival of the completely wrecked Pampa in 60 days and the setting up of a parallel base camp in

CARE HOME SCHEME

Care Home Scheme is an initiative undertook by the Government of Kerala to provide newly constructed houses to those who have lost their shelter in the deluge. This project is considered to be one of the prestigious housing schemes of the State Co-operative Department. The scheme comprises of three major components which are Care Home. Care Plan and Care Grace. The project is to be carried out through co-operative institutions which are approved by the State Level Executive Committee. The department aims at upraising the living standards of the people and to finish the construction work of 2000 houses in the state. The scheme has readied 181 houses so far and another 217 are on the final stage of construction. Care Homes are designed to outlive natural disasters and ensure stable and secure habitats.



of incomparable efforts. The Rama Moorthy Mandapom which provided shelter to the pilgrims got carried away completely. There were about 390 toilets of these 329 toilets were re-installed prior to the pilgrimage season and bio-toilets were also installed. 228 taps were installed for drinking water distribution. Over 25 Reverse Osmosis Plants were installed and uninterrupted drinking water supply restored. 7 medicated water counters were also set up in the new base camp. Dining facilities that could accommodate 3500 pilgrims at a time was also set up. 470 permanent toilets, 450 bio-toilets and 50 bathrooms were installed, and container comparts for providing accommodation for police and other officials were also set up. Two incinerators were equipped for burning solid wastes and temporary stands were set up for KSRTC buses. Individuals were given the duty to ensure the cleanliness and usability of the toilets.

Plumbing was completely reinstalled including new pipelines. 404 taps were installed in 101 kiosks for drinking water supply. The wrecked electricity lines and posts were already re-laid.





By **J. Mercykutty Amma** (Minister for Fisheries)

n fisheries sector alone, the loss was estimated to be Rs.17478 lakhs. It included loss to the tune of 13776 lakhs to inland aquaculture sector. Government farms and hatcheries sustained a loss of Rs.1898 lakhs. Livelihood of fisher folk to the tune of Rs.258 lakhs was also lost. Micro enterprises belonging to fisherwomen sustained a loss to the tune of 74 lakhs. The fishermen houses were also damaged and the loss was assessed to be of Rs.1472 lakhs

In accordance with the SDRF norms , compensation amount of Rs.1164 lakhs has been disbursed to the fish farmers and fishermen for the loss sustained to them. out

of which, an amount of Rs.22.56 lakhs has been distributed to 235 fishermen whose crafts have been destroyed fully. Rs.41.08 lakhs has been given as compensation for 1002 fishing crafts which suffered partial loss. Further, an amount of 45.44 lakhs have been disbursed to 1748 fishermen who lost their fishing nets completely and Rs.34.02 lakhs to 1620 fishermen whose nets were partially damaged. Similarly an amount of Rs 1021 lakhs have been distributed to inland fish farmers also.

Government accorded sanction for a rehabilitation package for inland aquaculture which envisages to provide financial assistance to the tune of Rs 4000 lakhs to the aqua

farmers for restarting their farming activities. Utilising fund from the budget allocation for 2018-2019 the projects have already been started implementation. Similarly an amount of Rs.39.16 lakhs has been sanctioned to provide assistance to fisherwomen groups who suffered losses during the flood.

REBUILDING THE FISHERIES SECTOR

In the context of the flood a proposal for Rs. 108660 lakhs have already been submitted to the Central Government for rejuvenating the sector. These included Rs.60000 lakhs for rehabilitation of fishermen, Rs.9991 lakhs for distribution of fishing inputs, Rs.10280 lakhs for livelihood, 3898 lakhs for renovation of fish markets, 2005 lakhs for fish landing centres, 400 lakhs for artificial reefs, 1593 lakhs for ornamental fisheries. However, the Union Government gave sanction for none, till date.

The Re-build Kerala Initiative was started in November, 2018 with the aim of giving shape to a resilient Kerala. In Fisheries sector, the Government of Kerala aim to enhance the fish availability to the masses by giving extreme thrust to sustainable development of marine capture fisheries, development of inland aquaculture, deep sea fishing and by reduction of wastage of fishes under Rebuild Kerala Initiative (RKI). RKI has identified 52 broad areas in the field of fisheries with long term, midterm and short term objectives. Among others, these include proposals principally for rehabilitation of fishermen to safer places, protection of sea shores, development of inland aquaculture, deep sea fishing, renovation of fish markets, marine cage farming, reservoir fisheries, ornamental fisheries, setting up of one stop aqua shops, artificial reefs, e- marketing of fishes, dredging at fishing harbours and landing centres etc. Detailed project reports for some of the projects have already been made. Under the RKI, an amount of Rs.1398 crores have been allocated for comprehensive rehabilitation of fishermen families who live within 50 meters distance from HTL of 590 km long Kerala coast. Around 18,865 fishermen families will be rehabilitated beyond 200 meters of distance from sea coast, for which each family will get Rs.10 lakhs for purchasing 2-3 cents of land and building house of their own there. A sum of Rs.3.2 crores have also been allotted for cage fish culture in the reservoirs of Kerala under RKI. The fisheries sector of the State will be revamped in a way to meet any future challenges within next three years. KC



hey are the brave hearts who wrote a new chapter in history with their oars, in the face of a disaster. With the same care that they take to unfurl their nets out in the sea, they extended their arms, pulled out tens of thousands of drowning people and brought them back into life. They scooped up the flood-inundated state of Kerala in the hollow of their palms and deposited it on dry shores. Fisherfolk came to the rescue when floodwaters crashed into houses like waves and submerged districts; Kerala will never forget these angels. Mirroring the intense

rescue efforts in a battlefield, they, along with the military, saved more than 70,000 lives.

Many marooned people had sought refuge on the upper storeys of their houses, taking with them the elderly and the new-borns. Disregarding their own safety, the fisherfolk swam in to rescue these people and took them to shelters. The fisherfolk defeated the overpowering floods with their unity and inner strength. Chief Minister Pinarayi Vijayan called them Kerala's very own army. The State honoured this rescue team at a special function organized at Kanakakunnu Nishagandhi

Auditorium. Shashi Tharoor, M. P., recommended them for the Nobel Prize.

Around 700 fishing vessels from Kollam, Thiruvananthapuram, Alappuzha, Ernakulam, Thrissur, Malappuram, Kozhikode and Kannur districts contributed to the unprecedented scale of rescue operations in the state. Almost 3,000 fisher folk arrived to search for and save people trapped under the floodwater, risking their own lives. It was on seeing coracles being used in Aluva for rescue efforts, that the fishermen set out to save the stranded people with their boats.

JAISAL - A PICTURE THAT GARNERED ADULATION

During the deluge, picture of Jaisal triggered ovation all over the world. To this day Kerala remembers this fisherman, Jaisal, who offered his back as a step for women struggling to board a rescue boat. Felicitations and public receptions were hosted in his honour. The gifts Kerala gave helped him move out from a tarpaulin-covered, leaky, single-room dwelling into a two-storeyed house.

"I had not set out expecting anything in return. At that time I was not able to do anything else. When I came to know that I was of help to many people I felt happy. Isn't being a stepping stone the easiest job to do?" These are Jaisal's words.

Jaisal and his team rescued around twenty families during the flood. This fisherman still remembers the faces of many who cried and clung on for dear life.

"We had arrived there hearing that a woman among the group was bleeding. She had to be rescued somehow. On reaching, we sensed that the situation wasn't very good. It was difficult to endure the cries of many. Aged people were not able to walk or clamber onto boats. It was when the height of the boat became a hindrance to many that I got the idea of offering my back as a step. Even when the full weight of people came on me, I bit down the pain. We had reached there after wading through even bigger pains — that was the thought that gave me courage during the time. Many were unaware of what they were doing in a bid to save themselves. Some stepped on me wearing footwear. Certain others reminded them to remove their slippers. But they might have forgotten that I too was human. I have no complaints. Maybe they did it in their tense state. It was later when I saw the video I understood that what I did was important," Jaisal remembers.





n 2018, a dark mark fell upon Kerala, witnessing the worst flood disaster in nearly a century after 1924 due to unusual high rainfall during monsoon. Over 483 people died, 140 are not found. One-sixth of the total population of Kerala had been affected by the deluge and relat=ed incidents; the state had been placed on red alert. For the first time in history, 35 dams out of the 54 in the state were opened. Heavy rains in districts of Idukki and Wayanad caused severe landslides where several families lost houses and lands.

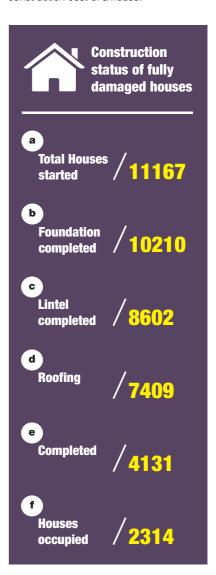
The State Government took effective measures immediately to manage this catastrophe. The Government had taken immediate action plans to rebuild Kerala from this natural calamity. The effective coordination of Government and non-governmental agencies, public and various levels of people by the State Government made Kerala recover from this tragedy within a short period.

As per the primary statistics, 15,473 houses were completely damaged. The final date for the reception of application for the damaged houses in the flood was extended till 30th June. These houses are rebuilt by families themselves through sponsorships. For reconstruction, the Government has sanctioned financial assistance of Rs 4 lakhs per family. In case of self-construction houses, this financial assistance is transferred directly to the beneficiary's bank account on instalment basis as per the stages of completion; 25% on the beginning, 50% on completion of foundation and 25% on completion of the lintel, respectively.

The Government of Kerala, very much responsible in monitoring the construction progress, entrusted the LIFE Mission (which implements the total housing mission in the state) to monitor and facilitate the construction of flood-affected houses in the state. Life Mission holds objectives to monitor and report the progress of reconstruction of fully damaged houses. It assists sanction from various agencies and the provision of building materials and manpower at minimum cost. Appropriate materials and technologies are advised upon by Life Mission to create awareness on the resilient and eco-friendly construction.

In order to facilitate these activities, under the monitoring of District Mission Offices, LIFE Mission initiated facilitation hubs in coordination with the affected blocks. These facilitation hubs operating in block offices consists of civil engineers, technical assistants and field staffs. To record the progress of each and every fully damaged houses under construction, a mobile application was developed. The field staffs in the facilitation hubs visit these houses and beneficiaries once in a month and records the construction progress in the mobile app with its recent photograph.

Many companies in the construction field with alacrity has offered their products like hardware, sanitary wares, plumbing and wirings items on a subsidised rate up to 60% to the beneficiaries of Rebuild Kerala. We hope this initiative itself can save a minimum of one lakh rupees upon the construction cost of a house.



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keralacalling@gmail.com KERALA CALLING AUGUST 2019

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