



Govt of Kerala



WATER **HYGIENE** **HARVEST**

HARITHA KERALAM MISSION STRIDING TOWARDS A GREENER KERALA

**STRIDING TOWARDS
A GREENER KERALA**

Chief Editor

Dr. T.N. Seema

State Coordinator

Navakeralam Karmapadhathi

Vice Chairperson

Haritha Keralam mission

Accomplishment

Team Haritha Keralam Mission

Coordination

B. Manoj

Public Relations Officer

Haritha Keralam Mission

Cover, Layout

Fousia P.A.

Typesetting

Rajani V.S.

Publication

Haritha Keralam Mission

Uppalam Road, Statue

Thiruvananthapuram 01

Phone

0471 2449939

E-mail

navakeralamgok@gmail.com

www.haritham.kerala.gov.in

Printing

Gramalekshmi Mudralayam

Copies : 500

February 2026



Forward

Sustainable and eco-friendly development is the core policy of the State. The objective is to organize development activities without polluting the earth, soil, air, or water. A sustainable development perspective is vital for restoring the ecological balance of Kerala. In 2016, the Haritha Keralam Mission was established with the goal of fostering sustainable intervention in the environmental sector.

Kerala is the only state in the country to operate a dedicated mission-based system like Haritha Keralam for environmental restoration. The Mission carries out critical environmental responsibilities, including protection of water resources, scientific waste management and Conservation of biodiversity. To combat the new challenges posed by climate change, the government has formulated the Mission's activities as extensive interventions starting from the local level.

Under the leadership of Local Self-Government Institutions (LSGIs), the Haritha Keralam Mission executes projects by mobilizing the public, prioritizing both environmental science and conservation. The Mission ensures community participation based on the conviction that a balanced relationship with



the environment is not just an individual need but a collective duty of society. It has already organized numerous public programmes aimed at cultivating a culture of environmental responsibility.

Environmental restoration and nature conservation are primary factors determining sustainable development. The link between the economy and natural resources is as inseparable as the live bond between the soil and humanity. The Government proposes a development approach that views humans as part of nature, balancing the environment with progress. This is the exact methodology followed by the Haritha Keralam Mission.

Despite overcoming many crises, we cannot ignore certain socio-environmental issues we face as a modern society. Key among these are: Sanitation and waste management, Climate change and its associated problems, The necessity of reaching Net Zero Emissions (Carbon Neutrality), Clean water in water bodies and free-flowing streams and rivers, Environmental restoration activities.

This book has been prepared to assist Local Self-Government Institutions in advancing toward these goals by highlighting the scientific and community-based methods adopted by the Haritha Keralam Mission.

Dr. T.N. Seema

State Coordinator

Navakeralam Karma Padhathi &

Vice Chair Person

Haritha Keralam Mission



CONTENTS

Haritha Keralam Mission.....	07
Haritha Keralam Mission: Structure.....	13
Haritha Keralam Mission : Objectives.....	18
Haritha Keralam Mission : Main Activities.....	21
Major Campaigns.....	24
Public Participation.....	33
Haritha Keralam Mission: Operational Achievements at a Glance.....	35
Haritha Keralam: Future Perspective.....	47





HARITHA KERALAM MISSION

The Haritha Keralam Mission is one of the four flagship missions established by the State Government to build a "Nava Keralam" (New Kerala) through all-encompassing development activities. Launched on December 8, 2016, the mission focuses on sanitation, water abundance, water security, and the production of safe food. It has already succeeded in creating significant changes across various sectors to ensure the ecological sustainability of the state. The mission's objectives are clearly defined in its unique motto: "Water, Cleanliness, and Harvest."

Through the Haritha Keralam Mission, the State Government aims for interventions that restore the biological bond between nature and humanity in a contemporary context. The mission operates with the perspective that environmental restoration must be carried out by understanding the underlying "politics of the environment." All actions that transform nature, including agriculture, must be performed in a way that preserves it. We no longer live in an era where farming can be done simply by following traditional seasons; therefore, we must confront the adverse effects of climate change with a sense of social responsibility.

The Haritha Keralam Mission strives to revive and protect the hills, forests, backwaters, rivers, streams, marshes, and paddy fields that play a decisive role in Kerala's environment. The impact of greenhouse gases and climate change, leading to rising atmospheric temperatures, is becoming a threat to the very existence of life on Earth. Even the collapse of a tiny ecosystem can trigger severe environmental consequences and the loss of our indigenous resources. It is by incorporating these micro-details that environmental restoration activities are being organized under the leadership of the Haritha Keralam Mission, marking it

as a top priority sector for Kerala.

The positive results of activities conducted both directly and through Local Self-Government Institutions (LSGIs) under the coordination of the Haritha Keralam Mission are now evident across the state. These include diverse initiatives such as "Net Zero Carbon Kerala through the People," the creation of Pachathuruthu (green islet) by ensuring local biodiversity, various water conservation projects like "Ini Njan Ozhukatte" (Let Me Flow Now), and innovative interventions in the field of waste management.

The role of the water sector is critical in environmental restoration.



Alongside development in sectors like tourism, employment, education, health, pilgrimage, and industry, the demand for water in Kerala is steadily increasing. It is estimated that by 2031, the state will require 47,800 million cubic meters of water. Any decrease in water availability primarily impacts the environmental sector and vulnerable populations.

In light of this situation, the Haritha Keralam Mission is proposing a Strategic Vision Document to ensure the water sector's support for Kerala's developmental progress. The key subjects addressed in this document include; Water conservation and resource management, The reclamation of water sources, Water quality, Policy decisions required for the future. By maximizing the potential of modern technologies for water resource management, this document will serve as a vital component in the creation of a Nava Keralam (New Kerala).

To reclaim Kerala's agricultural culture and greenery, the state government and the Haritha Keralam Mission are leading development activities centred on nature conservation. The methodology adopted here is a model worthy of emulation by the entire country, as the environment is fundamental to the journey toward Global Sustainable Development Goals.

The Haritha Keralam Mission is composed of three sub-missions related to water conservation, sanitation/waste management, and agriculture. While activities are implemented at the ground level under the leadership of Local Self-



Government Institutions, the Haritha Keralam Mission primarily functions as a coordinating support system, bridging various departments and agencies with the LSGIs.

SUB-MISSIONS

Soil and Water Conservation (Water Abundance)

Kerala is a land blessed with abundant water, considering the high volume of rainfall it receives. However, despite this, most parts of the state face severe drought and water scarcity for more than three months a year. Alongside this paradox, the issue of existing water sources being polluted remains a persistent challenge. Furthermore, many water bodies that could be utilized for agriculture and drinking water are currently falling into ruin and becoming unusable. The Water Conservation Sub-Mission of the Haritha Keralam Mission operates with the goal of finding solutions to all these issues and ensuring water security for Kerala.



The primary objectives defined for this sub-mission are:

- Planning and implementing water conservation activities based on an integrated watershed management approach.
- Developing a water-use culture centered on frugal consumption and exploring the possibilities of wastewater recycling.
- Ensuring water security and ecological sustainability while keeping future generations in mind.
- Maintaining, cleaning, and renovating existing water sources.

To achieve these goals, a wide range of activities are being implemented, including:

- Reviving depleted water sources.
- Well recharging and utilizing abandoned quarries as water reservoirs.
- Maximizing groundwater recharge by directing water into the soil.
- Strictly enforcing legal actions against water pollution.



- Ensuring water security through Water Auditing and Water Budgeting.
- Setting up systems to monitor and test water quality.

Over the last nine plus years, significant changes have begun to surface as a result of numerous activities led by Local Self-Government Institutions, effectively utilizing the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). By moving forward without losing the momentum of these initiatives, it will be possible to restore the historic water abundance of Kerala.

Sanitation and Waste Management Sub-Mission

A long-standing challenge faced by Kerala is the discrepancy between the high level of vigilance maintained in personal hygiene and the lack of similar concern for public sanitation. As a region undergoing rapid urbanization, Kerala faces several unique challenges that exacerbate the waste problem, such as limited land availability and high atmospheric humidity. This issue can only be resolved by scientifically planning and implementing activities from the point where waste is generated to the point where it is safely



processed. The Sanitation and Waste Management Sub-Mission of the Haritha Keralam Mission work specifically for this purpose.

The Suchitwa Mission (Sanitation Mission) acts as the technical arm of this



sub-mission. Together, the Haritha Keralam Mission and the Suchitwa Mission provide the necessary technical support to Local Self-Government Institutions (LSGIs) to resolve waste management issues.

The primary objectives established for this sub-mission include:

- Fostering civic awareness regarding waste management.
- Creating a "waste management culture" that includes reducing waste generation and scientifically segregating and safely disposing of the waste that is produced.
- Assisting Local Self-Government Institutions in finding solutions to complex waste management challenges.

To achieve these objectives, several key activities are being implemented:

- Decentralized Systems: Implementing mechanisms to process organic waste at its source.
- Inorganic Waste Management: Cleaning, segregating, and collecting non-biodegradable waste to be handed over for recycling.
- Liquid Waste Management: Establishing systems for the effective treatment of liquid waste.
- Enforcement: Taking strict legal action against polluting activities, including littering, burning waste, and discharging waste into water bodies.
- Green Protocol: Widely implementing the Green Protocol in waste management practices.



Through the activities of the Sanitation and Waste Management Sub-Mission led by Local Self-Government Institutions, significant strides have been made toward the government's declared goal of transforming Kerala into the cleanest state in India.

Agriculture Sub-Mission

The Agriculture Sub-Mission of the Haritha Keralam Mission was established



to facilitate activities necessary for the self-sufficient production of safe food through agricultural development, with a primary emphasis on organic farming.

The specific objectives set for this submission are:

- Achieving self-sufficiency in the production of vegetables, paddy, and fruits.
- Promoting organic farming by utilizing fertilizers produced from organic waste.
- Expanding cultivation to all currently fallow lands.
- Modernizing and reforming the agricultural marketing system.

To achieve these goals, a variety of initiatives are being implemented, including:

- Expanding the area of paddy cultivation from 2 lakh hectares to 3 lakh hectares.

- Creating "Fallow-Free Villages" (Tharishu Rahitha Gramangal).
- Establishing "Haritha Samrudhi" (Green Prosperity) wards.
- Expanding agriculture in coordination with the cooperative sector.
- Promoting farming in collaboration with industrial establishments and places of worship.



- Utilizing modern technologies in the agricultural sector.
- Developing value-added agricultural products and expanding their market reach.



2

HARITHA KERALAM MISSION: STRUCTURE

The Haritha Keralam Mission is a vital component of the Nava Keralam Karma Padhathi 2 (New Kerala Action Plan 2), established by the State Government for the rebuilding of Kerala.

The Chief Minister serves as the Chairperson of the Nava Keralam Karma Padhathi. The Haritha Keralam Mission itself is comprised of three sub-missions focusing on water conservation, sanitation/waste management, and agriculture. The Mission's activities are primarily executed under the leadership of Local Self-Government Institutions (LSGIs), with organizational structures existing at the State, District, and Local levels.

Administrative Framework

State Level:

- Chairperson: The Minister for Local Self-Government Department (LSGD).
- Co-Chairpersons: The Minister for Agriculture and the Minister for Water Resources.
- Vice Chairperson: The State Coordinator of Nava Keralam Karma Padhathi 2.



District Level:

- Chairperson: The Chairperson of the District Planning Committee (DPC).

Local Level:

- Corporations/Municipalities: The Mayor or Municipal Chairperson serves as the head of the Mission.
- Grama Panchayats: The Grama Panchayat President leads the Mission.

Coordination Mechanism

The Haritha Keralam Mission functions as a coordinating support system that bridges various government departments and agencies with Local Self-Government Institutions. To facilitate this, the Mission maintains:

- A State-level office.
- District Coordinators at the district level.
- Resource Persons/Block Coordinators with specific responsibilities at the Block and Municipality levels.

Haritha Keralam Mission: State Working Committee

- Chairperson: Minister for Local Self-Government Department
- Co-Chairpersons: Minister for Agriculture; Minister for Water Resources
- Vice Chairperson: Coordinator, Nava Keralam Karma Padhathi-2
- Secretary: Additional Chief Secretary

/ Principal Secretary / Secretary, Local Self-Government Department

- Convener: Assistant Coordinator, Nava Keralam Karma Padhathi-2

Members

- Additional Chief Secretary / Principal Secretary / Secretaries of Agriculture and Water Resources Departments
- Director, Health Department
- Executive Director, Kudumbashree
- Director, General Education Department
- Director, Department of Agricultural Development and Farmers' Welfare
- Director, Soil Survey & Soil Conservation
- Mission Director, MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme)
- Director, Department of Industries and Commerce
- Director, Fisheries Department
- Director, Animal Husbandry Department
- Director, Dairy Development Department
- Director, Tourism Department
- Director, Department of Environment and Climate Change
- Director, Ground Water Department
- Mission Director, State Horticulture Mission



- Managing Director, VFPC (Vegetable and Fruit Promotion Council Keralam)
- Managing Director, KLDC (Kerala Land Development Corporation)
- Managing Director, Kerala Agro Industries Corporation
- Executive Director, KRWSA (Kerala Rural Water Supply and Sanitation Agency - Jalandidhi)
- Director, CWRDM (Centre for Water Resources Development and Management)
- Managing Director, Clean Kerala Company
- Commissioner, Rural Development
- Commissioner, Land Use Board
- Managing Director, Kerala Water Authority
- Director of Panchayats
- Director, Urban Affairs Department
- Chairman, Pollution Control Board
- Chief Engineer, Local Self-Government Department
- Chief Engineer, Irrigation Department
- Principal Chief Conservator of Forests (Farm Forestry & Social Forestry)
- Chief, Decentralized Planning Division, State Planning Board
- Chief, Agriculture Division, State Planning Board
- State Nodal Officer, ATMA (Agricultural Technology Management Agency)

- Executive Director, Suchitwa Mission

District Mission

- Chairperson: Chairperson, District Planning Committee
- Secretary: District Collector & Member Secretary, District Planning Committee
- Convener: District Coordinator, Nava Keralam Karma Padhathi-2

Members

- Members of Parliament (Lok Sabha) from the district
- Rajya Sabha MPs (in Nodal Districts)
- Members of the Legislative Assembly (MLAs) from the district
- Mayor
- Two Chairpersons nominated by the Chamber of Municipal Chairpersons
- District President and Secretary, Association of Block Panchayat Presidents
- District President and Secretary, Association of Grama Panchayat Presidents
- Chairpersons of District Panchayat Standing Committees
- Government Nominee of the District Planning Committee
- District Development Commissioner (DDC)
- District Planning Officer



- Principal Agricultural Officer
- Joint Programme Coordinator, MGNREGS
- Senior Engineer (Irrigation) of the district
- District Coordinator, Suchitwa Mission
- Deputy Director of Panchayats
- District Medical Officer (Modern Medicine)
- District Medical Officer (Indian Systems of Medicine - ISM)
- District Medical Officer (Homeopathy)
- Deputy Director of Education
- Regional Deputy Director, Higher Secondary Education
- Assistant Director, Vocational Higher Secondary Education
- Project Director, Poverty Alleviation Unit
- District Mission Coordinator, Kudumbashree
- Regional Joint Director, Urban Affairs
- Assistant Development Commissioner (General)
- Joint Convener: Nodal Officer, Local Self-Government Department

Municipality / Corporation Level Mission

- Chairperson: Mayor / Municipal Chairperson
- Secretary: Municipal / Corporation

Secretary

- Convener: Nodal Officer

Members

- All Standing Committee members
- Vice-Chairperson of the Planning Committee
- Chairpersons of C.D.S. (Community Development Societies)
- D.E.O. (District Educational Officer)
- Convener, Municipal / Corporation Education Committee
- I.C.D.S. Supervisor / Assistant C.D.P.O. / C.D.P.O. (Child Development Project Officer)
- Chairpersons, Vice-Chairpersons, and Conveners of Working Groups formed for Annual Plan preparation (specifically those for Agriculture, Poverty Alleviation, Housing, Health, Drinking Water, Sanitation, and Education)

Grama Panchayat Level Mission

- Chairperson: Grama Panchayat President
- Secretary: Grama Panchayat Secretary
- Convener: Nodal Officer

Members

- District / Block Panchayat members within the Grama Panchayat area
- All Standing Committee Chairpersons



- Chairperson of the Planning Committee
- Chairpersons of C.D.S. (Community Development Societies)
- Convener, Grama Panchayat Education Committee
- I.C.D.S. Supervisor / Assistant C.D.P.O. / C.D.P.O.
- Chairpersons, Vice-Chairpersons, and Conveners of Working Groups formed for Annual Plan preparation (specifically those for Agriculture, Poverty Alleviation, Housing, Health, Drinking Water, Sanitation, and Education)



HARITHA KERALAM MISSION : OBJECTIVES

The primary goal of the Haritha Keralam Mission is to create an environmentally friendly state as part of the broader "Nava Keralam" (New Kerala) initiative. The Mission serves as an extensive public movement aimed at protecting nature and human life by making Kerala greener and cleaner. It seeks to establish a new development perspective by fully integrating and utilizing the synergies between three mutually reinforcing sectors: sanitation and waste management, agricultural development, and water resource conservation.

Central to this mission is the aim to unite society toward achieving access to clean air, pure water, and safe food. It undertakes comprehensive interventions to restore Kerala's natural wealth and acts as a vital support system to prepare the state for modern challenges such as climate change. By working to make Kerala the cleanest state in India, the Mission focuses on ensuring food security while simultaneously protecting soil, water, and biodiversity. It provides necessary support to Local Self-Government Institutions (LSGIs) to formulate and implement projects with active public participation.

The Mission takes proactive steps to foster a culture of waste management within society by adopting scientific models tailored to specific localities. This involves



launching massive public campaigns to implement waste management projects that prevent the pollution of land, soil, water, and air. It empowers LSGIs and the community to identify and execute essential environmental restoration tasks. In the agricultural sector, the Mission encourages self-sufficiency in vegetables and basic crops, liberating the public from pesticide-laden produce through a popular movement focused on organic farming and health-friendly food processing, storage, and distribution.

A new culture of water conservation and utilization is being cultivated among the citizens. The Mission assists LSGIs in renovating and purifying existing water sources while planning soil and water conservation activities on an integrated watershed basis to increase water availability and productivity. It ensures that modern science and technology are utilized in water resource planning and monitoring.

Efforts are also directed toward mitigating urban flooding, preventing water pollution and salinity intrusion, and removing excess silt and sand from water bodies to ensure long-term ecological sustainability for future generations.

The Mission promotes a circular economy by transforming waste management into a source of resources and employment. In accordance with state policies on solid and liquid waste management, it develops decentralized models to create a "Total Clean Kerala." This includes managing specialized waste streams such as slaughterhouse waste, hair, sanitary waste, non-recyclables, and construction debris through regional systems and private sector partnerships. Furthermore, it ensures public sanitation through projects like 'Take a Break'—providing clean public restrooms with toilet facility and the 'Litter-Free Kerala' campaign.



To achieve environmentally protected agricultural development, the Mission emphasizes the utilization of fallow lands and the expansion of integrated farming systems. It actively coordinates various departments, agencies, and voluntary organizations toward the goal of a "Net Zero Carbon Kerala." This includes protecting existing natural groves and establishing new

"Pachathuruthu" (green islets) featuring mangroves, bamboo clusters, and natural riparian vegetation. Beyond these stated objectives, the Haritha Keralam Mission remains committed to making timely decisions and taking necessary actions to ensure the continuous restoration of the environment.



4

HARITHA KERALAM MISSION : MAIN ACTIVITIES

Entering its tenth year, the Haritha Keralam Mission has catalysed remarkable transformations in Kerala's ecological sustainability by making waste management, water conservation, and agricultural expansion a central part of every citizen's life. The mission operates by identifying and resolving a critical challenge in decentralized planning: the lack of effective coordination between various government departments and Local Self-Government Institutions (LSGIs). By acting as a vital bridge, the Mission harmonizes the efforts of different agencies, ensuring that local bodies can maximize development gains through a unified support system.

A cornerstone of this mission is meaningful public participation. From the state level down to the local administrative tier, the Mission has empowered society to recognize and solve contemporary development crises. To manage inorganic domestic waste, Haritha Karma Senas (Green Action Forces) were formed across all LSGIs, currently deploying over 37,500 members for doorstep waste collection. The Mission also provides technical expertise to local bodies for scientific composting of organic waste from households, hotels, and marriage halls, discouraging littering in



public spaces. In partnership with the Suchitwa Mission, decentralized processing technologies and source-level segregation have been widely implemented through specialized training and support.

Water conservation has been addressed with equal priority. The Mission has led LSGIs in cleaning wells, ponds, rivers, and backwaters while implementing massive rainwater harvesting and well-recharging campaigns. To ensure long-term water security, integrated watershed plans have been modernized to align with the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). Utilizing the expertise of

scientific and research institutions, local bodies have developed Water Budgets and Water Security Plans. This integrated approach includes rejuvenating streams, managing catchment areas, and even utilizing water from abandoned quarries for irrigation and drought prevention.

Technological innovation has played a major role in these environmental efforts. With technical support from the IT Mission and the Rebuild Kerala Initiative, digital mapping (Mapathons) of water resources in the Western Ghats has been completed in over 230 LSGIs. To ensure public health, local water quality testing labs have been established in rural areas. Furthermore, the 'Smart Garbage App' and Management Information Systems (MIS) have been activated in every local body to monitor waste management in real-time.

The Mission's impact extends to the restoration of biodiversity and the promotion of green culture. The "Pachathuruthu" (Green islet) initiative has seen the creation of man-made forests,





mangrove plantations, and bamboo clusters on vacant lands to move toward the goal of a Carbon Neutral Kerala. To ensure these restored spaces remain protected, they are often integrated with

organic farming, aquaculture, and farm tourism. In the agricultural sector, the Mission has expanded paddy and vegetable cultivation, launched the "Devaharitham" campaign to farm on land owned by religious institutions, and successfully declared several Grama Panchayats as "Fallow-Free Villages." Through the strict implementation of the Green Protocol in government offices and tourism centers, the Mission continues to foster a "Litter-Free Kerala" as a massive public movement.



Green checkpost



50

MAJOR CAMPAIGNS

Waste-Free New Kerala (Malinya muktham Navakeralam) People's Campaign

The Malinyamuktham Navakeralam People's Campaign has paved the way for a comprehensive transformation across the state. This shift is evidenced by the increasing public awareness regarding sanitation, waste management, and adherence to the Green Protocol. As a result of citizens in both villages and cities taking the lead in campaign activities, numerous towns have achieved "Green Status." Many towns throughout the state have already evolved into "Green Beautiful Towns." The beautification, sanitation, and waste management efforts carried out in these areas—ranging from small junctions to major urban centres—have created fundamental changes in their respective localities.

The realization of Green Towns is a result of collective effort, focusing primarily on neighbourhood cleanliness, maximizing the reuse of waste materials, environmental protection, and aesthetic enhancement through plantation. These towns are made possible by ensuring that waste and scrap materials are not littered but are instead collected at designated points for scientific processing, creating maximum greenery, and ensuring water security



through eco-friendly practices. Green Towns promote a lifestyle that supports the development of both rural and urban areas without destroying nature. In this context, people's committees remain active across the state to ensure that areas that have achieved Green Status maintain it permanently.

The Haritha Keralam Mission served as the coordinating body for the Malinyamuktham Navakeralam People's Campaign, which was implemented in a time-bound manner to achieve total sanitation. Under the mission's coordination, remarkable and innovative activities were carried out, leading to Kerala being declared a fully solid waste-free state. Key components of this success include the establishment and certification of Green Institutions, Green Tourism Centers, Green Schools, Green Colleges, Green Towns, Green Neighbourhood Groups, Green Offices, and Green Libraries.

Green Protocol as a Lifestyle

The Green Protocol is becoming a fundamental component of the Malayali lifestyle. There is now a visible commitment to observing these guidelines



not just individually, but also in collective gatherings, offices, institutions, and public spaces. This adherence to eco-friendly practices is increasingly evident during celebrations, festivals, and public functions. It is widely assessed that the extensive awareness campaigns led by the Haritha Keralam Mission and other agencies have begun to yield results, highlighting the necessity of the Green Protocol in reducing waste and pursuing a nature-friendly existence.

"Ini Njan Ozhukatte" (Let Me Flow Now)

Over the past eight years, the Haritha Keralam Mission has spearheaded unprecedented and creative activities in the sectors of water conservation and water security. Under the leadership of Local Self-Government Institutions, numerous



innovative action plans have been implemented across the state, including the "Jalamanu Jeevan" (Water is Life) awareness campaign, river rejuvenation projects to breathe new life into dying rivers, the establishment of water quality testing labs, and the "Mapathon" initiative to mark watercourses on digital maps. Other pioneering efforts include the introduction of the nation's first local-level Water Budgets and the diversion of water from abandoned quarries to agricultural fields. Among these, the "Ini Njan Ozhukatte" campaign, aimed at the public reclamation of water sources and streams, has achieved remarkable success and has already completed its first two phases. The third phase of this campaign is currently progressing across the state as a critical part of the intensive public effort to restore the land's greenery, soil health, water purity, and environmental cleanliness.

Protecting the Western Ghats: Mapathons and Stream Marking

As part of the third phase of the "Ini

Njan Ozhukatte" campaign, activities to rejuvenate watercourses in the Western Ghats region have commenced. The network of streams within more than 230 Grama Panchayats in the Western Ghats has been scientifically identified and marked through digital Mapathons. The ongoing "Protect the Western Ghats" (Surakshithamakkaam Pashchimaghattam)



campaign aims to restore the flow of these streams by cleaning them through public participation. This project is expected to be significantly beneficial in mitigating the severity of landslides and soil erosion in these sensitive regions.

Quarry Water for Agricultural Fields

The project to utilize water from abandoned rock quarries is being expanded to more locations. The pilot project in Karipra Grama Panchayat of Kollam district, which successfully transported water from the Olavukode quarry to agricultural fields, has become a major success. Following this model, 14 similar projects have been launched across the state. Notable among these is the "Puzhayozhukum Manickal" (Manickal where the river flows) project in Thiruvananthapuram district, which



garnered significant public attention and serves as a model for other Grama Panchayats, along with the successful "Kabnikkayi Wayanad" (Wayanad for Kabani) project in Wayanad district.

Water Budget

A Water Budget is a formal document prepared by analysing the availability and consumption of water within a specific geographic area. Under the leadership of the Haritha Keralam Mission, Kerala has become the first state in India to prepare Water Budgets at the Local Self-Government level. To ensure regional water security, it is essential to accurately calculate water resources and requirements, which is exactly what this initiative achieves. So far, 706 Local Self-Government Institutions in the state have completed their Water Budgets, with work currently progressing in the remaining areas. As a follow-up to this initiative, a new campaign titled "From Water Budget to Water Security" has been launched in the Kasaragod district.

Net Zero Carbon Kerala through the People

The "Net Zero Carbon Kerala through the People" campaign is currently progressing across the state under the auspices of the Haritha Keralam Mission and the leadership of Local Self-Government Institutions. This initiative aims to reduce greenhouse gas emissions to achieve a Net Zero Carbon status. While India as a whole aims to reach this target by 2070, Kerala is striving to stay

ahead by achieving it by 2050. Activities are focused on calculating the levels of carbon emissions versus carbon sequestration to reach a state of equilibrium. Following a rigorous scientific methodology, the campaign recognizes that Net Zero Carbon status can only be attained through long-term efforts and scientific measures. In its initial phase, the campaign is actively being implemented in 152 local bodies.

"Oru Thai Nadam" (Let's Plant a Sapling) Public Afforestation Campaign

The "Oru Thai Nadam" public afforestation campaign, led by the Haritha Keralam Mission with the goal of planting one crore trees across the state, was inaugurated by Chief Minister Pinarayi Vijayan on World Environment Day 2025 by planting a "Kulamavu" (*Machilus macrantha*) sapling at the Cliff House premises. This campaign aimed to expand the existing "Pachathuruthu" (green islet) project started in 2019 and implement a comprehensive afforestation strategy. A special focus of the campaign is the planting of rare and endangered tree species. To monitor the location and growth of these saplings, a geo-tagging system is being implemented with the support of the Kerala Technological University. Although the initial target was one crore, the campaign successfully surpassed its goal, with a total of 1,06,58,790 saplings planted.



Haritha Kalalayam (Green Campus)

Haritha Kalalayam is a project implemented in colleges with the objective of environmental protection and waste management. The goal is to transform campuses into "Green Campuses" through the leadership of teachers, students, and staff by implementing scientific waste management, the Green Protocol,



agriculture, biodiversity conservation, water harvesting, water conservation,

and energy-saving activities. Out of 1,421 colleges assessed in the state, 1,063 have been found eligible for "Green Campus" status. Currently, 75% of the colleges in the state have achieved this designation.

Haritha Vidyalayam (Green School)

A green and clean environment is essential for fostering environmental awareness among students. The Haritha Vidyalayam initiative is more than just a project; it is a holistic approach aimed at creating a learning atmosphere and educational experiences that allow children to understand and protect nature. Through this campaign, the Haritha Keralam Mission intends to instil a deep-rooted environmental consciousness and a proactive attitude toward conservation in the younger generation.





Libraries Moving Toward Green Status

Libraries across the state are transforming into "Green Libraries" by adhering to the Green Protocol and actively participating in the "Malinyamuktham Navakeralam" (Waste-Free New Kerala) people's campaign. The activities of these libraries are coordinated around several key pillars, including the strict implementation of green protocols in daily operations, executing localized environmental projects, and leading public awareness activities. Furthermore, the campaign encourages the beautification of public spaces surrounding libraries and motivates library staff and volunteers to turn their own homes into models of green living.

Haritha Samrudhi Ward

The Haritha Samrudhi Ward campaign is designed to achieve self-sufficiency in vegetable production by ensuring that every single household in at least one selected ward of every Panchayat cultivates vegetables in a suitable manner. This initiative is implemented with full

public participation and the support of various groups, including volunteers, the Agricultural Karma Sena, Kudumbashree, Haritha Karma Sena, National Service Scheme (NSS), educational institutions, and cooperative societies. The campaign is executed through community-driven seed and sapling distribution and organized "planting festivals" in every home.

Pachathuruthu (Green Islets)

The "Pachathuruthu" project is an innovative concept by the Haritha Keralam Mission to create greenery on fallow lands. The project aims to identify unused public and private spaces to create and protect natural biodiversity hubs consisting of indigenous trees and local plant species. It serves as a practical intervention to mitigate the adverse effects of climate change and combat global warming caused by greenhouse gases. Chief Minister Pinarayi Vijayan inaugurated the project on World Environment Day, June 5, 2019, by planting a "Neermathalam" (*Crateva magna*) sapling in a five-cent plot at the Vengode Family Health Centre in Pothencode Grama



Panchayat, Thiruvananthapuram. To date, 4,291 Pachathuruthus have been established across the state, covering a total area of 1,346.49 acres. Kannur district holds the record for the largest area of green islands (315.36 acres across 234 units), while Kasaragod district has the highest number of individual units. The single largest Pachathuruthu is the Muzhakkunnu Ayyappankavu grove in Kannur, which spans 136 acres.

"Thenginu Thadam, Manninu Jalam" (Basins for Coconut Trees, Water for the Soil)

Recognizing the decreasing surface area where rainwater can directly interact with and permeate the soil, the Haritha Keralam Mission launched the "Thenginu Thadam, Manninu Jalam" campaign. The primary goal is to facilitate rainwater recharge into the earth alongside crop maintenance. The campaign seeks to revive the traditional agricultural practice of opening basins around coconut trees and filling them with lime, green leaves, cow dung, ash, rock salt,



and other organic fertilizers. By restoring this traditional wisdom, the mission aims to ensure both the health of the trees and

the preservation of groundwater for the planet.

Haritha Karma Sena: A Green Revolution in Waste Collection

The Haritha Karma Sena (Green Action Force) stands as a symbol of a silent revolution against the "throw-away culture" of Keralites. Established in 2017, the force has grown to become an indispensable part of Kerala's sustainable waste management framework. Currently,



the state boasts over 37,500 members, providing services to 95% of households and establishments across the region. Members visit homes once or twice a month to collect inorganic waste and, in certain areas, actively intervene in organic waste management as well. Collected waste is moved from households to Mini Material Collection Facilities (MCFs) and subsequently to larger Material Collection Facilities for further segregation. Every month, they collect more than 10,000 tons of inorganic waste, including plastic, which is then handed over for scientific processing. This systematic approach has led to the disappearance of waste heaps along Kerala's roadsides and a significant



reduction in plastic burning, thereby decreasing health risks, atmospheric pollution, and ecological damage. By preventing the carbon dioxide emissions associated with the unscientific handling of plastic, this decentralized system plays a vital role in climate mitigation—a model of localized waste management that remains unique among Indian states.

Neelakurinji Biodiversity Knowledge Centre: A Centre of Attraction

The Neelakurinji Biodiversity Knowledge Centre, launched by the Haritha Keralam Mission in 2023, is drawing significant attention from travellers visiting Munnar. Located in Adimali, the gateway to the Munnar highlands, the centre aims to educate tourists about the unique biodiversity of the region, making their visit more meaningful and enjoyable.



Extensive facilities have been arranged at the centre to provide students, tourists, and locals with deep insights into the native biodiversity of the Western Ghats.

Kanampuzha: A Stellar Model of Restoration

Kanampuzha in Kannur was once a stagnant, waste-laden waterbody that caused frequent waterlogging and flooding. The pollution was so severe that it contaminated nearby wells. Originating from Ayyappanmala near Kannur city, this 10-kilometer-long rivulet flows through urban and agricultural zones before joining the sea at Adikadalayi. Recognizing that the





polluted river threatened the very existence of the region, the local community and their leaders organized a massive struggle for survival. Restoration efforts began in 2017 under the leadership of Minister Ramachandran Kadannappalli and the Haritha Keralam Mission, bringing together various departments including Irrigation, Agriculture, Soil and Water Conservation, and Animal Husbandry. In a historic display of collective will, over 5,000 people stepped into the polluted water to remove waste and restore the natural flow. Following the cleanup, several follow-up projects were undertaken, including the protection of its source at Ayyappanmala, the revival of agriculture along the river basin, urban dredging, and tourism development. Today, the sight of Kanampuzha flowing through the Kappad-Peringalayi paddy fields is breathtaking. The four-kilometer stretch through these fields has become a vibrant hub where locals and tourists alike spend their mornings and evenings for exercise and relaxation. With its paved walkways and banks reinforced with coir geotextiles, the area has transformed into one of the district's major tourist attractions.

Other Activities

The Haritha Keralam Mission has implemented the "Harithadrishti" mobile application for monitoring and

data collection, alongside "Mapathon" activities to prepare comprehensive maps of all categories of watercourses across the state. Mapathon activities for "Pachathuruthu" (green islands) are also currently progressing. Various campaigns organized to achieve the mission's goals have served as powerful public education and awareness programs. Notable among these are sanitation-focused campaigns like "Freedom from Waste" (Malinyathil ninnum Swathanthryam), Jagrathotsavam, Harithotsavam, and "Clean House for a Clean Land." Similarly, water-focused initiatives such as "Water is Life," "Thodu Sabha" (Stream Assemblies), "Thodu Nadatham" (Stream Walks), Water Parliaments, and the "Fallow-Free Village" campaign have garnered significant attention

Despite the field-level limitations caused by the COVID-19 pandemic and subsequent lockdowns starting in March 2020, the mission maximized online platforms to organize extensive awareness activities during this period. In collaboration with KILA and the Gulati Institute of Finance and Taxation, webinars were conducted as part of the 25th anniversary of decentralization, with 55 local self-government institutions participating. Ultimately, the Haritha Keralam Mission has succeeded in creating the necessary motivation to make environmental protection an integral part of daily life.

PUBLIC PARTICIPATION

Many of Kerala's development models have earned national recognition, and the foundation of these models lies in the active and responsible participation of the people. Public involvement played a crucial role in the success of the Total Literacy Mission and People's Planning. Following this tradition, a model of public participation has been ensured in all projects of the Haritha Keralam Mission. Real change becomes possible when people become active fellow travellers in development activities. The primary goal of this participatory model is to foster a sense of collective responsibility and social ownership through activities that directly involve the public.

To ensure extensive and deep public participation, the mission has adopted robust Information-Education-Communication (IEC) methods that integrate awareness, inspiration, and a sense of responsibility. Through continuous communication, the mission awakens a sense of dedication in individuals and strengthens the social consciousness that everyone has a decisive role to play in these activities. As part of these IEC efforts, the mission ensures the cooperation of influential and organized collectives, including political and social organizations, labour unions, residents' associations, neighbourhood groups (Ayalkkootams), and local self-help groups. These organized bodies play



a vital role in enhancing the credibility and reach of campaigns, effectively carrying the message to all levels of society.

At the regional level, activities are coordinated by Local Self-Government Institutions (LSGIs), tailored to the specific needs and conditions of each area. By involving the local populace, the mission ensures the quality of work while strengthening the community's sense of participation and accountability. The depth of this participation is reflected in the statistics for 2024: the mission organized 25,378 meetings across various levels, attended by 4,08,127 people. This group included 71,302 people's representatives, 1,29,942 government officials, and 2,07,046 volunteers. In the same year, 1,21,190 field-level interventions were conducted, utilizing the active service of 2,73,127 volunteers. In total, 8,76,663 individuals participated in various mission activities in 2024 alone, illustrating the massive scale of public engagement behind the mission's success.

Through this participation-based methodology, the mission has successfully

converted the commitment of social collectives into tangible environmental achievements. The contribution of women, mobilized through systems like Kudumbashree, Haritha Karma Sena, and the Employment Guarantee Scheme (MGNREGS), is particularly noteworthy. Additionally, the large-scale participation of youth through the NSS and SPC has provided significant energy to the mission. Key outcomes of this engagement include the rejuvenation of watercourses in all districts through the "Ini Njan Ozhukatte" campaign and the achievement of "Green Status" by 2,97,483 neighbourhood groups. These achievements prove that decentralized planning combined with socially conscious public intervention can link local environmental efforts to Global Sustainable Development Goals (SDGs)—specifically Goals 6, 11, 12, 13, 15, and 17. The public campaigns of the Haritha Keralam Mission represent a true vision of participatory democracy, uniting local governance and the common man toward a cleaner, greener, and more sustainable Kerala.



HARITHA KERALAM MISSION: OPERATIONAL ACHIEVEMENTS AT A GLANCE

Over the past four years, the Mission has been able to achieve tangible results in its targeted activities across the three sectors of Sanitation & Waste Management, Water Conservation, and Agriculture. The activities of the Haritha Keralam Mission are carried out through the effective coordination of various government departments, as part of the development projects of Local Self-Government Institutions, and with active public participation.

Sanitation and Waste Management Sub-Mission

- The 'Freedom from Waste' (Malinyathil ninnum Swathanthryam) campaign and its associated activities, conducted with the goal of creating a clean Kerala, provided a strong foundation for operations in this sector across the state.
- Haritha Karma Sena (Green Action Force) was formed in all Local Self-Government Institutions (LSGIs) for inorganic waste collection. Currently, a force of 37,894 members is actively working



in these institutions. Door-to-door collection of inorganic waste has reached 95%.

- To facilitate the collection and storage of inorganic waste, 20,051 Mini MCFs (Material Collection Facilities) and 1,350 Material Collection Centres are fully operational. Additionally, 192 Resource Recovery Facilities (RRF) are functioning across the state for sorting, recycling, and processing.
- 2,117 community compost units and 210 community-level biogas plants have been established.
- 6,964.44 km of roads were tarred using 3,709 metric tonnes of plastic shredded at the RRFs of local self-government bodies.
- Over a period of last five years, a total

of 239.292 metric tonnes of hazardous waste and 3,025.382 metric tonnes of e-waste were collected and transferred across the state.

- Twenty lakh people statewide were made literate in "Green Laws," focusing on strict penalties for dumping waste in water bodies and the ban on products including single-use plastics.
- Initiatives were taken to implement the Green Protocol in the 2026 Local Body elections and the 2025 Parliamentary elections.
- The Green Protocol is being implemented in festivals and celebrations. It has been successfully implemented in 10,010 offices and institutions at the state and district levels. Notably, 10,000 government



offices shifted to the Green Protocol starting January 26, 2021.

- 3,13,392 bins and 26,967 bottle booths were installed.
- 59,942 institutions, 2,97,483 neighbourhood groups (Ayalkkootams), 14,484 schools, and 1,434 colleges were transformed into "Green Institutions."
- Green status was awarded to 3,266 markets/public places, 348 tourism centers, and 3,095 towns.
- In the 12-point program announced in the previous State Budget, the government declared that 500 Grama Panchayats and 50 Municipalities would achieve "Sanitation Status." As a result of these efforts, the target was exceeded, with 758 Grama Panchayats and 71 Municipalities achieving the status. This includes all Grama Panchayats within 37 Block Panchayats.
- "Sanitation Status" is the first step toward "Total Sanitation Status," awarded to local bodies that demonstrate excellence in solid waste management and create necessary infrastructure. Preliminary steps to achieve "Total Sanitation Status" have begun in 113 Grama Panchayats and 28 Municipalities.
- Septage treatment facilities were arranged in Thiruvananthapuram, Ernakulam, and Kalpetta.
- Special systems were established for the processing of poultry waste and

hair waste.

- Out of 6,912 libraries in the state, 3,556 have achieved "Green Library" status.

Water Conservation Sub-Mission

- With a focus on water conservation and water security, the Haritha Keralam Mission has successfully rejuvenated a total of 412 km of rivers and 45,736 km of streams/rivulets over the past four years.
- Water conservation plans were prepared by 1,013 Local Self-Government Institutions, and 105 Block-level Watershed Master Plans were developed.
- Catchment area management was successfully executed across 60,116 acres.
- The rejuvenation of the Varattar River was achieved. Additionally, several polluted water bodies including Kanampuzha, Kuttanperoor River, Killiyar, Kolarayar, Vadakkepuzha, Chalamkode stream, Muttom Parappa stream, Kambrayar, Perumthodu, Poonoor River, and Kottarakkara Pandivayal stream were cleaned to restore natural flow.
- The rejuvenation and interconnection of the Meenachilar-Meenantharayar-Kodoor rivers were made possible, enabling the resumption of agriculture in over 5,200 acres.
- Through the interventions of the



Haritha Keralam Mission between April 2021 and December 2025, 54,770.59 km of watercourses and 4,356 ponds were rejuvenated as part of water conservation activities. (When combined with the 45,736 km rejuvenated during the previous government's five-year term, a grand total of 1,00,506.59 km of watercourses have been rejuvenated, including those cleaned repeatedly).

- To enable water storage in streams, 965 permanent check dams and 85,514 temporary check dams were constructed.
- A total of 73,644 wells were recharged, 43,212 new wells were constructed, and 13,968 existing wells were renovated.
- The mission saw the construction of 24,938 new ponds and the rejuvenation of 29,617 existing ones. These efforts secured a total water storage capacity of 1,21,81,650 cubic meters.
- These activities were primarily carried out under the leadership of Local Self-Government Institutions as part of the Employment Guarantee Scheme (MGNREGS).
- The "Ini Njan Ozhukatte" (Let Me Flow Now) campaign, launched in December 2019 for the public reclamation of watercourses, cleaned 7,291 km of streams and rivulets across two phases. This significantly helped reduce the severity of waterlogging caused by extreme rainfall in various districts,



including Kottayam and Alappuzha.

- A project was launched to utilize water from abandoned rock quarries for fish farming, recharging ponds, wells, and streams, as well as for drinking water purposes.
- Activities to estimate water availability by installing scales in ponds were initiated, notably implemented in 100 ponds within the Kattakada constituency.
- Efforts to prepare a "Water Budget" to help Local Self-Government Institutions formulate Water Security Plans were launched. The government approved the guidelines prepared for this purpose with the assistance of CWRDM.
- Work on preparing a Water Budget has commenced in one block within every district.
- The construction of Bandhara-style summer water reservoirs began in the four most water-scarce districts. In the Taliparamba constituency, the construction of a Bandhara in Kurumathur Grama Panchayat was completed, enabling water storage. Through KIIFB, approval was granted for 34 Bandharas: 13 in the Bhavani River, 6 in Thoothapuzha, 9 in Chandragiri, and 6 in Achankovilar.
- The mission initiated the establishment of primary water quality testing labs for the public, attached to Chemistry labs in one Higher Secondary School within every local body's limit. So far, 335 labs have been established—144 with the

support of the Rebuild Kerala Initiative (RKI) and 191 through respective MLA funds. Construction of the remaining labs is in progress.

- A total of 48,337 water samples were tested across various labs statewide until December 2025. Work to establish another 199 labs is ongoing. The Haritha Keralam Mission has provided training to teachers and students in 306 schools where labs have been set up.
- The first water quality testing lab was inaugurated at Anjarakandy Higher Secondary School in Kannur district on September 7, 2020.

Agriculture Sub-Mission

Significant achievements have been made in the agricultural sector through the activities of the Haritha Keralam Mission, conducted under the supports of Local Self-Government Institutions (LSGIs) and the Department of Agriculture.

- The "Fallow-Free Village" (Tharishu Rahitha Gramam) project involves identifying cultivable fallow lands and bringing them under cultivation under the leadership of the LSGIs. One Grama Panchayat from each block has been selected for this purpose. Fallow-free activities are currently underway in 164 Grama Panchayats. Currently, 17 Grama Panchayats have been officially declared Fallow-Free Villages.
- The "Haritha Samrudhi Ward" project, which aims to implement vegetable cultivation in every household within



a single ward, has been executed in 2,422 wards. To date, 2,174 Haritha Samrudhi Wards have been declared across 13 districts.

- Under the Fallow-Free Village project, which ensures cultivation in all lands made fit for farming, 87 Local Self-Government Institutions have already been declared fallow-free.
- Following an action plan to transform all ITI campuses in the state into green campuses, 12 ITIs have already been converted into green campuses ("Haritha Campuses.")
- A project was launched to implement farming in public sector undertakings under the Industries Department, in collaboration with the Department of Agriculture, the Local Self-Government Department, and the Haritha Keralam Mission. So far, cultivation has commenced in 39 institutions across nine districts.
- A project has been initiated to cultivate vegetables, upland paddy, fruit trees, medicinal plants, and flowering plants for temple rituals on fallow lands owned by temples under the Travancore Devaswom Board. This project, titled "Devaharitham," is being implemented on 3,000 acres of Devaswom Board land and has also been started in several temples in Northern Kerala.



- As part of the project launched on June 5, 2019, with a goal of creating 5,000 "Pachathuruthu" (Green Islands) to ensure local biodiversity, 4,291 green islands have already been established across various locations in the state. Tree saplings, numerous shrubs, climbers, and bio-fences have been planted across 1,346.49 acres spanning 969 Local Self-Government Institutions.
- As part of the Pachathuruthu project, the production of fruit tree saplings is being carried out through public participation in various districts. In Padiyoor-Kallyad Grama Panchayat of Kannur district, 10 saplings were produced in every household; currently, work is progressing to prepare a total of one lakh saplings.

Other Activities

Net zero carbon Kerala through people

- Implemented the Urja Gramam (Energy Village) project in Kannapuram Grama Panchayat, Kannur district, under the leadership of the Panchayat and Haritha Keralam Mission.
- Organized state-level training for Kudumbashree and Haritha Karma Sena workers to start LED bulb repairing units. Following this, units for LED repair, LED manufacturing, and decorative light string assembly were launched in various locations.
- Installed solar systems in designated wards of selected Panchayats. Solar panels were set up in public crematoriums, Krishi Bhavans, and Family Health Centres.
- Additionally, LED bulbs were distributed to BPL and extremely poor families through the EMC (Energy Management Centre).
- Conducted statewide energy conservation classes led by the Haritha Keralam Mission. As of December 2025, 41,198 people have participated in these sessions.
- Organized Net Zero Carbon workshops at state, district, and Local Self-Government levels.
- Carried out reclamation activities for the 18 km long Mampuzha river in Perumanna, Kozhikode district, as a follow-up to the Water Budget. Bamboo saplings were planted along the riverbanks by the Mission in collaboration with the Social Forestry department.
- Prepared a comprehensive plan for the reclamation of Sanketham Thodu in Chathamangalam Grama Panchayat, Kozhikode, and commenced the first phase of work.
- Distributed solar pumps to 21 farmers in Kuzhur Grama Panchayat, Thrissur, through the agency TATA in collaboration with ANERT and coordinated by the Haritha Keralam Mission.
- Installed digital thermometers to



measure atmospheric temperature in 12 Anganwadis and three schools in Kattakada Grama Panchayat, Thiruvananthapuram.

- Launched a project to plant bamboo saplings at the Oxygen Park in Andoorkonam Grama Panchayat, Thiruvananthapuram.
- Commenced cultivation of millet and ragi across 55 acres in 15 Local Self-Government Institutions in Kasaragod district.
- Organized 'Darpanam 2024', a social outreach camp for students, as part of the Chengannur DIET campaign in Alappuzha.
- Conducted energy audits in Net Zero Carbon Panchayats across all districts in collaboration with the World Resources Institute (WRI) India. Additionally, solar feasibility surveys and status studies were conducted in public buildings for solar panel installation.
- Performed energy audits in constituent institutions within Net Zero Carbon Panchayats.
- Launched a comprehensive project in collaboration with GIDA to achieve the Net Zero Carbon goal in the Goshree Islands, an ecologically sensitive area near Kochi.
- Implemented the 'Sugandha Keralam' project in Thrissur as part of Net Zero Carbon activities. High-yielding black pepper saplings were distributed in cooperation with the Horticulture

Mission and the Agriculture Department.

- Provided detailed explanations of the 'Net Zero Carbon Kerala through the People' campaign in all Grama Sabhas. Surveys to calculate carbon emission and sequestration levels were organized in various Grama Panchayats.
- Completed carbon emission surveys in eight Local Self-Government Institutions; 25 institutions have achieved 'Carbon Negative' status.
- Established the 'Neelakurinji Biodiversity Knowledge Centre' at Adimali Govt. High School, Idukki, to create public awareness about the biodiversity of the Anjunad region (part of the Western Ghats) and the need for its protection. Annual study camps for school students are conducted based on this centre.
- Transformed Kannur Central Jail into India's first Net Zero Jail, setting an outstanding model in agriculture, water conservation, energy conservation, and waste recycling.
- Organized energy conservation classes for auto-rickshaw and taxi workers statewide, emphasizing the necessity of transitioning to electric vehicles.
- Initiated activities to transform the Arankode Tribal Colony into a 'Haritha Unnathi' (Green Colony) in Padiyoor Grama Panchayat, Kannur. LED bulbs were distributed to all houses with the support of Senior Chamber International, Iritty Legion.



- Organized a Net Zero Carbon awareness camp titled "Nmmale Vaderekkai, Njangalum Koodi" (For our Vadakara, we too join) for students from 44 schools in Vadakara Municipality.
 - Launched a portal for the rooftop solar project in Kuzhur Grama Panchayat, Thrissur, resulting in 65 registrations.
 - Allocated funds in various Grama Panchayats for solar installations in government offices through the intervention of the Haritha Keralam Mission.
 - Implemented the 'Haritha KSRTC' project centered at KSRTC bus stands and significantly intervened in the sanitation activities of KSRTC.
 - Planned and commenced activities to transform the Malabar Cancer Centre into a Net Zero Carbon campus.
 - Established a medicinal plant park on 30 cents of poramboke (government) land in Chittattukara Panchayat, Ernakulam, as part of the campaign.
 - Declared 100 houses as 'Green Homes' in Thekkumbhagom Grama Panchayat, Kollam, as part of Net Zero activities.
- named "Marakkootam" (Cluster of Trees) was implemented in schools, focusing on creating model green islets centred around one school in each block.
 - In Kasaragod district, 10,000 mangrove saplings were prepared in a nursery at Valiyaparamba in the Nileshwaram block. A project was initiated in this Panchayat—which has a 24 km coastline—to construct coastal protection bunds using sand, covered with coir geotextiles, and planted with Adambam Valli (Beach Morning Glory).
 - In Ernakulam district, a beautiful green island was created in the heart of the city near the Kaloor Perandoor canal (adjacent to Gokulam Park), transforming a site that was previously a massive waste dump.
 - In Kollam district, millet cultivation was initiated on one cent of land at BVUP School in Anchal Grama Panchayat, and also at the Kulathupuzha KSRTC depot as part of the KSRTC Mega Cleaning program.
 - Chittattukara Grama Panchayat in Ernakulam district set a unique model by becoming the first to publish an Agricultural Calendar. As part of the Net Zero Carbon project, extensive plans were arranged here to produce toxin-free vegetables.
 - "Punarjani Pachathuruthu": In Kollam district, the "Punarjani" (Rebirth) green island project was launched on 30 acres of land belonging to KMML,

Pachathuruthu (Green Islets)

- In Palakkad district, the innovative green project '100 Kavukal Pachathuruthukal' (100 Sacred Groves & Green Islands), being implemented in the Thrithala constituency, was launched at Thirumittacode.
- In Malappuram district, a project



spanning Panmana and Chavara Grama Panchayats. This green island was established on land that had remained unused following mining activities.


Agricultural Interventions

- Cultivation in Devaswom Temple Lands: Cultivation of flowers for temple rituals, vegetables, and paddy was undertaken on fallow lands under the Devaswom temples. In Chirayinkeezhu Grama Panchayat, Thiruvananthapuram district, vegetable and flower cultivation was implemented across 446 cents of land belonging to 46 temples.
- Thottara Punja Paddy Fields: Rice cultivation was resumed in Thottara Punja, an 800-acre low-lying paddy field spanning Amballoor and Edakkattuvayal Panchayats in Ernakulam district. Interventions based on the Water Budget are being explored to make the land fully cultivable; so far, approximately 40% of the field has been successfully reclaimed for farming.
- Nutri-Gardens: In Ernakulam district, Nutri-Gardens featuring medicinal plants were established at Anganwadis in Uriampetti and Pinavoorkudi within Kuttampuzha Grama Panchayat.
- Millet Cultivation in Wayanad: Cultivation of millets such as Ragi, Little Millet (Chama), and Maize commenced on 5 acres in Kaniyampatta Grama Panchayat. Additionally, farmers in Panamaram Grama Panchayat are also



cultivating Little Millet and Ragi.

- Devaharitham Project (Kollam): As part of the Devaharitham initiative, banana cultivation was launched at the Thrikkadavoor Mahadeva Temple under the Kollam Corporation.
- Devaharitham Project (Ernakulam): Cultivation of Kadali bananas, sugarcane, and Bermuda grass (Karuka) was started on land adjacent to the Ernakulathappan Temple.
- "Nooru Meni" Campaign: In Palakkad district, the "Nooru Meni" campaign was launched to set a model in total agricultural coverage. Selected Panchayats from each block are cultivating vegetables, paddy, tubers, pulses, and millets.
- Infrastructure Development in



Alappuzha: Under the RKVY project in Alappuzha district, the first phase of infrastructure development began for 44 hectares of paddy fields in the Plassery and Pullamchira areas of Vayalar Grama Panchayat. An amount of ₹4,27,00,000 was administratively sanctioned under the Agriculture Department's RKVY scheme, with implementation carried out via KLDC.

- **Fallow-Free Kotayi:** Kotayi Grama Panchayat in the Kuzhalmannam block of Palakkad district was declared a "Fallow-Free Village." Through the MGNREGS, 66 acres out of 71 acres of fallow land were made cultivable. Cabbage, various chilies, beans, okra, tomatoes, brinjal, bananas, and special coconut varieties are grown across 15 wards, with farmers successfully supplying produce to marketing centres.
- **Fallow Land Reclamation in Alappuzha:** The Bharanikkavu Block and Panchayat jointly started farming on 12 acres of fallow land. Cultivation also began on 3.14 acres in Ala Grama Panchayat and 0.44 acres in Ward 6 of Edathua Grama Panchayat.
- **Temple Land Farming in Kasaragod:** Paddy cultivation was carried out on one acre of land owned by the Madhur Temple in the Kasaragod block. In Delampady, vegetable saplings were distributed to maintain the "Haritha Samrudhi" wards.
- **"Thalir" Project:** Sowing for the "Thalir" project which includes millet

cultivation, upland paddy, and organic vegetable farming was completed with the cooperation of the Haritha Keralam Mission. "Valichoor," a native variety from Wayanad, was used for the upland paddy cultivation.

Water Conservation and Allied Activities

- **Jalasarudhi Campaign and Workshop:** In Palakkad district, the 'Paristhitikam 2024' workshop was organized under the leadership of the Palakkad District Panchayat with the support of the Navakeralam Karma Padhathi. This was part of the Jalasarudhi campaign aimed at ensuring water availability and educating the public on moderate water consumption.
- **Digital Monitoring and Mapping:** The "Harithadrishti" mobile application is being utilized for the monitoring and data collection of Haritha Keralam Mission activities. Simultaneously, "Mapathon" activities are underway to prepare maps of all categories of watercourses across the state. The Mapathon project for identifying and mapping Pachathuruthu (green islets) is also progressing.
- **Public Awareness Campaigns:** Various campaigns organized to achieve the mission's goals served as powerful public education programs. Notable campaigns include:
- **Sanitation & Waste Management:** "Freedom from Waste" (Malinyathil



ninum Swathanthryam), Jagrathotsavam, Harithotsavam, and "Clean House for a Clean Land."

- Water Conservation: "Water is Life" (Jalamanu Jeevan), Water Parliaments, and the Fallow-Free Village campaign.
- Digital Outreach: State-level declarations regarding "Sanitation Status," Water Quality Labs, and Pachathuruthu were broadcast live via

the Mission's official Facebook page and YouTube channel.

- Jalaanjali and Neeruravu Projects: The "Jalaanjali" water conservation project implemented in the Peravoor Block of Kannur district served as a precursor to the "Neeruravu" project. Significant work was carried out under this initiative, including the construction of check dams and the cleaning of small water streams.



HARITHA KERALAM: FUTURE PERSPECTIVE

Kerala's status in various development indices is comparable to that of developed nations, and we consistently secure the top rank in the country across several quality-of-life indicators. However, the Navakeralam Karma Padhathi and its constituent, the Haritha Keralam Mission, were launched in 2016 specifically to address and resolve the persisting challenges described as the "second-generation problems" of development. The mission aims to create a "New Kerala" by adopting innovative development perspectives and operational methods to overcome contemporary crises and disasters facing the state, such as natural calamities, the impacts of climate change, and infectious diseases.

The activities of the Haritha Keralam Mission are rooted in a long-term vision where the state's development and environmental protection advance hand-in-hand. Through these efforts, a new model has emerged in the state where Local Self-Government Institutions undertake sustainable environmental protection activities with active public participation. To ensure scientific accuracy in these endeavors, the Haritha Keralam Mission has strengthened the coordination between science and technology agencies and relevant government departments. These activities are carried out with the vision of building a clean, green,



and sustainable Kerala through integrated efforts in water conservation, sanitation, waste management, and agriculture.

Over the past ten years, the initiatives led by Local Self-Government Institutions under the auspices of the Haritha Keralam Mission for environmental restoration have been remarkable. These were implemented through the effective coordination of various departments and agencies, as the primary responsibility of the Haritha Keralam Mission was the coordination and integration of projects. Based on the achievements of the past decade, certain points regarding the approach and future course of action are presented below. These can be finalized following detailed discussions.

Water Conservation

- **Watershed and Basin-Based Management:** To maintain Kerala's ecological balance, the previously adopted method of integrating watershed-based soil and water conservation activities with river basin management must be continued.
- **Water Security and Budgeting:** Water and environmental security must be ensured for future generations. For this, every Local Self-Government Institution (LSGI) must prepare a Water Budget and a Comprehensive Water Security Plan. A public campaign titled "From Water Budget to Water Security" will be organized under the leadership of LSGIs.
- **Integrated Implementation Plans:** Watershed Master Plans at the Block Panchayat level should be utilized for all planning and project formulation. Technical committees at the LSGI level must be equipped to coordinate the execution of these works across various departments and agencies. A single execution plan should be developed at the LSGI level, integrating various Central and State schemes from related departments and agencies.
- **Leveraging MGNREGS:** The potential of the National Rural Employment Guarantee Scheme (including new systems) should be maximized. Technical expertise from officials of other departments must be made available during the planning and execution stages of these works as needed.
- **Sustainable Maintenance:** To ensure the permanent maintenance of rejuvenated water sources and prevent re-pollution, management should be carried out through the coordination of departments such as Agriculture, Tourism, Water Resources, and Local Self-Government.
- **Climate Change Adaptation:** Considering the increasing rainfall intensity in Kerala due to climate change, systems must be established to drain excess rainwater. This includes restoring the carrying capacity of rivers by increasing the space available for them to flow, while also ensuring structures that enable water storage



within the river systems.

- **Weather Monitoring and Alerts:** An early warning system for weather will be established by installing Automatic Weather Stations in Grama Panchayats where Mapathons have been conducted, along with rain gauges in feasible locations and institutions. This will be linked to the existing WRIS (Water Resource Information System) and implemented through public participation under LSGI leadership.
- **Water Quality Assurance:** To address public concerns regarding water purity, Water Quality Labs should be established in all Higher Secondary Schools. This will facilitate public testing and subsequent interventions to ensure purity. Efforts will also focus on eliminating pollution in streams to ensure smooth flow.
- **Pollution Prevention:** To prevent drinking water sources from being contaminated by toilet tanks, single-pit latrines must be converted into septic tanks. Localized treatment systems will be established for hotels and other establishments in towns to ensure wastewater is not discharged into water bodies.
- **Replicating Success Models:** Successful models implemented in diverse terrains—such as Kattakada, Bavali, Manickal, and Jalaanjali—should be replicated in similar geographical areas. LSGIs that pioneered these projects should be given a platform to introduce their methods to other local bodies, and a master plan should be prepared for this purpose.
- **Quarry Water Utilization:** Water from reservoirs like abandoned quarries should be tested for quality and utilized for recharging wells, ponds, and streams, as well as for irrigation and drinking purposes. Solar-powered pumping should be used to facilitate this water distribution.
- **Stream Network Restoration:** Time-bound campaigns modelled after "Ini Njan Ozhukatte" (Let Me Flow Now) should be organized to rejuvenate watercourses and increase their carrying capacity. Efforts must be taken to fully recover the stream network and ensure the smooth flow of all watercourses identified in the "Mapathon." Priority should be given to restoring low-order stream networks in areas highly prone to landslides.
- **Support for Large-Scale Projects:** Scientific proposals and interventions will be made to identify and secure the water requirements for major projects like the Vizhinjam port.
- **Rejuvenation of Large Water Bodies:** The method used for the rejuvenation of Vellayani Lake, funded by the Haritha Keralam Mission, will be adopted to restore other large water bodies in the state.



Sanitation and Waste Management

- **Total Sanitation Goals:** Kerala will be transformed into a total sanitation zone. Solid waste management based on source-level segregation and local sewage protection will be implemented. Large-scale waste disposal plants will be established in essential locations.
- **Septage Management:** Local septage treatment facilities suitable for processing toilet waste will be established at the regional level.
- **Roadside Amenities:** The "Take a Break" centres (roadside rest areas) will be completed and made fully functional along all major highways.
- **Litter-Free Campaign:** A "Litter-Free Kerala" (Valicheriyaal Muktha Keralam) initiative will be implemented as a public campaign under the leadership of Local Self-Government Institutions. Waste collection and segregation will be managed on an entrepreneurial basis, followed by processing and marketing.
- **Support for Recycled Products:** As part of promoting upcycled and recycled products, the government will ensure that 50% of the products used in government systems are sourced from such materials.
- **Specialized Waste Streams:** Kerala will be made a "Slaughter Waste-Free" state with the assistance of private entrepreneurs. Facilities for biomedical waste management will also be significantly expanded.
- **Infrastructure and Branding:** Measures will be taken to increase the number of regional landfills and establish Construction & Demolition (C&D) waste recovery centres. Organic fertilizer produced by local bodies will be marketed under the brand name "Harithamithram."
- **Green Grading and Certification:** The Green Protocol will be strictly implemented. A system of "Green Grading" and certification will be introduced for tourism centres, government offices, institutions, and private commercial establishments.
- **Green Corridors:** Green corridors will be implemented as models in the tourism sector. These will be integrated with "Green Streets" and "Green Towns."
- **Community-Led Tourism Sanitation:** To ensure cleanliness in tourism centres and create a tourist-friendly environment, local residents will be actively engaged and linked to tourism markets and services as stakeholders.
- **Water Body Restoration:** Small polluted rivers and water sources will be rejuvenated, following the "Kanampuzha Model," to create successful examples of integrated tourism and agriculture.
- **Coastal Protection:** Specific action plans will be formulated to make the coastlines waste-free and ensure their sustainable maintenance.



Agriculture and Environmental Restoration

- **Urban Agriculture Promotion:** Urban farming will be encouraged by promoting terrace and backyard cultivation with the assistance of Residents' Associations. This initiative will integrate household waste composting with urban farming. In large building complexes, treated wastewater will be recycled and utilized for vegetable cultivation.
 - **Eco-Friendly Agricultural Development:** To achieve the goal of environmentally protected agricultural growth, interventions will focus on utilizing fallow lands to maximize the production of food crops, including paddy and other cereals.
 - **Self-Sufficiency in Vegetables and Fruits:** Building on the progress made in vegetable production, cultivation will be expanded to more homes and institutions to reach self-sufficiency. Efforts will also be made to expand the acreage of Kerala's native fruit varieties to maximize their production.
 - **Diversified Farming Systems:** Cultivation of millets and oilseeds will be expanded. To ensure maximum income for farmers, integrated farming systems will be promoted. Additionally, medicinal plant cultivation will be implemented in feasible areas.
 - **Modern Farming Techniques:** In line with the state's urbanization, secondary agricultural activities—
- including modern precision farming and vertical farming systems—will be encouraged. This is expected to create new employment opportunities for educated youth.
- **Safe Food Production:** Measures will be taken to ensure eco-friendly food production (including organic farming) along with health-friendly food processing, storage, and distribution to guarantee safe food for all.
 - **Agricultural Value Chain:** To boost Kerala's economy and increase farmers' income from the agricultural sector, new and robust agricultural value chains will be strengthened.
 - **Net Zero Kerala Initiative:** Programs will be formulated to coordinate various departments, agencies, voluntary organizations, and institutions toward the "Net Zero Kerala" goal. Measures for the protection and improvement of existing Pachathuruthu (greenislet) will be taken, and new ones—including mangroves, bamboo groves, and natural riparian vegetation—will be established.
 - **Employment and Income Generation:** Coordinated projects involving various departments and agencies will be implemented to create jobs and increase income in food production, storage, marketing, value addition, and farm tourism.
 - **Watershed-Based Model Projects:** Model projects for cereals, vegetables, fruits, medicinal plants, oilseeds, and



agro-forestry will be formulated in agricultural habitat units based on watershed principles and local resource availability.

- Fallow Land Reclamation: Following the models of Kattamudi, Pettimudi, and Mynagappally, fallow lands will be identified and brought back under cultivation through coordinated efforts, with a focus on producing value-added products.
- Forest and Shola Conservation: A special project for the protection of grasslands will be formulated in collaboration with the Forest Department, following the UNDP operational model, to conserve Shola forests in forest regions.

Net Zero Carbon Kerala through the People

- The "Net Zero Carbon Kerala through the People" campaign is currently being implemented in 151 Grama Panchayats and one Municipality. This will be further strengthened by continuing current efforts and incorporating new, interested Local Self-Government Institutions.
- Specific activities centred around Kovalam will be formulated within the inland water transport sector.



- Carbon emissions will be reduced by implementing the "Fallow-Free Village" (Tharishu Rahitha Gramam) and "Haritha Samrudhi Ward" programs in a more sustainable and permanent manner.
- Major institutions will be transformed into "Net Zero Institutions" through specialized interventions, following the successful model established at the Kannur Central Jail.

HARITHA KERALAM MISSION

Website : www.haritham.kerala.gov.in

Email : harithakeralamgok@gmail.com

Phone : 0471-2449938, 2449939

Dr. T.N. Seema Vice Chairperson	9188120300 tnseema@gmail.com	9447077556
Indu S. Administrative Officer	9188120302 aonkp23@gmail.com	9446456435
Pradeep T.P. Accounts Officer	pradeepthekemuriyil@gmail.com	9446177631
T.P. Sudhakaran Asst. Coordinator Navakeralam Karmapadhathi	9188120307 tpsharithakeralam@gmail.com	9895029009
Abraham Koshy Asst. Coordinator Haritha Keralam Mission	9188120308 abrahamkoshy@hotmail.com	9447388184
S.U. Sanjeev Asst. Coordinator (Agriculture, Environment Restoration)	9188120305 sanjeevsu106@gmail.com	9387801694
Haripriya devi V.V. Asst. Coordinator (Waste Management)	haripriyaagri@yahoo.com	9447008982
V. Rajendran Nair Programme Officer (Coordination & Capacity Building)	9188120310 rajisakhav@gmail.com	9446104370
G. Krishnakumar Programme Officer (Agriculture, Environment Restoration)	7012907426 krishnastro@gmail.com	9447340784
Satheesh R.V. Programme Officer (Water Resources)	9188120311 satheeshkncni@gmail.com	9495244544
P. Ajayakumar Programme Officer (Waste Management)	9188120306 ajayanhi@gmail.com	9447221655
Suresh U. Programme Officer (Rebuild Kerala Initiative)	usureshaji@gmail.com	9995460226



Manoj B. Public Relations Officer	9895882812 manojarga@gmail.com	9447587632
Prabhakaran Nair B. Accounts Section	mekkathil@gmail.com	9497852459
Shiji S.J. Administration Section	shijihkm2018@gmail.com	9188120314

ജില്ലാ മിഷൻ കോർഡിനേറ്റർമാർ

Thiruvananthapuram	C. Asok	navakeralatvpm001@gmail.com	9446070551
Kollam	S. Issac	harithakeralamissionklm@gmail.com	9447721737
Pathanamthitta	G. Anilkumar	harithakeralamissionpta@gmail.com	9447027934
Alappuzha	K.S. Rajesh	nkpalpy1@gmail.com	9497676809
Kottayam	Shine N.S.	hkkmkottayam@gmail.com	9446365864
Idukki	Ajay P. Krishna	navakeralam2idukki@gmail.com	9446092612
Ernakulam	Renjini S.	hkmernakulam@gmail.com,	9895897132
Thrissur	Dhidhika C.	hkmthrissur@gmail.com	9496217532
Palakkad	Saithalavi P.	hkmpgt@gmail.com	8589885889
Malappuram	Dr. Seema P.	hkmmalapuram@gmail.com	9497660064
Kozhikkode	Shaji M. Stephen	hkkmkozhikode@gmail.com	9447848511
Wayanad	E. Suresh Babu	hkmwayanad@gmail.com	9495031023
Kannur	E.K. Somasekharan	nkpknr@gmail.com	9744333345
Kasargod	K. Balakrishnan	navakeralamksd@gmail.com	9446088056