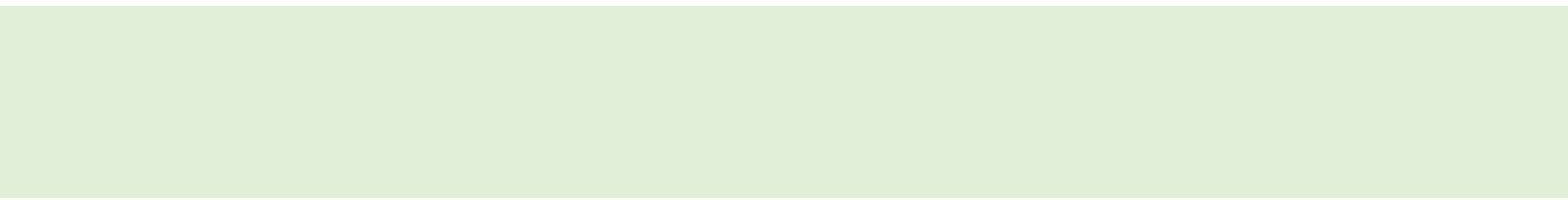


**PANDEMIC
PREPAREDNESS PLAN
MODEL OF LSG
PUTHUCODE
PANCHAYAT**

**MEDICAL OFFICER,
FHC PUTHUCODE
fhcputhucode@gmail.com**



MESSAGE FROM PRESIDENT/CHAIR LSGI

It gives me immense pleasure to present this document on behalf of Puducode Grama Panchayat. As a Local Self Government Institution, our Panchayat remains committed to the holistic development and well-being of the community through participatory governance, transparency, and sustainable planning.

Puducode Panchayat, with its unique geographical setting and strong social cohesion, has consistently upheld the values of cooperation and collective responsibility. While the Panchayat has achieved steady progress across multiple sectors, it continues to face challenges such as seasonal climatic variations, public health concerns, environmental issues, and the growing demand for basic infrastructure and essential services. Addressing these challenges calls for coordinated efforts, systematic planning, and active participation from the community.

The Panchayat, in close collaboration with health institutions, government departments, community-based organizations, and field-level functionaries, is continuously strengthening public health initiatives, sanitation and waste management systems, and disaster preparedness measures. Emphasis is placed on disease surveillance, environmental conservation, social welfare programmes, and inclusive development to ensure equitable benefits reach all sections of society.

We firmly believe that preparedness, decentralized planning, and proactive governance are fundamental to building community resilience. Through sustained community engagement and coordinated action, Puducode Grama Panchayat strives to create a safe, healthy, and sustainable environment for present and future generations.

I extend my sincere appreciation to all officials, health workers, volunteers, and citizens who consistently contribute to the development and welfare of the Panchayat. Let us continue to work together with shared responsibility towards the comprehensive development of Puducode.

President-K.Udayan

Puducode Grama Panchayat

MESSAGE FROM HEALTH STANDING

COMMITTEE CHAIRPERSON

The Health Standing Committee of Puducode Grama Panchayat remains steadfast in its commitment to safeguarding and promoting the health and well-being of the community. Public health is a core pillar of local governance, and the Committee's efforts are directed towards ensuring accessible, equitable, and quality health services for all residents.

Puducode Panchayat, with its predominantly rural character and diverse settlement patterns, presents both opportunities and challenges in the delivery of health services. Seasonal climatic variations, water-related health concerns, the risk of vector-borne diseases during monsoon periods, and the increasing burden of non-communicable diseases necessitate continuous vigilance and coordinated action. The Committee works in close coordination with the Health Department, Primary Health Centres, ASHA workers, Anganwadi centres, and other key stakeholders to strengthen preventive and promotive health initiatives.

Special emphasis is placed on immunization, maternal and child health services, care of the elderly, sanitation and waste management, disease surveillance, and health education activities. Community participation and effective interdepartmental coordination remain central to the Committee's approach, ensuring that health programmes reach all sections of the population in a timely and effective manner.

The Committee recognizes that preparedness and prompt response are critical for managing public health emergencies and seasonal disease outbreaks. Through systematic planning, regular review mechanisms, and data-driven interventions, the Health Standing Committee continues to enhance public health preparedness and resilience within the Panchayat.

I extend my sincere appreciation to all health professionals, field-level staff, volunteers, and community members whose dedicated efforts strengthen the public health system. Together, we strive to build a healthier and safer Puducode.

Chairperson-P.C Abdullah

Health Standing Committee

Puducode Grama Panchayat

MESSAGE BY MEDICAL OFFICER

As the Medical Officer of Family Health Centre Puducode, I am pleased to present this document -the pandemic preparedness plan outlining our continued commitment to strengthening public health and primary healthcare services. The Family Health Centre functions as a key primary-level healthcare institution, providing accessible, affordable, and essential health services to the population of Puducode and the surrounding areas.

The FHC offers comprehensive outpatient care, maternal and child health services, immunization, management of communicable and non-communicable diseases, and effective implementation of national health programmes. The institution plays a crucial role in disease surveillance, early detection, prevention, and control activities, particularly during seasonal outbreaks.

Puducode has significant risk for disasters particularly floods with kanakannoor(ward 2),thiruvadi-ward 1,malankadu ward 5,shankarathuparambu ward 13 being flood prone areas requiring evacuation.Through the coordinated efforts of our medical officers, nursing staff, health inspectors, ASHA workers, and other support staff,along with cooperation from our LSGD Iam sure we will be well prepared to face any pandemic or disaster that may occur in Puducode and the backbone being our disaster management plan.

In this plan we have outlined the available resources we have in terms of infrastructure,manpower,high risk areas for disasters and pandemics,vulnerable population,emergency management plans which will help in early detection and containment of an event.

I sincerely appreciate the dedicated efforts of the health staff, the support of the local administration, and the cooperation of the community. Together, we remain committed to improving health outcomes and ensuring quality healthcare services for the people of Puducode.

Dr.Nimitha L Vijai,Medical Officer

Family Health Centre Puducode

EXECUTIVE SUMMARY

Family Health Centre (FHC) functions as the primary public healthcare institution serving the population of **24023** Grama Panchayath. The F H C plays a pivotal role in delivering comprehensive, accessible, and affordable healthcare services, with a strong focus on preventive, promotive, curative, and rehabilitative care in accordance with national and state health programmes.

The FHC caters to a predominantly rural population, addressing key public health priorities such as maternal and child health, communicable and non-communicable disease control, immunization, family welfare, adolescent health, and geriatric care. Regular outpatient services, home-based care through field health staff, and outreach activities ensure healthcare coverage even in geographically challenging areas. The institution actively implements national health missions, including the National Health Mission (NHM), National Tuberculosis Elimination Programme, National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), and other disease surveillance initiatives.

PUTHUCODE FHC works in close coordination with the Grama Panchayath, ASHA workers, Anganwadi centres, schools, and community-based organizations to strengthen community participation and improve health awareness. Emphasis is placed on early detection, timely referral, health education, and lifestyle modification to reduce disease burden and improve overall health outcomes. Despite constraints related to infrastructure, manpower, and increasing service demand, the FHC continues to enhance service delivery through effective planning, data-driven decision-making, and community engagement. Strengthening facilities, upgrading digital health systems, and expanding preventive services remain key focus areas for future development.

Overall, PUTHUCODE Family Health Centre stands as a vital institution in safeguarding public health and improving the quality of life of the residents of PUTHUCODE Grama Panchayath.

LIST OF ABBREVIATIONS

LSGD/LSGI	Local Self Government Department / Local Self Government Institution
BMO	Block Medical Officer
IDSP	Integrated Disease Surveillance Programme
NDMA	NATIONAL DISASTER MANAGEMENT AUTHORITY
PPE	PERSONAL PROTECTIVE EQUIPMENT
ICMR	INDIAN COUNCIL OF MEDICAL RESEARCH
CD	COMMUNICABLE DISEASES
NCD	NON-COMMUNICABLE DISEASES

TABLE OF CONTENTS

	3
INTRODUCTION	9
• Background of the PPP	9
LSGD AT A GLANCE	9
INTEGRATED HEALTH INFRASTRUCTURE MAP OF PUDUCODE PANCHAYAT	10
GENERAL PROFILE OF THE LSGI'S	13
Background of the LSGI	13
Demographic and Vulnerable Population	14
Clinical Vulnerability	16
INFRASTRUCTURE & RESOURCE INVENTORY	18
Health Facility Directory & Basic Capacity in the LSGD	18
Private Clinics	19
Healthcare Education & Training Institutions	20
Specialized Services & Emergency Inventory	20
Oxygen & Diagnostic Capacity	21
Diagnostics facility mapping at the LSGI level	22
Laboratory Identification & Basic Details	22
Social and Community Infrastructure for surge plan	22
Human resources	24
Community & Support Cadre	25
Community Organizations	26
Administrative & Emergency Services	27
Information regarding resources	27

ONE HEALTH & ENVIRONMENTAL SURVEILLANCE	28
Animal & Bird Population	28
Veterinary Infrastructure	29
Veterinary Doctors & Workforce	30
High-Risk Interface Points (Surveillance Sites)	30
Environmental Risk Mapping	31
Disease Seasonality Mapping	32
Vulnerability Mapping	33
EPIDEMIOLOGICAL TRENDS (2021–2025)	34
Disease Burden among human beings(Last 5 Years)	34
*(use the above table data to create the graph/diagram)	36
Seasonal Trend Analysis	37
Outcome-Based Trend Analysis- 2025	39
Transmission Trend- 2025	40
Integrated Disease Hotspot Map (2021–2025)	42
Preparedness and Response Protocol at LSG Level	44
Constitution of One Health Committee	44
Pandemic Response Workforce	45
Activities and Measures before and during Pandemic	47
PHASE 1 - Alert / Preparation	47
PHASE 2 - Active Response	50
Standard Screening Protocol	51
PHASE 3 - Surge Capacity	60
Conversion of Community Facilities	60
CONCLUSION	61
RECOMMENDATIONS	62

ANNEXURE	63
1. IMPORTANT PHONE NUMBERS	63

INTRODUCTION

● Background of the PPP

Pandemics pose significant challenges to public health systems and community well-being, highlighting the need for strong preparedness and coordinated response mechanisms at the local level. The Pandemic Preparedness Plan (PPP) of Pudukode Grama Panchayat has been developed to strengthen early detection, preparedness, and response through the coordinated efforts of health institutions, the Panchayat administration, and frontline health workers. The plan serves as a structured framework to ensure timely and effective action during public health emergencies, maintain continuity of essential health and civic services, and provide focused protection to vulnerable and high-risk populations within the Panchayat.

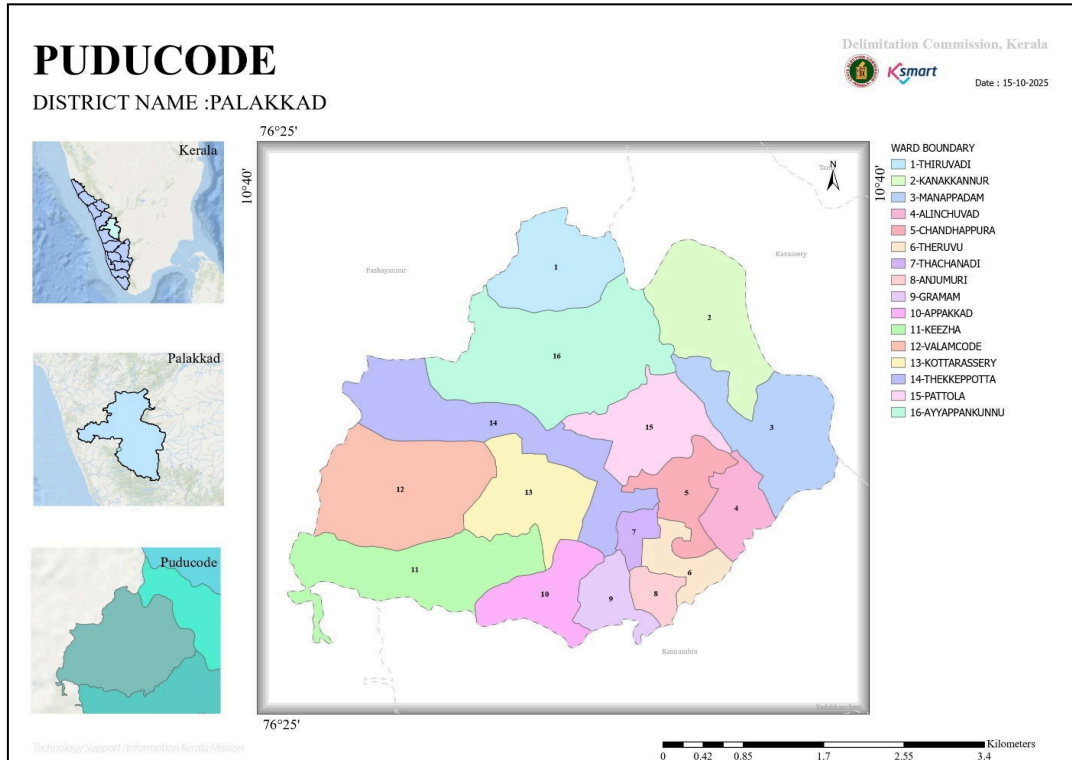
The Local Self Government Department (LSGD), Government of Kerala, plays a vital role in policy formulation, guidance, and overall oversight of Local Self Government Institutions, including Grama Panchayats, Municipalities, and Corporations. Through decentralized governance, participatory planning, capacity building, and systematic monitoring, LSGD supports Pudukode Grama Panchayat in the implementation of public health, development, and welfare programmes. This institutional support enhances the Panchayat's capacity to respond effectively to pandemics and other public health emergencies in an inclusive, resilient, and sustainable manner.

● LSGD at a glance

Pudukode Grama Panchayat consists of 15 wards with a total of 6,108 households and a population of 24,023. Migrant population is distributed across wards, with the highest reported in Ward 11 (80), followed by Wards 10 and 15 (20 each). The Panchayat has a considerable number of wells, with higher counts in Wards 5 (92), 4 (84), and 1 (65).

Educational institutions are present in selected wards, while both government and private healthcare facilities are available in a few wards. Some wards have also reported hotspots, indicating areas requiring attention.

LSGD AT A GLANCE



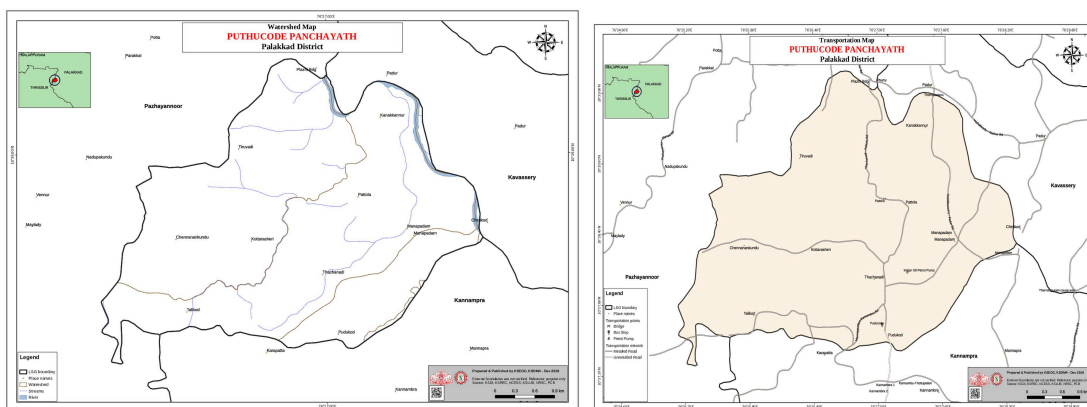
Map 1:Geographical boundaries with political map (based on latest delimitation)

- Baseline data
- Ward division -

Ward	Houses	Population	Migrants	Wells	Hot spots	Ed. Institutions	Hosp pvt/govt.
1	438	1589	3	65	0	0	0
2	544	2064	11	10	0	2	0
3	455	1730	0	61		0	0
4	416	1616	6	84		2	0
5	509	1834	10	92		0	1
6	437	1901	0	53		1	0

7	465	2085	4	65		0	1
8	420	1995	0	44		1	1
9	288	701	0	60		0	0
10	347	1515	20	38		0	1
11	353	1342	80	57		1	0
12	400	1470	10	34		0	0
13	314	1364	0	31		1	0
14	312	1207	0	56		0	0
15	410	1621	20	65		1	0

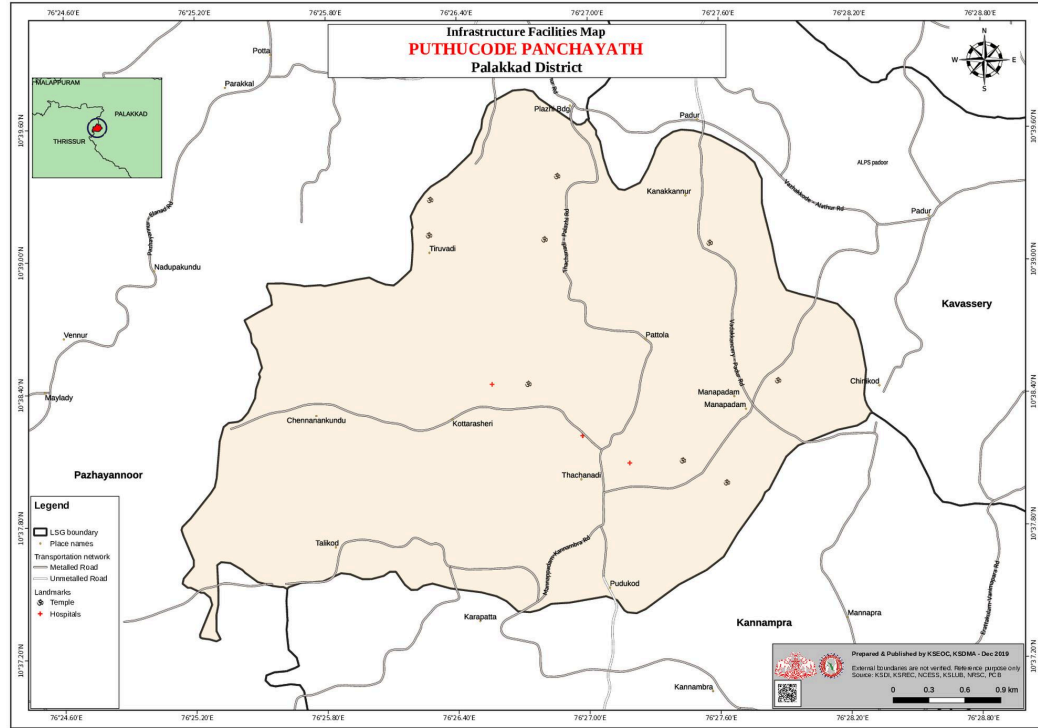
- Risk stratification among wards in the context of Communicable diseases and hazards
- **Major Roads/rivers**



Puducode Grama Panchayat is well connected through a network of **major and local roads** that link the Panchayat with nearby towns and service centres in Palakkad district, facilitating the movement of people, agricultural produce, and access to essential services including healthcare, education, and markets. This road connectivity also supports emergency response, disease surveillance activities, and the transportation of patients and health personnel during public health emergencies. Geographically, the Panchayat is influenced by the **Mangalam River**, which supports

irrigation and agricultural activities in the area. In addition, the Local Self-Government Institution (LSGI) contains **29 water bodies, including canals and irrigation channels**, which play an important role in agriculture and water management.

- **Major establishments with geospatial mapping**



The geospatial mapping of Puthucode Grama Panchayat identifies a diverse array of major establishments categorized by their utility during a public health crisis. The infrastructure is anchored by primary health facilities such as the FHC Puthucode in Ward 14 and the private Newlife Hospital in Ward 7, supported by a network of 21 Anganwadis and 9 educational institutions (8 schools and 1 college) which serve as key community hubs. To manage surge capacity, the plan maps 23 specific venues, including large-scale facilities like the MC Palace and Thanima auditoriums (each capable of holding 150 beds), alongside smaller sites like the Kanakanoor Shiva Temple Hall and Saphalya auditorium.

Beyond health and housing, the mapping includes essential service points such as 21 water pumping stations, 8 ration shops, and a Supplyco outlet to ensure food and

water security. The industrial landscape is represented by 9 small-scale factories, two of which are earmarked for emergency support. Social and religious mobilization is facilitated through 14 religious organizations and 14 sports or youth clubs distributed across the wards.

- **Occupational groups, socio cultural groups, migration & mobility patterns**

The socio-economic landscape of Puthucode Grama Panchayat is rooted in its agricultural heritage, where the workforce is primarily engaged in paddy cultivation within the region's characteristic Kole lands, alongside small shops and allied activities. This traditional base is supported by a robust social infrastructure of 6,379 MNREGS workers and 241 Kudumbashree members, while the economy gradually incorporates service-sector employment and small-scale industries. The community is tightly knit through a network of 14 religious organizations, 14 sports and youth clubs, and a dedicated cadre of frontline workers, including 18 ASHA workers and 21 Anganwadi staff, who facilitate grassroots mobilization and public health outreach.

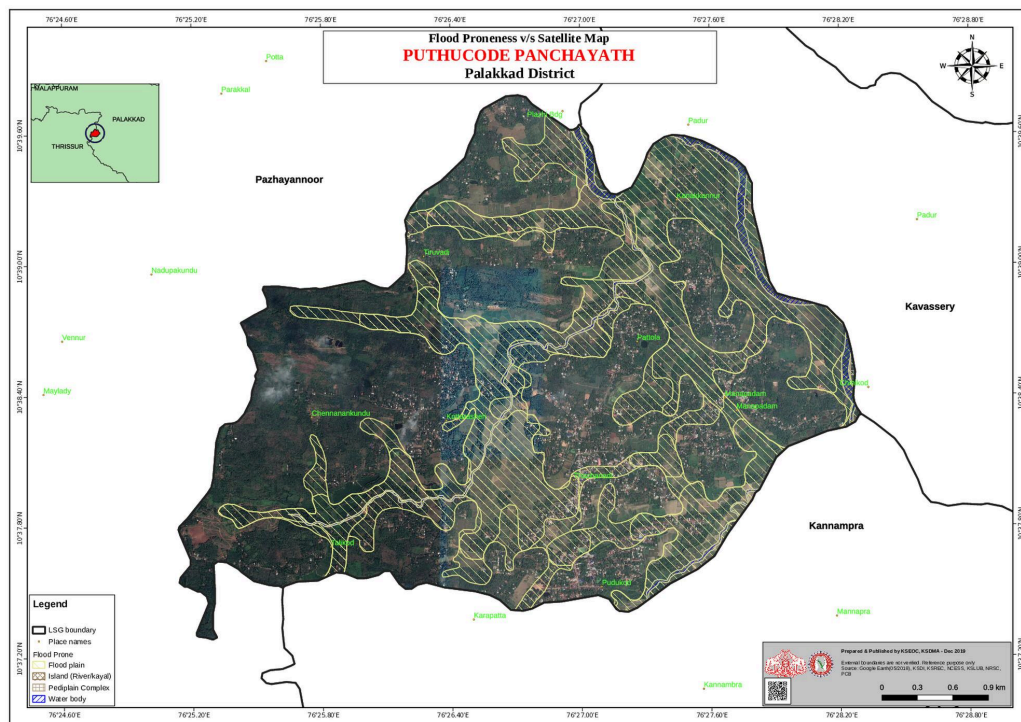
Migration plays a critical role in the local demographic and labor structure, with 169 recorded immigrants (in-migrants) predominantly employed in the construction and agricultural sectors. These populations are concentrated in specific areas, most notably Ward 11, which houses 80 migrants, followed by Wards 10 and 15. The mobility of these groups and the general population is heavily influenced by the local geography; the dense network of 29 water bodies and low-lying terrain creates significant transportation challenges during the monsoon, particularly in the eight wards identified as flood-prone. This necessitates a highly coordinated logistics plan involving a pool of 35 taxis and two ambulances to maintain connectivity and essential services for all residents, including the 3,528 BPL families and other vulnerable groups.

- **Vulnerability mapping**

The vulnerability mapping of Puthucode Grama Panchayat integrates geographical, clinical, and demographic data to identify those at highest risk during a public health crisis. Geographically, the landscape is defined by its low-lying terrain and a dense network of 29 water bodies, rendering Wards 1, 2, 3, 5, 11, 12, 13, and 15 highly flood-prone, while Ward 14 is specifically flagged for landslide risks. Clinically, the plan tracks a significant population requiring priority care, including **1,234 hypertensive patients**, **1,134 diabetic patients**, and over 100 bedbound individuals. This is further compounded by the social vulnerability of **3,528 BPL families** and 169 recorded immigrants, primarily concentrated in Ward 11, who may face barriers to accessing essential services.

From an environmental and zoonotic perspective, the plan identifies critical "High-Risk Interface Points" such as Arangattukadavu, Thiruvadi, and Kanakkanoor, where cattle sheds are located near water bodies, increasing the potential for disease transmission between animals and humans. Surveillance also focuses on the 1,419 children under five and 4,085 elderly residents who are most susceptible to epidemiological trends like the recurring cases of Dengue and Acute Diarrheal Disease. By mapping these specific clinical and environmental overlaps, the Panchayat can implement targeted interventions, such as prioritized evacuation for the elderly in flood zones or enhanced water quality monitoring in high-risk agricultural wards.

- **Disaster prone areas (geographic vulnerability)**



The geographic vulnerability of Puthucode Grama Panchayat is shaped by its character as a midland agricultural area, where an undulating landscape meets an extensive network of 29 water bodies and a major river. While the region sits at a midland elevation, its specific drainage patterns and the presence of numerous canals create significant risks for localized flooding during the monsoon. Consequently, the disaster mapping identifies Wards 1, 2, 3, 5, 11, 12, 13, and 15 as highly flood-prone, with specific high-risk localities including Thiruvadi, Kanakkanoor, Pattola, Malankadu, Mothayamcode, and Choolipadam. These areas require prioritized surveillance and emergency evacuation planning to mitigate the impact of seasonal rising water levels on both residents and agricultural assets.

In addition to hydro-meteorological risks, the midland topography introduces slope-related hazards in certain sectors. Ward 14 is explicitly geospacially identified as a landslide-prone area, necessitating focused monitoring of soil stability and infrastructure safety during periods of heavy rainfall.

GENERAL PROFILE OF THE LSGI'S

Background of the LSGI

Puthucode Grama Panchayat is situated in the Alathur Taluk of Palakkad district, Kerala. The geographical landscape of the Panchayat is predominantly low-lying, characterized by extensive paddy fields (Kole lands) and a dense network of rivers, canals. This unique terrain plays a significant role in shaping the local microclimate and poses distinct challenges to transportation, emergency response, and service delivery, particularly during monsoon seasons and flood events.

The Panchayat is administratively divided into multiple wards, with a population largely dependent on traditional livelihoods. Agriculture—especially paddy cultivation—small business, and allied activities form the backbone of the local economy. In recent years, tourism-related activities and service-sector employment has also shown gradual growth. The area hosts a diverse workforce, including a notable presence of migrant labourers, particularly in construction, agriculture, and allied sectors.

From a public health and disaster management perspective, Puthucode LSGI has historically been vulnerable to seasonal flooding, waterborne diseases, and vector-borne illnesses such as Dengue and Leptospirosis. The severe floods experienced during recent years, including the 2018 flood disaster, significantly impacted life, livelihoods, and infrastructure within the Panchayat. These recurring emergencies have underscored the importance of strengthening local preparedness, response mechanisms, and inter-departmental coordination.

In this context, the development of a localized, data-driven Auxiliary Infrastructure and Logistical Resource Map is essential to support effective planning, timely emergency response, and sustainable development initiatives. Such mapping enables the Panchayat to identify critical

resources, improve accessibility during disasters, and enhance overall resilience of the community.

Table 1: Background of LSGD	
Description	Details
Name of LSGI	PUDUCODE
Type (GP/Municipality / Corporation etc.)	Grama Panchayath
Block	PAZHAMBALACODE
District	PALAKKAD
Number of wards	16
Total area (sq. km)	16.29
Population(Projected)	24023
Population density	1474 persons/sq km
Terrain (coastal/low-lying/backwaters/foothills, etc.)	Undulating
Number of rivers passing through LSGI	1
Number of water bodies in the LSGI	29
Number of educational institutions	9
Factories / small-scale industries	9
Flood-prone wards	Ward No 1,2,3,5,11,12,13,15
Landslide-prone wards	Ward No 14

Table 1: Background of LSGD

Description	Details
Death Management and Disposal Facilities (mortuaries/crematorium, including electric)	Crematorium 1
Auditoriums/Marriage halls/convention centres/community halls	23

Demographic and Vulnerable Population

Understanding the demographic composition and vulnerable population groups is essential for pandemic preparedness. Children, elderly, economically deprived families, migrant workers, and socially vulnerable groups are at increased risk during public health emergencies due to higher exposure, limited access to services, and dependency on public systems..

Description	Details (in numbers)
DEMOGRAPHIC PROFILE	
Total population	24023
Male	12066
Female	11956
Transgender	1
Children under 5	1419

Description		Details (in numbers)
DEMOGRAPHIC PROFILE		
Adolescent		2472
Elderly (>60)		4085
SOCIAL/LIVELIHOOD VULNERABILITY		
Previous EPEP family		72
BPL family		3528
Tribal communities		0
Migration	Immigrant	169
	Emigrant	132
Socio-economically deprived		72
Fisherfolk		0
SC Community		7
ST Community		0

Graphs: Population pyramid (if possible) for seeing if your LSGI has a high "dependency ratio" (lots of children and elderly compared to working adults).

Clinical Vulnerability

Certain population groups need priority healthcare & are at higher risk of severe illness, complications, and mortality during pandemics. Patients with chronic diseases, those requiring regular medical care, and individuals with mobility or functional limitations face challenges in accessing timely care during emergencies. Mapping these groups helps in prioritizing continuity of treatment, medicine stock planning, oxygen support, referral transport, and targeted home-based care.

Description	Details in numbers
Pregnant women	139
Lactating mothers	368
Bedbound patients	107
Patients under palliative care other than bedbound	158
Patients on Haemodialysis	10
Patients on CAPD	1
Cancer patients (currently on treatment)	13
Haemophilic patients	5
Mentally challenged	115
Differently abled	82
Diabetic patients	1134
Hypertensive patients	1234
TB patients	6

Major Festivals & Events specific to the LSGI

(with the possibility of a public gathering)

Sl. No.	Name of festival	Month detailing the periodicity
1	NAVARATHRI FESTIVAL WARD 9	OCT-NOVEMBER
2.	PUTHIRIPADAM NERCHA WARD-1,6,8,13,14,15	MARCH-APRIL
3	MARIYAMMAN VILAKKU WARD 5,4	APRIL
4	MANAPPADAM KARTHIKA VILAKKU, WARD 5	DEC
5	POONCHANTHODIVELA WARD2	FEBRUARY
6	BHAGAVATHI PATTU WARD 14	MARCH
7	MARIYAMMAN VILAKKU WARD 1	MAY
8	VISHU VELA WARD 1,2,3,4,11	APRIL
9	MARIYAMMAN VILAKKU WARD 4	MARCH

INFRASTRUCTURE & RESOURCE INVENTORY

Health Facility Directory & Basic Capacity in the LSGD

This section provides an overview of the healthcare infrastructure available within the LSGD area. It outlines the distribution and basic capacity of health facilities that form the backbone of service delivery during routine times and public health emergencies.

Family Health Centres (FHCs) and Community Health Centres (CHCs) generally function as the first point of contact for the community, providing essential outpatient and inpatient services. General Hospitals (GH) and Medical College Hospitals (MCH), where accessible, serve as the main referral centres for advanced diagnostics, specialist care, and critical services during public health emergencies. This inventory helps identify existing strengths, gaps, and potential surge capacity that can be mobilised during a pandemic or disaster.

Table 5. Health Facility Resource Summary								
Sl. no.	Health Facility	Type of Facility (MCH/GH/CHC/FHC/SC etc.)	Contact Number	Total beds	ICU Beds	Oxygen-Supported Beds	No. of Ventilator Support Beds	No. of ambulances
Government Healthcare Facilities								
1	FHC PUTHUCODE	FHC	0492-2-26724 3	3	0	0	0	0
2	ICDS PUTHUCODE	sc	6235387118	0	0	0	0	0

Table 5. Health Facility Resource Summary								
Sl. no.	Health Facility	Type of Facility (MCH/GH/CHC/FHC/SC etc.)	Contact Number	Total beds	ICU Beds	Oxygen-Supported Beds	No. of Ventilator Support Beds	No. of ambulances
3	IPP THEKKEPOTTA	sc	9605577876	0	0	0	0	0
4	ICDS PATTOLA	sc	9656275218	0	0	0	0	0
5	FWCK PATTOLA	SC	8921439067	0	0	0	0	0
Private Healthcare Facilities								
1	NEWLIFE HOSPITAL	PVT.HOSPITAL	9961001090	4	0	0	0	0
AYUSH Healthcare Facilities								

Private Clinics

Private clinics are an essential part of pandemic preparedness, as they are often the first place people seek care when symptoms begin. In many communities, private clinics manage a significant share of outpatient visits and therefore play a critical role in early case detection, timely referrals, and disease surveillance. Having an up-to-date understanding of where these clinics are located, the services they provide, and how they are linked to the public health system helps ensure that no cases are missed during an outbreak. It also allows health authorities to engage private practitioners more effectively for reporting, risk communication, and coordinated response, strengthening the overall capacity of the health system to manage public health emergencies.

Table 6. Private Clinic Resource Summary

Sl No.	Name of Clinic	Registered (Y/N)	Clinic (General / Speciality)	Speciality (if any)	Address	Contact Number	Diagnostic Facility (Y/N)	Ambulance Linkage (Y/N)
1	HAYATH	N	GENERAL	-	THACH ANADI, PUDUCODE	8590420533	N	N

Healthcare Education & Training Institutions

This section tracks the educational infrastructure available, which is vital for human resource planning in the health sector.

Category of Institution	Govt	Private	AYUSH	Total
Medical Colleges	NO	NO	NO	NO
Nursing Colleges	NO	NO	NO	NO
Dental Colleges	NO	NO	NO	NO
Para-medical / Allied Health	NO	NO	NO	NO
Pharmacy Colleges	NO	NO	NO	NO

Specialized Services & Emergency Inventory

This section provides a detailed view of the specialized medical resources available to the community, focusing on emergency response and critical care capabilities. This table tracks the vital assets required for managing severe illnesses and emergencies across Government, Private, and AYUSH sectors.

Item	Govt	Private	AYUSH	Total
Hospital beds	3	4	0	7
Oxygen-generating systems(Y/N)	0	0	0	0
Oxygen-supported beds(Numbers)	0	0	0	0

Item	Govt	Private	AYUSH	Total
Ventilator-supported beds	0	0	0	0
ICU beds	0	0	0	0
Burns units	0	0	0	0
Blood centres	0	0	0	0
BLS ambulances	0	2	0	2
ALS ambulances	0	0	0	0
Dialysis facilities	0	0	0	0
Dispensaries	0	1	4	5
Medical store	1	4		7
Industrial establishments(Medium-scale industries/small-scale industries establishments to whom we can depend in a worst-case scenario)	0	2	0	2

Oxygen & Diagnostic Capacity

Monitoring **oxygen and diagnostic capacity** is a critical component of public health preparedness, ensuring that the LSGD can handle both chronic care and sudden surges in respiratory or infectious diseases.

Name of Health Facility	Oxygen-generating System (Y/N)	Backup Oxygen Source (Y/N)	Diagnostic Facilities Available(Y/N)				
			Lab	USG	X-ray	CT/MRI	RT-PCR
Government Healthcare Facilities							
FHC PUDUCODE	NO	YES	YES	NA	NA	NA	NA
PRIVATE Healthcare Facilities							
NEWLIFE HOSPITAL	NO	YES	YES		NA	NA	NA

Diagnostics facility mapping at the LSGI level

The diagnostic capacity of **PUDUCODE G.P** represents the "intelligence network" of our healthcare system. The speed and accuracy of disease identification depend entirely on the distribution and technical level of these facilities.

Item	Govt	Private	AYUSH	Total
General labs	1	5	0	6
Microbiology labs	0	0	0	0
RT-PCR labs	0	0	0	0
USG units	0	0	0	0
CT/MRI units	0	0	0	0

Research labs	0	0	0	0
Labs of other departments that can be repurposed	0	0	0	0

Laboratory Identification & Basic Details

Sl. No.	Name of Laboratory	Ownership (Govt / Private / Academic)	Address	Contact No.	24×7 Services (Yes/No)	NABL / Govt Approved (Yes/No)
1	NEETHI LAB	PRIVATE	THACH ANADI	PRAVEE N. N M 94479924 99	0	0
2	LANA CLINICAL LAB	PRIVATE	CHAND APURA	HASEEN A8921151 213	0	0
3	NEETHI LAB ANJUMURI	PRIVATE	ANJUM URI	HASEEN A-892115 1213	0	0
4	SANTHWANA M	PRIVATE	MANPP ADOM	Bini-9447 992499	0	0
5	0	0	0	0	0	0

Social and Community Infrastructure for surge plan

This table serves as our **logistics and shelter inventory**. By mapping these locations, quickly we can identify where to house displaced citizens, where to set up temporary medical clinics, and how to manage the deceased with dignity during a crisis.

Category	Total Count	Ward	Est. Capacity (Persons)	Contact details
Educational Institutions				
Anganwadis	21	1to 16	100	IN ANNEXURE
Schools	8	2,5,9, 10,16	1000	
Colleges	1	2	80	
Healthcare Educational Institutions				
Medical colleges (Govt/Private)	NA	NA	NA	NA
Nursing colleges (Govt/Private)	NA	NA	NA	NA
Dental colleges (Govt/Private)	NA	NA	NA	NA
Paramedical institutes (Govt/Private)	NA	NA	NA	NA
Community Gathering Spaces				
Community halls	10			
Auditoriums	4			

Religious buildings	9			
Vulnerable Group Support Facility				
Destitute homes	0			
Elderly homes	2	2,5		
LSGD owned other buildings	0			
Mass Fatality Management (MFM) Infrastructure				
Mortuary	NA	NA	NA	NA
Crematorium	1	15		

*refer annexure 1 for contact details

Human resources

This section focuses on the **human capital** available within the LSGI. In any emergency—be it a pandemic, flood, or industrial accident—infrastructure is only as effective as the people operating it.

Medical & Clinical Personnel

This table tracks the "Frontline" providers responsible for diagnosis, treatment, and clinical management. Narrative sentence: eg., "Total health workforce: 450 personnel, with 60% in government facilities serving as primary surge capacity." A detailed directory with the contact numbers of all workers is maintained (**Annexure in 1**).

Cadre	Govt (No.)	Private (No.)	Total
Doctors—Modern Medicine	2	1	3
Doctors – AYUSH	2	2	4
Doctors – Veterinary	1	1	2
Doctors – Dental	0	3	3
Nursing officers	2	1	3
Lab technicians	1	5	6
Optometrist	0	0	0
Pharmacists	3	3	6
Psychologists	0	0	0
Counsellors	1	0	1

Public Health & Field-Level Workforce

These individuals are the backbone of surveillance, maternal-child health, and decentralized care.

Cadre	Health services	Municipal common services	Total
HS (Health Supervisors)	0	0	0
HI (Health Inspectors)	0	0	0
LHS (Lady Health Supervisor)	0	0	0
LHI (Lady Health Inspectors)	0	0	0
JPHN (Jr Public Health Nurses)	4	0	4
JHI (Jr Health Inspectors)	2	0	2
MLSP (Mid-Level Service Providers)	4	0	4

Cadre	Health services	Municipal common services	Total
Palliative Nurses	1	0	1
RBSK Nurses	1	0	1
PRO	0	0	0
Epidemiologist	0	0	0
Data Manager	0	0	0

Community & Support Cadre

This group represents the surge capacity of the LSGI—people who can be called upon for logistics, rescue, and specialized support.

Cadre	Number
ASHA Workers	18

Cadre	Number
AWW (Anganwadi Workers)	21
Emergency Medical Volunteers (Trained)	17
Kudumbashree	241
MNREGS	6379
Purusha Swayam Sahaya Sangham	7
Ex-Servicemen	31
Retired Police Officers	10
NCC/NSS Volunteers	0
Red Cross volunteers	0

Community Organizations

This section details the presence of community-based organisations (CBOs), non-governmental organisations (NGOs), faith-based organisations (FBOs), Kudumbashree Self-Help Groups

(SHGs), and Ayalkootams within the Local Self-Government Institution (LSGI). These groups enhance grassroots mobilization, resource distribution, and support networks crucial for pandemic response and community resilience.

Category	Total Count
NGOs	4
Religious based organizations	14
Foreign based organizations	1
Sports Club/youth clubs	14
Kudumbashree SHGs	241
Ayalkootams	0
Political organizations	4
Residential organizations	1

Administrative & Emergency Services

This section outlines the availability of key non-health emergency support services and infrastructure within the LSGI, which are essential for effective pandemic preparedness and response. These facilities support law enforcement, disaster response, water supply, logistics, mobility, and community-level interventions during public health emergencies.

Category	Total Count	Contact details
Police Stations	0	0
Fire & Rescue Stations	0	0
Water Pumping Points	21	
Public Distribution System (PDS)	RATION SHOP - 8 Supplyco - 1	

Information regarding resources

The availability of essential transport and support resources plays a quiet but critical role in saving lives. Equipment such as ambulances, mobile mortuaries, amphibian ambulances, and motorized boats ensures that patients, samples, and healthcare teams can move swiftly—even in flooded, remote, or difficult terrains. Heavy vehicles like JCBs, cranes, tractors, and torus lorries support logistics, waste management, emergency infrastructure, and rapid conversion of spaces into care or isolation facilities. Taxis, four-wheel-drive vehicles, and trucks help maintain continuity of essential services, reach vulnerable populations, and support home-based care and supply delivery.

Means of transportation	Total Count
JCB	17
Crane	1
Heavy Trucks	1

Tractor	11
Ambulances	2
Mobile mortuaries	0
Boats	0
Taxi service	35

Note: For specific details regarding vehicle owners and contact information, please refer to **Annexure [X]**.

ONE HEALTH & ENVIRONMENTAL SURVEILLANCE

The One Health method integrates environmental, animal, and human health to enable proactive pandemic preparedness. Panchayat-level surveillance needs to be improved in order to detect and treat zoonotic and environmentally generated diseases early. Surveillance is strengthened through systematic assessment of animal populations, veterinary infrastructure, poultry and slaughter facilities, inter-sectoral coordination, and specialised tools like avian influenza seasonality mapping using GIS in previous outbreaks to enable predictive alerts and ward-specific sampling to support effective pandemic preparedness in high-risk areas like Ward 15 of Puducode

Animal & Bird Population

Mapping animal and bird populations at the Panchayat level is essential for identifying and prioritising zoonotic disease hazards like rabies, avian influenza (H5N1), leptospirosis, anthrax, and Nipah-like spillover occurrences. Risk classification, targeted surveillance, vaccination planning, and early epidemic detection made feasible by comprehensive population mapping all enhance One Health-based pandemic preparedness.

Category	Item	Estimated Population	Wards
Animal Population	Livestock (Cattle/Goats/Buffalo)	642	All wards
	Pet Animals (Dogs/Cats)	717	All wards
	Stray Dog Population	432	All wards

Category	Item	Estimated Population	Wards
	Pig Farms (Number of heads)	100	
	Small Units (Sheep / Goats – clustered)	GROUPS-20	1,2,4,5,12,13,14
Bird Population	Poultry Units (Birds)	0	
	Poultry- (FOWL)	7009	All wards
	Wild/Migratory Birds (Observed)	4 PLACES	6,8,10,13
	Crow Mortality Events (Reported)	NIL	

The main risk of zoonotic diseases in Puthucode Grama Panchayat is concentrated in Wards 1, 2, 4, 5, 12, 13, and 14, primarily due to the high density of pig farms, cattle congregation areas, and poultry units in these locations. The significant stray dog population in public places such as markets, fish landing sites, and bus stations continues to pose a major challenge for the prevention and control of Rabies, increasing the risk of animal bites and transmission. There is also a considerable risk of Avian Influenza (H5N1) introduction and amplification during the November–December period due to the seasonal presence of migratory and resident water birds around ponds, canals, rivers, backwaters, and paddy fields. Furthermore, clusters of pig farms and animal shelters located in flood-prone areas significantly increase the risk of Leptospirosis and other environmentally mediated zoonotic diseases, particularly during the monsoon season when flooding facilitates contamination and disease transmission.

Veterinary Infrastructure

Veterinary institutions are a core pillar of One Health surveillance, enabling early zoonotic disease detection through vaccination, investigation of unusual animal illness or deaths, sample collection, and timely outbreak reporting. A well-mapped and responsive veterinary network strengthens coordination with human health and LSGI systems, ensuring rapid response during zoonotic events and pandemics.

Facility Type	Name of Facility	Ownership Govt / Pvt	Location(Ward No)	Contact number
Veterinary Dispensary	GOVT.VETERINARY DISPENSARY	GOVT	15	04922266077
Veterinary Hospital / Polyclinic	govt.veterinary dispensary	govt.	15	6282251337
Private Veterinary Clinics	0	0	0	0
Mobile / Emergency Vet Service (incl. night services)	TOLLFREE NO			1962
Pet Homes / Animal Shelters	0			
Slaughterhouse-linked Veterinary Inspection Unit	0			

Veterinary Doctors & Workforce

Early detection, diagnosis, reporting, and reaction to animal illness epidemics depend on the availability and accessibility of qualified veterinary specialists. By identifying unusual animal morbidity or mortality promptly, collecting samples promptly, and coordinating efficiently with human health and LSGI systems—especially during zoonotic outbreaks and pandemic-prone situations—a clearly defined veterinary workforce enhances One Health surveillance.

Category	Number Available	Type (Govt/Pvt)	Contact number
Government Veterinary Doctors	DR.ANUSREE	GOVT	6282251337
Private Veterinary Doctors	DR.SANJO, DR.JOPHIN		8287390264, 9656509858
Livestock Inspectors	2	govt.	AKHIL-6238135 031 MADAV-903765 0985
Para-veterinary Staff / Attenders	1	govt.	
Contract / On-call Veterinary Support (if any)	6282251337,82873 90264		1962

High-Risk Interface Points (Surveillance Sites)

High-risk interface points for zoonotic disease surveillance in Puducode Grama Panchayat include areas where close interaction between humans, animals, and the environment occurs. Backyard poultry farms present potential risks due to the close proximity of domestic birds to households. Cattle sheds located near water bodies, particularly in areas such as Arangattukadavu, Thiruvadi, and Kanakkanoor, may contribute to environmental contamination and increased human–animal contact. Fish and meat markets, including meat, fish, and chicken stalls, represent important high-risk interfaces because of frequent handling of animal products and improper waste disposal. Community slaughter points also increase exposure risks due to informal slaughtering practices and limited biosecurity measures. In addition, areas where migratory birds congregate, especially in Wards 7, 8, and 10, serve as potential hotspots for zoonotic disease transmission through interactions between wild birds, domestic animals, and humans. These locations collectively represent the key surveillance sites where the risk of zoonotic spillover is elevated and where focused monitoring under the One Health approach is essential.

Type of Habitat	Type of High risk interface	Geographical vulnerability
Wetlands & Backwaters	0	
Backyard Poultry Farms	0	
Cattle Sheds near Water Bodies	ARANGATTUKADAVU, THIRUVADI, KANAKKANOUR	Risk of zoonotic and water-borne diseases (e.g., Leptospirosis)
Fish & Meat Markets	0	

Meat Stall	21	Localized food safety and sanitation risk
Fish Stall	0	
Chicken Stall	3	
Community Slaughter Sites	0	
Migratory Bird Congregation Areas	WARD- 7,8,10	Risk of avian-related disease transmission
Rodent-Infested Grain Storage	0	

Category	Total Count	Key Locations (wards)
Poultry Farms	0	
Backyard / Clustered Poultry Units	1	12,CHOOLIPADAM
Duck Rearing Units (open water access)	1	1
Slaughterhouses/ Slaughter Points	0	
Meat/Fish Markets	0	
Live Bird Sale Points	1	10 THACHANADI
Cattle Markets / Weekly Animal Fairs	0	
Pet Shops / Breeders	1	10
Animal Shelters / Pet Homes	0	
Waste Disposal Sites near Animal Units	0	

Environmental Risk Mapping

Environmental risk mapping identifies monsoon/flood hotspots for vector-borne (dengue, chikungunya), water-borne (leptospirosis, diarrhoea), and zoonotic diseases in Kerala's wetlands. Systematic surveillance supports early warnings, targeted interventions, and Panchayat pandemic preparedness.

Waterborne exposure: Flood-prone areas and stagnant water bodies facilitate *leptospira survival*, raising leptospirosis risk.

Traditional practices: Informal slaughter and fish markets lack standardized hygiene, creating *spillover opportunities*.

Risk Factor	High-Risk Wards	Key Locations	Risk Level (High/Med/Low)
Flood-prone areas	1	THIRUVADI	HIGH
	2,	KANAKKANO	HIGH
	3	OR	LOW
	,5,	PATTOLA,	HIGH
	11	MALANKADU	LOW
	12	,MOTHAYAM	HIGH
	13	CODE,	HIGH
	15	CHOOOLIPADA	HIGH
		M	
		SANKARATH UPARAMBU, AASHARITHA RA	

Water bodies/wetlands	2	puthucode,thiru vadi	
Solid waste accumulation	1	THIRUVADI PUZHAYORA M	
Animal waste disposal issues	10	CHERUKANJI RACODE	
Rodent infestation zones	0		
Industrial effluent discharge	4,5,11	COCONUT MIL MANAPADAM ,	
Construction sites / abandoned buildings	10	WATER TANK ,THACHANADI	
Poor drainage/blocked canals	13	TEKKEPOTTA CANAL	

Drinking water source contamination risk	9,14,15	CHOLAKULAM BU,KIZHAKKE GRAMAM,CHEN DAKALLU	
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Disease Seasonality Mapping

1, **Flooding & waterlogging** → amplifies leptospirosis, malaria, diarrheal diseases.

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2, **Migratory bird influx (Nov–Feb)** → avian influenza risk.

3, **Mosquito breeding cycles** → vector-borne disease peaks in monsoon.

4, **Agricultural practices** → close human–animal contact in paddy fields.

Disease	Peak Risk Season	Key Drivers	High-Risk Locations	Surveillance Focus
Avian Influenza	march	INCREASED H EAT	LARGE POULTRY FARM	BIRD DEATH
Leptospirosis	JULY-AUG	WATER LOGGING	PADDY,POND S	HIGH RISK GROUP,FEVE R SURVEILLAN CE
Dengue/Chikungunya	JUNE	RAIN	HOT SPOTS,SCRA P UNITS	VECTOR AND CASE SURVEILLAN CE
Acute Diarrheal Diseases	RAINY	LARGE SCALE EVENTS,REF UGEE CAMPS		
Rabies	june,july			
Anthrax (rare)	0			

Vulnerability Mapping

Vulnerability mapping pinpoints high-risk populations, occupations, and areas exposed via environment, livelihoods, socio-economics, and poor service access. Paired with environmental/seasonality mapping, it enables risk-based surveillance, targeted actions, and optimal resource use in One Health and pandemic planning.

Vulnerability Factor	High-Risk Wards	Key Groups / Locations	Risk Level
Flood-prone households	1,2,3,5,11,12,13, 15		Medium risk
Wetland-adjacent communities	0		
Backyard poultry / duck rearing households	1,12		Low risk
Livestock-rearing households	5		Low risk
Slaughterhouse & meat market workers	5		Low risk
Fisherfolk & fish market workers	6		Low risk
Sanitation workers	0		
Daily wage / migrant workers	137		Low risk
Elderly & chronically ill populations	1502		Low risk
Pregnant Women	40		Low risk

Children (schools, Anganwadi's)	0	0	0
Limited access to safe water & sanitation	14	chendakkal	Low risk

EPIDEMIOLOGICAL TRENDS (2021–2025)

Disease surveillance is the systematic collection, analysis, and interpretation of health data for planning, implementation, and evaluation of public health practice. This section presents the disease surveillance profile of the LSGI based on routine reporting systems and outbreak investigations to identify priority diseases, seasonal patterns, and emerging public health threats.

Disease Burden among human beings (Last 5 Years)

Analysis of disease-wise data for the last five years helps identify persistent public health problems, emerging diseases, and changes in disease burden. This information supports prioritisation of prevention, preparedness, and response activities at the Panchayat level.

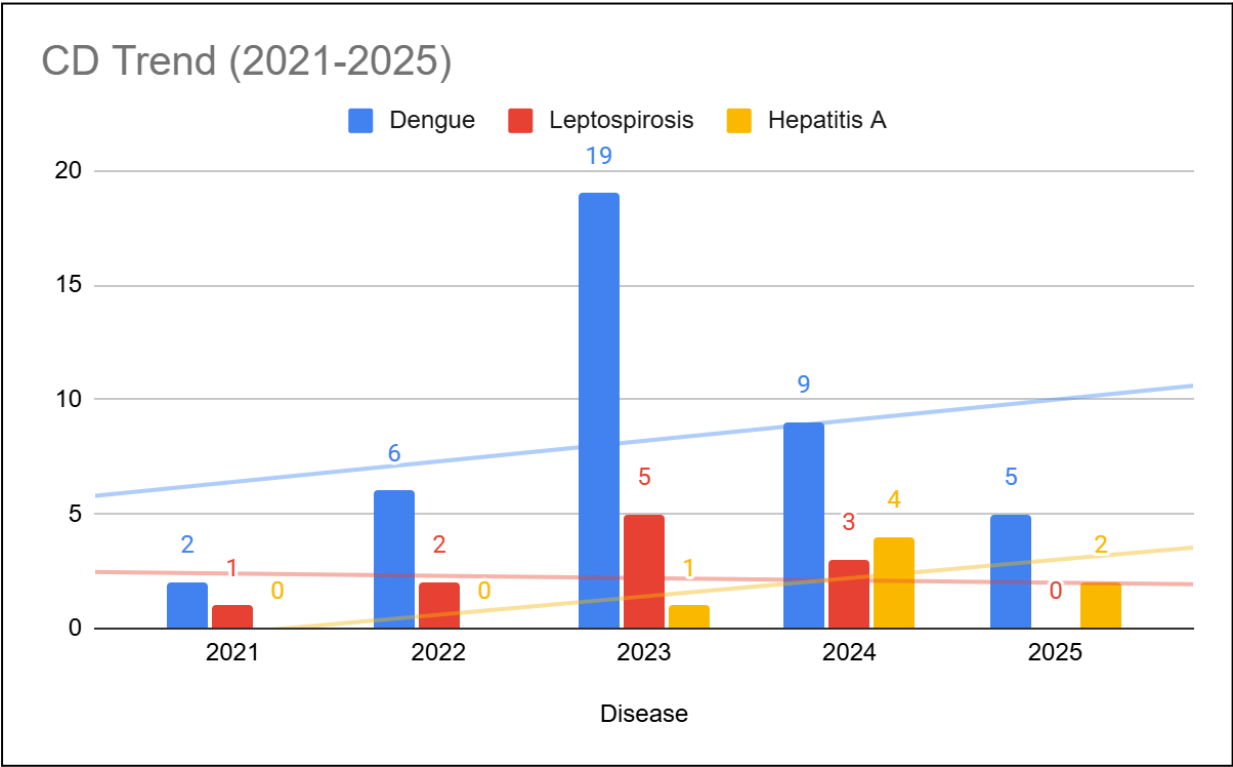
Disease	2021	2022	2023	2024	2025	Trend(Increasing/Stable/Decreasing)
Dengue	2	6	19	9	5	Decreasing (peak in 2023 followed by steady decline)
Leptospirosis	1	2	5	3	0	Decreasing (gradual rise till 2023 followed by decline to zero)
Hepatitis A	0	0	1	4	2	Increasing / Emerging (recent rise with slight decline in 2025)
Malaria	0	0	0	0	0	Stable (no cases reported)

Pandemic Preparedness Plan

Scrub Typhus	0	0	0	0	0	Stable (no cases reported)
Typhoid	0	0	0	0	1	Emerging (new case reported in 2025)
H1N1	0	2	1	0	0	Decreasing (temporary cases in 2022–2023, now reduced to zero)
H3N2	0	0	0	0	0	Stable (no cases reported)
ADD	22	24	62	107	92	Increasing (steady rise with peak in 2024, slight decline in 2025)
Mumps	0	0	0	38	12	Decreasing (sudden increase in 2024 followed by decline)
Measles	0	0	1	2	0	Decreasing (low cases with decline to zero)
Hepatitis B	0	0	2	0	0	Stable (sporadic cases only in 2023)

Hepatitis C	0	0	0	0	0	Stable (no cases reported)
Tuberculosis	11	17	11	16	9	Stable (fluctuating trend without clear rise or fall)
Leprosy	1	1	0	0	1	
COVID-19					0	

*(use the above table data to create the graph/diagram)



Seasonal Trend Analysis

Seasonal analysis helps anticipate surges (e.g. dengue in monsoon, leptospirosis after floods, influenza in cooler months) and plan pre-emptive vector control, stockpiling of IV fluids, and awareness campaigns at Panchayat level.

DENGUE

Dengue is a major seasonal vector-borne disease strongly associated with rainfall, water stagnation, and increased mosquito breeding during the monsoon period.

Peak: July–November

Dengue – Ward-wise Yearly Distribution (2021–2025)

WARD	2021	2022	2023	2024	2025	TOTAL
1	0	0	2	0	0	2
2	1	0	1	2	2	5
3	0	1	1	4	0	6
4	0	0	0	0	0	0
5	0	2	0	0	0	2
6	0	0	2	1	0	0
7	0	0	3	0	0	0
8	0	0	4	0	0	0
9	0	1	0	0	1	0
10	0	0	1	0	0	0
11	1	1	0	0	1	0
12	0	0	1	0	1	0
13	0	0	0	0	0	0
14	0	0	2	0	0	0
15	2	1	2	1	0	6

LEPTOSPIROSIS

Leptospirosis cases are closely linked to monsoon rains, flooding, and occupational exposure, particularly in low-lying and waterlogged areas.

Peak: June - August

Leptospirosis – Ward-wise Yearly Distribution (2021–2025)

Ward	Leptospirosis – Ward-wise Yearly Distribution					
	2021	2022	2023	2024	2025	Total
1	0	0	0	0	0	0
2	0	0	1	1	0	2
3	0	0	0	0	0	0
4	0	0	0	1	0	1
5	0	0	0	0	0	0
6	0	0	0	0	0	0

7	0	0	0	0	0	0
8	0	1	3	0	0	4
9	0	0	0	0	0	0
10	0	1	0	0	0	1
11	1	0	1	0	0	2
12	0	0	0	0	0	0
13	0	0	0	0	0	0
14	0	0	0	1	0	1
15	0	0	0	0	0	0

VIRAL HEPATITIS - A

Hepatitis A cases are commonly associated with unsafe drinking water, food contamination, and breakdowns in sanitation, often presenting as clusters or outbreaks.

Peak: October - December

Hepatitis A – Ward-wise Yearly Distribution (2021–2025)

Ward	Hep A – Ward-wise Yearly Distribution					
	2021	2022	2023	2024	2025	Total
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	1	1
4	0	0	0	0	0	0
5	0	0	0	0	0	0
6	0	0	0	1	0	1
7	0	0	1	0	0	1
8	0	0	0	1	0	1
9	0	0	0	0	0	0

10	0	0	0	0	0	0
11	0	0	0	0	1	1
12	0	0	0	0	0	0
13	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	1	0	1

Outcome-Based Trend Analysis- 2025

♦ Mortality Outcome

- No deaths reported across all major communicable diseases in 2025.
- Diseases such as Dengue, Leptospirosis, Hepatitis A, Typhoid, ADD, and Tuberculosis reported zero mortality,
- No COVID-19 related mortality observed.

♦ Disease Burden Outcome

- Dengue: Declined to 5 cases in 2025 from a peak in 2023, indicating effective vector control measures.
- Leptospirosis: Reduced to zero cases, showing strong preventive action during monsoon periods.

- Hepatitis A: Continued presence (2 cases) suggests ongoing sanitation and water quality concerns.
 - Typhoid: Newly reported (1 case), indicating emerging food and water safety issues.
 - ADD: Remains the highest contributor with 92 cases, showing persistent burden despite slight decline.
 - Mumps: Reduced to 12 cases after a peak in 2024, indicating partial outbreak control.
 - Tuberculosis: 9 cases with a stable trend, indicating continued endemic presence.
- ◆ Severity & Case Fatality Pattern
- No case fatality reported in any disease category.
 - All reported diseases show low severity with effective clinical management.
 - No major outbreaks leading to severe outcomes or deaths.
- ◆ Seasonal Control Outcome
- Dengue (July–November): Controlled effectively despite previous peaks.
 - Leptospirosis (June–August): No cases in 2025, indicating strong seasonal preparedness.
 - Hepatitis A (Oct–Dec): Limited cases with no clustering or outbreaks.
- ◆ Transmission Pattern Outcome (2025 Focus)
- Vector-borne diseases: Well controlled (Dengue present, others absent).
 - Water-borne diseases: High burden (ADD, Hepatitis A, Typhoid), indicating sanitation and water quality gaps.
 - Air-borne diseases: Reduced overall; TB (9 cases) and Mumps (12 cases) remain concerns.
 - Blood-borne diseases: No reported cases, indicating effective prevention.
 - Zoonotic diseases: No cases reported, including Leptospirosis in 2025.
- ◆ Ward-Level Outcome
- Primary Hotspot (High Priority): Ward 8 – highest multi-disease burden with repeated occurrence and environmental vulnerability.

- Secondary Hotspots: Wards 3, 2, 6, 7, 11, and 15 showing moderate multi-disease presence.
- Low-Risk Wards: Wards with minimal or sporadic cases under routine surveillance.
- ◆ Conclusion (2021–2025)
 - Overall low mortality and controlled epidemiological situation in 2025.
 - Significant success in controlling vector-borne and seasonal diseases.
 - Persistent burden of water-borne diseases (especially ADD) remains a major concern.
 - Continued focus required on sanitation, water safety, and TB control, along with targeted interventions in identified hotspot wards to strengthen future pandemic preparedness and resilience.

Transmission Trend- 2025

For effective management of public health issues, it is important to track the trend of disease transmission mode. It helps identify the population or place at high risk that can be used to predict outbreaks and implement targeted interventions as quickly as possible. Understanding these kinds of trends enables authorities to allocate resources efficiently and change the strategies adequately based on the trend that follows.

Mode of Transmission	No. of cases	No. of Deaths
Vector Borne Diseases	5	0
Water Borne Diseases	95	0
Air Borne Diseases	6	0
Blood Borne Diseases	0	0
Food Borne Diseases	0	0

Vector-Borne Disease

Disease	No. of Cases	No. of Deaths
Dengue	5	0

Malaria	0	0
Chikungunya	0	0

Water Borne Disease

Disease	No. of Cases	No. of Deaths
Cholera	0	0
Typhoid	1	0
Hep- A	2	0
ADD	92	0
Amoebiasis	0	0
E- Coli infections	0	0

Air Borne Disease

Disease	No. of Cases	No. of Deaths
---------	--------------	---------------

Influenza	0	0
H1N1	0	0
TB	9	0
Chickenpox	16	0
Measles	0	0
Covid-19	0	0
Pertussis	0	0
Mumps	12	0

Blood-Borne Disease

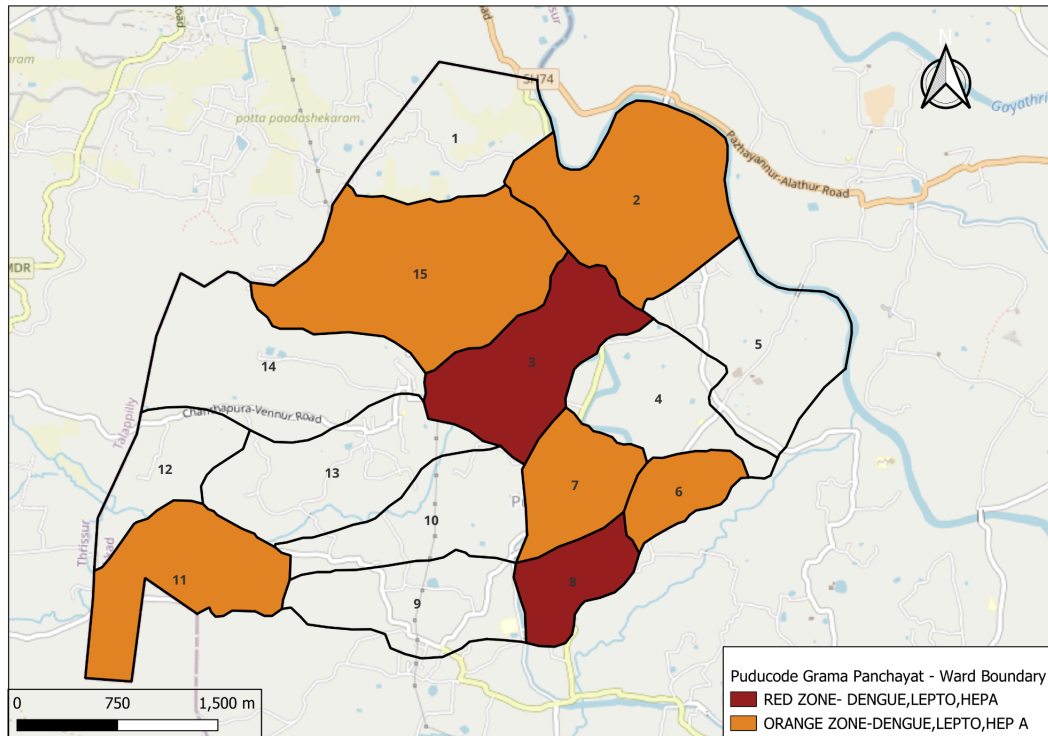
Disease	No. of Cases	No. of Deaths
AIDS	0	0

Hep- B	0	0
Hep- C	0	0

Zoonotic Disease

Disease	No. of Cases	No. of Deaths
Rabies	0	0
Leptospirosis	0	0
Avian influenza	0	0
West nile	0	0
Anthrax	0	0
Nipah	0	0
Scrub Typhus	0	0

Integrated Disease Hotspot Map (2021–2025)



Map :Hotspot Map

source:<https://map.opendatakerala.org/> created with qgis

Pandemic Preparedness Plan

Ward No	Dengue Total (2021-25)	Leptospirosis Total (2021-25)	Hepatitis A Total (2021-25)	Mumps (2021-25)	ADD (2021-25)	Total Cases
1	2	0	0	8	12	22
2	4	2	0	11	14	31
3	6	0	1	12	15	34
4	0	1	0	10	12	25
5	2	0	0	13	10	25
6	3	0	1			
7	3	0	1			
8	4	4	1			

9	2	0	0			
10	1	1	0			
11	3	2	1			
12	2	0	0			
13	0	0	0			
14	2	1	0			
15	5	0	1	11	15	32

By overlaying five years of data, we have identified Primary ‘Red Zone’ Wards – 8 and 3. These wards show repeated occurrence of multiple diseases with higher case burden, indicating sustained transmission risk. Ward 8 is categorized as the Highest Priority Hotspot due to its combination of high multi-disease load, flood vulnerability, and increased vector density.

Secondary Hotspots include Wards 2, 6, 7, 11, and 15, where two diseases are present with moderate case load, suggesting mixed transmission patterns. Future health infrastructure, such as the proposed R.O plants, should be prioritized in Ward 8, followed by other primary and secondary hotspot wards.

Preparedness and Response Protocol at LSG Level

This section describes the operational framework for the LSGI once a pandemic is declared. It explains how the LSGI and health system will move from routine data collection to active response, using a One Health approach.

Constitution of One Health Committee

The LSGD shall constitute a One Health Committee comprising the LSGI President, Medical Officers (Modern Medicine, AYUSH, and Veterinary), the Health Inspector, and the Veterinary Surgeon.

Objective: The One Health Committee coordinates human, animal, and environmental health to prevent and control pandemics.

Sl No	Name	Designation	Department/Institution	Role in Committee	Contact Number
1	Udayan. K	Panchayat President	LSGD	Chairperson	9744071280
2	Dr Nimitha L Vijai	Medical Officer (PHC/CHC)	Health Dept	Member Secretary	8281769603
3	Dr. Anusree	Veterinary Officer	Animal Husbandry	Member	6282251337
4	Dr.Haritha	Epidemiologist	Health Dept	Member	8971034366
5	Rajesh	Health Inspector/PHN	Health Dept	Surveillance	JHI-9656719075
6	Priya	ASHA Supervisor	Health Dept	Community link	9400507154
7	Nisha	ICDS Supervisor	Social Welfare	Vulnerable groups	9683920374

Pandemic Preparedness Plan

8		Police Station Officer	Police Dept	Law & order	
9	P. C Abdullah	Ward Councillor Representative	LSGD	Community coordination	Health standing committee chairman-PC 9656549587
10	Chandrika	Kudumbashree CDO	Kudumbashree	Community mobilisation	9947297901
11		NGO/Volunteer rep	Civil Society	Support services	
12		Line Department representations			
		IRRIGATION			
		AGRICULTURE			
		FOOD SAFETY			

Key Responsibilities:

- Review disease surveillance data (human + animal)
- Conduct ward-wise risk assessment and vulnerability mapping
- Approve quarantine/isolation centre locations
- Coordinate with district for resources (PPE, oxygen, ambulances)
- Periodically review health system surge capacity, including beds, oxygen, human resources, and ambulances.
- Approve and monitor risk communication and community engagement strategies, including rumour management.

- Ensure protection and service continuity for vulnerable groups (elderly, persons with disabilities, dialysis patients, coastal populations).
- Conduct quarterly mock drills
- Monitor equity measures for vulnerable groups

Meeting Schedule:

Quarterly (normal times) | Weekly (outbreak alert) | Daily (pandemic phase)

Pandemic Response Workforce

To ensure a coordinated and timely response during a pandemic, a dedicated Pandemic Response Workforce shall be constituted at the LSG level. The workforce will function under the overall supervision of the One Health Committee and in close coordination with the health authorities. Team-based deployment will enable efficient surveillance, case management, quarantine and isolation management, logistics support, and risk communication. Each team shall have a clearly designated team leader, defined roles, and an identified pool of personnel to allow rapid activation, rotation of duties, and continuity of services during prolonged emergencies.

Total Response Workforce Available: 300 persons

Team Name	Composition	Key Responsibilities	Team Leader
Surveillance and Contact Tracing Team	HI, JHI, JPHN, ASHAs and Volunteers	Case detection, contact listing, home visits, reporting	HI
Case Management Team	Doctors, Nurses, MLSP, Palliative Nurses	Patient care & referral	DOCTOR
Quarantine & Isolation Team	LSGD staff, Volunteers	Facility management	JHI

Psychosocial support	ICDS COUNSELLOR	MCH care	member[-vanit ha]
Logistics & supply chain Team	LSGD staff, Storekeepers, Drivers 3	Supplies & transport [PPE, medicines, oxygen, transport, waste management]	Ward Member
Communication Team	Ward members, Kudumbashree, Youth clubs, AWW workers and other self help groups	IEC, community meetings, countering misinformation	M.O in charge
Transportation	KSRTC, educational institutional buses	transporting	vice president,GP puthucode
Media Surveillance	Development Standing Committee members, IT Volunteers	Monitoring media reports, rumor tracking, misinformation control	Development Standing Committee Chairperson
Intersectoral coordination and convergence	Representatives from Health, LSGD, Police, Education, ICDS	Multi-department coordination, review meetings, resource mobilization	Development Standing Committee Chairperson
Collaborative surveillance	Health Officials, Private Practitioners, Labs	Data sharing, case notification, outbreak alert system	Health Standing Committee Chairperson

All teams shall be activated immediately upon outbreak alert or pandemic declaration and shall report daily to the LSG Incident Commander/Medical Officer, with consolidated reporting to the Block PHC. Duty rosters and alternate personnel shall be maintained to ensure

uninterrupted services during staff shortages or prolonged response periods. Team composition and numbers may be revised based on the magnitude of the outbreak and availability of human resources.

Activities and Measures before and during Pandemic

PHASE 1 - Alert / Preparation

Surveillance and Reporting-Enhanced syndromic surveillance:

1. Data sources for surveillance:

Surveillance data shall be compiled from multiple sources to ensure comprehensive coverage across the Panchayat. These include outpatient and inpatient registers from public and private health facilities, laboratory test results, reports from ASHA workers and other field health staff including JHIs, JPHNs, and MLSPs, school absenteeism records, pharmacy sales trends of antipyretics and antibiotics, and mortality data from the local registrar. All notifiable diseases and priority syndromes shall be reported in real time through the Integrated Health Information Platform (IHIP) to facilitate early warning signal generation, trend analysis, and rapid public health response.

2. Event-based triggers (to be monitored and reported):

Event-based surveillance shall focus on the prompt identification and reporting of unusual or unexpected public health events that may indicate the emergence of a pandemic threat. The following triggers shall be actively monitored and immediately reported through appropriate channels, including the Integrated Health Information Platform (IHIP):

- Sudden clustering of fever, respiratory illness (ILI/SARI), diarrhoeal disease, or other similar syndromes within a locality.

- Two or more epidemiologically linked cases occurring in households, institutions, schools, hostels, migrant labour camps, or elderly care facilities.
- Unexplained severe illness, rapid deterioration, or deaths due to unknown causes.
- Increase in hospital admissions for respiratory or febrile illness beyond the expected baseline.
- Illness among healthcare workers or frontline staff.
- Reports of unusual clinical presentations or failure of standard treatment response.
- Rumours or community reports of sudden illness outbreaks.

All such events shall be verified promptly by field staff, documented, and escalated to higher authorities for timely outbreak investigation and control measures.

3. Zoonotic and animal health surveillance

Zoonotic and animal health surveillance shall be strengthened during the alert and preparedness phase through close coordination between the Health Department, Animal Husbandry Department, and local Panchayat authorities under a One Health approach. Continuous monitoring shall be undertaken for unusual illness, sudden deaths, or changes in disease patterns among domestic animals, poultry, and wildlife, particularly in areas of close human–animal interaction such as livestock holdings, backyard poultry units, animal markets, slaughter points, and forest fringe areas.

Reports from livestock owners, poultry farmers, veterinary field staff, and community informants shall be promptly collected, verified, and shared with the public health surveillance system. Any suspected zoonotic event, including clusters of animal illness or mortality with potential human exposure, shall be immediately reported and jointly investigated. Integrated

human and animal health surveillance findings shall be used to guide early risk assessment, targeted preventive measures, and timely containment actions to reduce the risk of zoonotic spillover and pandemic emergence.

4. Logistics and Stock Preparedness

- Identify and empanel local vendors and define emergency procurement mechanisms in accordance with existing LSGD and Health Department norms.
- Prepare and maintain an essential logistics checklist covering medical supplies, consumables, and support equipment.
- Pre-identify secure storage locations for emergency stocks and ensure maintenance of stock registers with regular updating.
- Finalise emergency transport arrangements, including availability of vehicles and identified drivers for rapid deployment during alerts.
- Designate a Nodal Officer for Logistics to enable prompt decision-making, coordination, and communication during emergencies.
- Conduct rapid stock verification and ensure availability of minimum buffer stock, including:
 - PPEkits – 5 numbers
 - Pulseoximeters – 20 numbers
 - Handsanitizers – 25 litres
 - Masks - 100 Nos
 - Gloves – 250
 - Disinfectants – adequate quantity

Identify critical gaps in logistics and immediately communicate requirements to the Block and District authorities for timely replenishment and support. Monitor expiry dates and stock rotation.

➤ **Identification of Quarantine and Isolation Facilities**

- Identify and list suitable buildings for quarantine and isolation (schools, hostels, community halls, etc.).
- Categorise cases as per the severity and allocate to appropriate facilities (for instance, severe cases to classrooms, mild cases to an assembly hall in case of a school).
- Facility readiness checklist needed (beds, toilets, ventilation) etc.
- Find an alternate site if the primary sites are not available or not in use.
- Identify facility managers and support staff
- Prepare basic SOPs for:
 - Admission and discharge
 - Food, water, sanitation
 - Infection prevention and waste disposal
- Ensure availability of basic amenities: water, sanitation, electricity, ventilation, and waste disposal. Prepare a rapid activation plan for these facilities if case numbers increase.

➤ **Risk Communication and Community Preparedness**

- Disseminate early warning messages on symptoms, preventive measures, and reporting mechanisms. Display IEC materials both in English and the local language in public places and ensure ward-level awareness.
- Sensitize elected representatives and community leaders on preparedness measures.
- Establish a rumour tracking and misinformation response mechanism to identify, verify, and promptly counter false or misleading information.

- Engage trusted local persons (ward members, ASHA workers, religious leaders, teachers, community volunteers) to communicate official public health messages and reinforce correct practices.
- Develop and deploy targeted IEC materials for:
 - Schools and educational institutions
 - Markets and commercial areas
 - Work sites and labour settings
- Conduct community sensitization meetings at the ward level to promote preventive behaviors, address concerns, and strengthen community participation in preparedness and response.

➤ **Protection of Vulnerable Groups**

Vulnerable populations require priority protection through targeted line-listing, service continuity, and delivery mechanisms.

- Prepare and regularly update **line-lists** of vulnerable populations, including:
 - Elderly persons living alone
 - Persons with disabilities
 - Pregnant women
 - Migrant workers
 - Dialysis patients

The detailed line-lists shall be maintained as **Annexure ____** and updated periodically.

➤ **Clinical Dependency Mapping**

Develop ward-wise dependency and vulnerability maps to identify households requiring regular support during emergencies. Ensure continuity of essential health services for vulnerable groups, including

- Dialysis services (facility mapping, transport arrangements, and scheduling)

- Continuity of treatment for TB, HIV, and other chronic conditions requiring uninterrupted medication
- Mental health and psychosocial support services

Establish **delivery mechanisms** for food, essential commodities, and medicines to vulnerable households through coordinated action involving ASHAs, JPHNs, Kudumbashree, volunteers, and local administration.

PHASE 2 - Active Response

1. Case Identification and Contact Tracing

Case detection and contact tracing activities will be carried out in coordination with the Health authorities, following disease-specific SOPs and IDSP guidelines.

Field Staff Involved

- Health Inspector (HI)
- Junior Health Inspector (JHI)
- Junior Public Health Nurse (JPHN)
- ASHAs and ASHA Supervisors
- Ward-level volunteers and Kudumbashree members (as required)

2. Screening Checkpoints

Screening checkpoints at high-traffic locations (transport hubs, markets, religious gatherings) for early detection of symptomatic travellers and crowd screening during outbreaks. Potential locations include bus stands, market entry points, etc. based on local context and risk assessment.

Screening activities will be carried out by trained personnel such as ASHAs, ward members, and volunteers, with support from Health Department staff. Necessary equipment, including non-contact thermometers and appropriate PPE, shall be ensured prior to activation.

Location	Type (Bus stand/Jetty/Market/Railway)	Staff Deployed (ASHAs/Volunteers)	Screening Method	Reporting authority
Bus stand	Transport hub	One JHI One ASHA One health Mentors	1.Swab Collection. 2. Blood smears collection (RDT) 3.Thermal Scanners	Surveillance Nodal Officer in control room
Market entry	Market	One JHI One ASHA Male health volunteers	1.Swab Collection. 2. Blood smears collection (RDT) 3.Thermal Scanners	Surveillance Nodal Officer in control room

Standard Screening Protocol

1. TEMPERATURE CHECK (Non-contact)	2. VISUAL SYMPTOMS (Cough/Fever/Breathless)	3. TRAVEL HISTORY (Last 14 days)
↓	↓	↓
4. QUICK RISK ASSESSMENT High Risk → Test/Quarantine Suspect → PHC Referral	5. ACTION TAKEN Normal → Allowed IEC + Mask provided	

The screening protocol shall include temperature screening, observation for visible symptoms, and inquiry regarding recent travel or exposure history. Individuals identified as suspects during screening shall be immediately referred to the nearest

PHC/FHC for further evaluation, testing, and appropriate action as per prevailing guidelines.

3. Pandemic Control Room

The Pandemic Control Room (PCR) serves as the central nerve center for real-time coordination, data aggregation, decision support, and communication during outbreaks. It consolidates information from all LSGD teams, health facilities and community sources to enable rapid response decisions.

Control Room Infrastructure and Location

Primary Location: PUDUCODE Panchayath Office.

Backup Location: Community Hall in PUDUCODE G.P.

Health System Control Room Framework

The PCR is organized into **seven functional pillars** to ensure no aspect of the response is overlooked:

1. *Rapid Response Team (RRT)*

- Provides immediate intervention during emergencies, clusters, and field alerts.
- Coordinates urgent actions such as case investigation, contact tracing, isolation, and inter-facility referrals.

2. *Data Management & Analytics Team*

- Collects, validates, and manages key health system indicators (cases, tests, beds, HR, supplies).
- Analyzes data trends, generates projections, and supports evidence-based decision-making for local authorities.

3. *Human Resource Deployment Team*

- Allocates healthcare staff efficiently based on workload and need
- Ensures adequate and equitable workforce distribution across facilities

4. *Laboratory Surveillance Team*

- Oversees diagnostic testing coordination, sample transport, and timely reporting of results.
- Monitors lab indicators (testing volume, positivity rate, turnaround time) for early detection of outbreaks

5. *Vaccination Cell (If Required)*

- Plans and executes vaccination campaigns, including micro-planning and session scheduling.
- Tracks coverage, identifies gaps, and coordinates corrective actions with field teams and outreach services.

6. *Infrastructure & Patient Occupancy Team*

- Monitors facility capacity, earmarked beds, oxygen and critical care resources across all linked facilities.
- Ensures optimal patient distribution and referral management using updated bed-status and resource data.
- BMWM

7. *Communication team*

8. *Logistics and supply chain*

9. *Transportation (interfacility & emergency transport)*

10. *Media surveillance Call centre*

11. *Management of the deceased*

12. *Intersectoral coordination and convergence*

Key Control Room Team

The Control Room Team coordinates all pandemic response activities within the LSGD and serves as the single command and communication hub during activation. It integrates information, field actions, logistics, and policy execution across all participating departments and health facilities.

Role	Name	Designation	Contact Number	Responsibility
In-charge/Nodal Officer	Dr.Nimitha	Medical officer	8281769603	Overall coordination, decision-making, and reporting to the District level.
Data Entry Operator	Prasad	clerk	9847367897	Managing the line list, updating dashboards, and tracking testing results.
Communication Officer	Adarsh rajesh	JHI	9995226344	Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls.
Logistics Coordinator	Pc abdullah	Health standing committee chairman	9656549587	Basic needs
Technical Support (IT/Data)		JHI		

SOP for alert escalation/trigger point with mapping of responsibilities.

Key Points:

- The Control Room shall be staffed with a designated In-charge, data entry personnel, and communication staff with clearly defined roles and shift arrangements.

- It shall maintain updated records on daily monitoring indicators including new cases, persons under active quarantine, and hospital bed occupancy.
- All reports and situation updates shall be shared daily with the Block and District Surveillance Unit.
- The Control Room shall act as a single point of contact for coordination with response teams, health institutions, and other departments.
- Contact details of the Control Room shall be widely communicated to field staff and stakeholders during activation.

Daily Monitoring Indicators

To ensure timely decision-making and effective response, the following key indicators shall be monitored and updated on a daily basis by the Pandemic Control Room:

1. Epidemiological Indicators:

New cases reported today, Total active cases, Test Positivity Rate (TPR), Case Fatality Rate (CFR)

2. Surveillance Indicators:

Persons under home quarantine, High-risk contacts identified, Fever, ILI, SARI or other symptoms (syndromic surges), Travellers (symptomatic or high-risk arrivals), Animal husbandry surveillance (zoonotic alerts, unusual animal deaths, poultry/bird flu signals), Mortality surveillance (excess deaths, unexplained fatalities, verbal autopsy reports)

3. Logistics and Infrastructure Indicators:

Hospital / CFLTC beds occupied, Oxygen cylinders/concentrators available, Ambulances on standby

4. Alert Findings

The following table outlines category-specific **trigger points (red flags)** from surveillance indicators and corresponding immediate actions for the Pandemic Control Room. These enable rapid response to alert findings like testing anomalies, positive cases exceeding thresholds, clusters, and WGS reports.

Category	Trigger Point (Red Flag)	Immediate Action
Clusters	Geographical or facility-based: 5+ cases linked to one location (office, school, street).	Declare a micro-containment zone; perimeter control and active case finding.
Testing	Sudden drop in testing volume / delay in reporting / unusual testing trends	Review the sample collection process, address lab bottlenecks, deploy additional testing teams, and notify the District Lab.
Lab	Test Positivity rate increases	Increase testing sites in that ward.
Hospital	>80% Oxygen bed occupancy	Activate backup/CFLTC beds.

Travel	Cluster of cases from a single flight/train or high-risk arrival group.	Trace all passengers in adjacent seats; implement mandatory institutional quarantine.
Animal	Mass poultry/wildlife death or unusual sickness	Notify Animal Husbandry, sample the area, and dispatch RRT for environmental sampling and zoonotic check.
Mortality	Sudden spike in home deaths or brought-in-dead (BID) cases	Audit the deaths and Active Case Search drive
Additional investigations like Whole Genome Sequencing (WGS)	Detection of a Variant of Concern (VOC) or Variant of Interest (VOI)	Implement strict micro-containment; update clinical protocols to match variant severity.

4. Communication of Public Health Information

A Community Communication Hub shall be established to ensure timely, accurate, and consistent dissemination of information during a pandemic. The Hub will function under the coordination of Nodal officers of the control room and act as the nodal point for public communication, risk messaging, and community engagement. **It will support dissemination of official advisories, promote preventive behaviors, address rumors and misinformation, and ensure that messages reach all sections of the population through trusted local channels and leaders.**

Key communicators

Channel	Responsible Person	Contact
Ward-level announcements	member	9656547768
Social media	member	9544918285
Local Cable TV/Radio	manager,kannambra varthakal	9388060645

- All messages disseminated through the Hub shall align with advisories issued by the Health Department and District authorities.
- Community leaders shall be sensitized to support behavior change, reduce stigma, and counter misinformation.
- Special efforts shall be made to reach vulnerable and hard-to-reach populations using locally appropriate communication methods.

Rumor Tracking: A designated volunteer will monitor local social media/WhatsApp groups daily to identify misinformation and issue official clarifications via the Communication Hub.

5. Coordination with District/State Authorities & Other Organisations

Effective coordination with Block, District, and State authorities is essential to ensure timely reporting, technical guidance, and uninterrupted supply of essential resources during a pandemic. The LSG shall establish clear communication channels, designate responsible officers, and adhere to prescribed reporting timelines to support coordinated public health action and efficient resource mobilisation.

Key Details:

- **Nodal Officer for Reporting:** Medical Officer
- **Contact Number:** 8281769603

Reporting Schedule and Protocols:

To Whom	What to Report	Frequency	Nodal Person
Block PHC	Complete Situation Report (Cases, Quarantine, Beds, Screening, Deaths)	Daily / As directed during outbreak	MO
District IDSP Unit	Outbreaks/Clusters/Unusual Events (>5 cases same ward)	Immediately	MO
Veterinary Officer	Animal health events/Zoonotic alerts	Immediately upon detection	Veterinary Inspector / Livestock Inspector
State Cell	Zoonotic cross-sector events	As directed / Immediate during major outbreak	DMO/DSO (through Block PHC)

Supply Chain Coordination

The LSG shall coordinate closely with Block, District, and State authorities (KMSCL) to ensure uninterrupted availability of essential goods, medical supplies, and logistics during a pandemic. Supply requirements shall be assessed regularly based on case load and communicated promptly to the appropriate authorities for timely replenishment.

Key Points:

- Maintain updated contact details of District and Block nodal officers for health logistics, oxygen supply, ambulances, and essential medicines.
- Submit timely indent requests for PPE, testing kits, medicines, oxygen, and other critical supplies through prescribed channels.
- Monitor stock levels at LSGD facilities, quarantine/isolation centres, and field teams through daily stock registers and dispensing logs to prevent shortages.
- Coordinate with District authorities, Karunya/Neethi medical shops, and local purchase committees for funds allocation and emergency procurement.
- Ensure regular monitoring of dispensing registers at all facilities to track usage, expiry, and pilferage—shortages being a perennial issue requiring proactive weekly audits.
- Activate surge procurement protocols during high caseloads, leveraging local purchase powers under LSGD funds alongside state supplies.

Resource Inventory and Contacts

Resource Category	Source (District/State/Private)	Contact
PPE Kits/Masks/Gloves	KMSCL	0491- 253336
PPE Kits/Masks/Gloves	Local Vendors	7012208221

Oxygen Cylinders/Concentrators	KMSCL	0491- 253336
Medicines/Antivirals	KMSCL	0491- 253336
Medicines/Antivirals	Neethi Shops	7012208221
Test Kits (RTPCR/Rapid)	KMSCL	0491- 253336

Collaboration with NGOs, PPP, and CSR

To augment government efforts during a pandemic, the LSG shall collaborate with NGOs, voluntary organisations, and private sector partners through public–private partnerships and Corporate Social Responsibility (CSR) initiatives, in coordination with District authorities.

Key Points:

- Engage NGOs and community-based organisations for community outreach, awareness, and support to vulnerable populations.
- Leverage CSR support for procurement of medical equipment, PPE, oxygen concentrators, food kits, and sanitation materials, as permitted.
- Ensure all collaborations align with government guidelines and are routed through approved administrative and financial procedures.
- Maintain transparency and documentation for all external support received and utilised.

Organization	Type	Support Offered	Contact Person
Youth Clubs/Student Unions	CBO	new royal club, appakkad	9744721203

Interdepartmental Coordination

Coordination among departments during a pandemic shall be ensured through regular review meetings convened by the LSGD President. These meetings will provide a structured platform for sharing situational updates, assessing resource availability, resolving operational gaps, and taking joint decisions to ensure a coordinated and timely response.

Department	Representative	Key Role	Contact
Health (PHC)	Staff Nurse : Jismi	Case management	i9496124789
Veterinary	Veterinary Surgeon: Dr.Anusree	Animal surveillance	6282251337
ICDS	Supervisor: Nisha	Nutrition support	96333920374
Education	Head Teacher:	School coordination	Sindu-80756 82591
Police	CI	Containment enforcement	
Water Authority	AE	Water supply	
LSGD Engineering	AE	Quarantine infrastructure	Tintu(AE)-96 05846644

PHASE 3 - Surge Capacity

Phase 3 is activated when there is a rapid increase in cases, high test positivity rates, or when existing health facilities and quarantine arrangements approach saturation. The focus of this phase is to expand isolation capacity, augment clinical care services, and mobilise additional resources through district and state support mechanisms.

Conversion of Community Facilities

To manage increased case load, the LSGD shall activate additional isolation facilities by repurposing identified community infrastructure such as community halls, auditoriums, schools, hostels, or other suitable buildings.

Name of facility	Facility Type	No. of Buildings	Ward	Surge Capacity (Beds)	Nodal Person
MC Palace	auditorium	1	7	150	
Thanima	auditorium	1	3	150	
KC PALACE	auditorium	1	8	75	
SAPHALYA	auditorium	1	8	75	
Kanakanoor shiva temple hall	Temple hall	1	2	70	
College of ship technology	college		2	60	
Kanakanoor AUP school	school		2	20	

NUPS manappadom	school		5	120	
Vridha vishrama kendram			2	100	
Mariyamman temple hall			4	50	
rajamandiram			3	100	

- Recovery and rehabilitation phase

- Recovery

- Damage & impact assessment
- Restoration of health services
- Rehabilitation of affected population
- Psychosocial & mental health support
- Disease surveillance during recovery phase
- Environmental cleanup & sanitation
- Livelihood restoration
- Community engagement & confidence building
- Documentation & after-action review
- Lessons learned & best practices
- Health system strengthening
- Policy revision & preparedness enhancement
- Research

CONCLUSION

The Overall Pandemic Action Plan of Puducode Grama Panchayat provides a comprehensive, risk-based, and people-centred framework to prevent, prepare for, and respond to public health emergencies. By integrating ward-level risk stratification, demographic and clinical vulnerability mapping, strengthened disease surveillance, and effective intersectoral coordination, the Plan ensures early detection, timely response, and continuity of essential health services during pandemics.

Emphasis on community participation, protection of vulnerable populations, healthcare system preparedness, and improved water, sanitation, and environmental management enhances local resilience. Through decentralized planning, data-driven decision-making, and sustained collaboration with health institutions and community stakeholders, Puducode Grama Panchayat is well-positioned to minimize health risks, maintain social stability, and safeguard the well-being of its population during future public health emergencies.

RECOMMENDATIONS

1. Strengthening Healthcare Infrastructure

- Establish a primary health response unit within the Panchayat with trained staff.
- Ensure availability of basic medical supplies (masks, sanitizers, PPE kits, oxygen cylinders).
- Create tie-ups with nearby hospitals for emergency referral and transport.

2. Community Awareness & Education

- Conduct regular awareness campaigns on hygiene, vaccination, and preventive measures.
- Use local communication channels (community radio, WhatsApp groups, notice boards) to spread verified information.
- Train volunteers to act as health ambassadors in each ward.

3. Emergency Response & Coordination

- Form a Pandemic Preparedness Committee at Panchayat level including health workers, ward members, and NGOs.
- Develop a clear action plan for lockdowns, quarantine, and distribution of essentials.
- Maintain a database of vulnerable groups (elderly, differently-abled, chronically ill) for targeted support.

4. Supply Chain & Food Security

- Identify and support local suppliers and farmers to ensure uninterrupted food supply.
- Create community kitchens during emergencies to serve vulnerable populations.
- Stockpile essential commodities in Panchayat-run outlets for crisis periods.

5. Digital Preparedness

- Promote digital platforms for telemedicine consultations.
- Use Panchayat's website/social media for real-time updates on health advisories.

- Encourage online grievance redressal to reduce crowding in offices.

6. Training & Capacity Building

- Organize mock drills for pandemic response in schools, offices, and public spaces.
- Train Panchayat staff and volunteers in first aid, infection control, and crowd management.
- Collaborate with NGOs and health departments for capacity-building workshops.

7. Long-Term Resilience

- Integrate pandemic preparedness into the Panchayat Development Plan.
- Allocate a dedicated budget for health emergencies.
- Encourage community participation in planning and monitoring preparedness measures.

MOCKDRILL SCENARIOS

Mock drill scenarios for public health emergencies, including outbreak response, mass casualty management, and pandemic preparedness, have been identified to strengthen institutional readiness and coordinated response mechanisms; however, implementation is pending across institutions and will be conducted in a phased manner to strengthen emergency response capacity.

ANNEXURE

1. IMPORTANT PHONE NUMBERS

Phone numbers and particulars of persons responsible for providing guidance, assistance, and support for pandemic preparedness operations may be provided here in a manner that allows easy reference at a glance. The information recorded here could be exhibited elsewhere at the time of emergencies. LSG institutions shall give special attention to collect and record the above data of persons and institutions who/which are supposed to give technical and co-ordination support to reduce the impact of pandemic.

1.1. Details of grama panchayat/municipality/corporation wards

Sl.No	Name of the ward	Ward number	Name of the ward member	Contact number
1	THIRUVADI	1	P P KRISHNAN	9847117545
2	KANAKKANOR	2	NITHEESH	9633724440
3	MANAPADAM	3	LIJINA	9446067056
4	ALINCHUVAD	4	AMBILI	8592054100
5	CHANDAPURA	5	HAREESH	9847257586
6	THERUVU	6	P C ABDULLA	9656549587

7	THACHANADI	7	M C NASAR	8606060304
8	ANJUMURI	8	SHAHIDA	9847557507
9	GRAMAM	9	BHAGYALAKSHMI	9656158017
10	APPAKKAD	10	VIDYA	7558894604
11	KEEZHA	11	JISHA	9544918285
12	VALANKODE	12	UDHAYAN	9495071280
13	KOTTARASSERY	13	UMMUSALMA	8157998223
-1 4	THEKKEPOTTA	14	ASWATHY	9544618121
15	PATTOLA	15	RAJESH	7356539189
16	AYYAPANKUNNU	16	RAHULRAJ	8921397260

1.2. Other important phone numbers of grama panchayat/municipality/corporation area

Sl. No.	Name	Contact number
---------	------	----------------

1.		
2.		
3.		
4.		
5.		
6.		
7.	Excise department	
8.	Forest department	

1.3. Important offices of grama panchayat/municipality/ corporation

Sl.No	Name of the office	Contact person	Contact number
1.	Village Office	Village Officer	9446945509
2.	Agriculture Office	Agriculture Officer	9446637638
3.	Animal Husbandry Office	Animal Husbandry Doctor	6282251337

4.	Police Station	Police Officer (Vadakkenchery SI)	9497980636
5.	BSNL Office	Officer	04922257000
6.	Block Office	Officer	04922222270
7.	KSEB Office	(AE)Officer	9496009955
8.	Fisheries Office	Officer	-
9.	Fire and Rescue	Vadakkenchery Fire Station Number	04922 256 101

1.4. Health Services

Sl. No	Name of the hospital/institution	Location	Phone number
1.	Government hospitals/PHC	Chandapura	04922267243
2.	Private hospitals	New Life , Thchanadi	8111948444
3.	Clinical laboratories	Neethi Diagnostics, Thachanadi	9447992499

		Lena Lab, Chandapura	8921151213
		Neethi Lab, Anjumuri	8921151213
		Sandhwanam , Manapadam	6282154164
4.	Chemist/pharmacy	Janaushadhi, Anjumuri	8921151213
		Sana medicals, Thachanadi	9447366745
5.	Blood donors		
6.	Other language experts (Bihari, Hindi, Bengali, Asamees)		

1.5. Veterinary Services

Sl. No	Name of the Clinic	Name of the Surgeon/Doctor	Place/location	Phone number
1	Govt. Veterinary Hospital	Dr AnuSree	Pattola	6282251337

1.6. Helpline numbers

Helpline	Phone number
Police	100
Fire and Rescue	101
KSEB	1912

1.7. Public and Private Schools Contact details

Pandemic Preparedness Plan

S.No	Name of School	Institution type	Phone number-headmaster
1	ALPS KANAKKANOOR	Aided	SHANIYA 9747781059
2	NEW LEAF SCHOOL VETTUKAD	PRIVATE	JASEERA 8606103629
3	APLS KOTTARASSERRY	AIDED	DHANYA 7025609073
4	EMUPS MARYMATHA	PRIVATE	SR.ANITHA 9526262464
5	NARAYANA UPS	AIDED	MANIKANDAN 8848681561
6	SARVAJANA HSS	AIDED	MADHU 9249125300
7	SARIGA PUBLIC SCHOOL	AIDED	DEEPA 9847050170
8	GMLPS PUDUCODE	Govt	SINDHU 8075682591
9	COLLEGE OF SHIP TECHNOLOGY	Private	8111972769
10			

1.9. Anganwadi Contact Details

Ward No	Name of Anganwadi Teachers	Phone number
1	Thiruvadi-Ranjitha	9995239459
2	Kuthiramparambu-Preetha	9961234854
2	Kanakannoor-Fousiya	9744073629
3	Arlacode-Nikisha	9961888434
4	Manappadom-Aseena	9744766823
3	Pattola-Bindu	9746496261
3	Thekkekkara-Deepa	9048749760
5	Kannathukad-Suseela	9847410810
6	Marlad-safiya	9526432196
7	Ithaparambu-lakshmi	8606068326
7	Thachanadi-thahira	9562017129
8	Puducode-pushpaja	9288857277
10	Appakad-anila	9961771741
11	Parakunnu-bindu	9947887905
11	Keezha-preeja	8113908157
12	Choolipadam-satyabhama	9072458209
12	Thekkepotta-sunitha	9947441430

12	Chennalamkundu-chembakam	9947142429
13	Puthiripadam-sathidevi	9526377494
15	Palatuthara-sindu	9526365362
15	Ulikuthampadam-fairoja	9961474668

1.12. Information regarding resources

Means of transportation	Name of Owner	Phone Number
Heavy Trucks		
Tractor	PP KRISHNAN NARAYANAN VARUNDEVAN RAMAKRISHNAN KAREEM THEKKEPOTTA MANAF WARD 4 MOHAMMED WARD 5	9847117545 9947913389 9961684461 9495449789 8113011888 9961771232 9605491866
JCB	VINOD PARAKUNNU BADUSHAMANAPPADA M RANJITH MALANKAD	9947171808 8129549361 9961243460

Ambulances	SURESH P , ASHRAF PRAVASI	9388060645 9495465855
Boats	0	
Taxi service	shibu,subash	9656719075

Annexure 1: LSG Baseline Data Collection Format

A. Baseline data

Sl. No.	Indicator / Field	Baseline Data	Source / Remarks
1	Name of LSG	PUDUCODE	
2	District	PALAKKAD	
3	Block / Taluk	ALATHUR	
4	Type of LSG (Gram Panchayat / Municipality / Corporation)	GRAMA PANCHAYAT	
5	Area (sq. km)	16.29	
6	No. of wards	16	
7	GIS boundary file available	(Yes/No)	
8	Key contact person & phone	Udayan-panchayat president-97440712 80	

B. Demography

Indicator / Field	Baseline Data	Source / Remarks
Total population	24023	Projected data
Males	12065	
Females	11957	
Transgender population	1	
Age distribution (<5, 5–14, 15–59, ≥60)	Less than 5-1409 5-14- -2520	

	>60- -3154	
No. of households	6033	
Population density (persons/sq.km)	1474	
No. of migrant workers	164	
Major occupational groups		

C. Vulnerable Populations & Social Risks

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	No. of elderly (≥ 60)	3154	
2	No. of persons with disability	100	
3	No. of bedridden persons	107	
4	No. of chronic disease cases (DM/HTN/COPD/CKD etc.)	2460	
5	Pregnant women (current estimate)	139	
6	Children <5 years	1409	

7	Tribal population (if any)	0	
8	Fisherfolk / coastal vulnerable groups (if any)	0	
9	Urban slums / unnotified settlements (if any)	0	
10	Homeless population	4	
11	Orphanages / old age homes (number & capacity)	2	
12	Hostels / prisons / shelters (number & capacity)	0	
13	Poverty / BPL estimate	3528	
14	Food insecurity hotspots		
15	Any history of stigma/discrimination issues (Yes/No)	no	

D. Health System & Service Readiness

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	No. of health facilities in LSG (PHC/CHC/TH/DH/Private)	FHC-1 Private-1	
2	PHC/Family Health Centre details (name, location)	Family healthcentre, Chandapura, Puducode	
3	Subcentres / Health & Wellness Centres (number)	4	
4	Private clinics / hospitals (number)	1	
5	Labs available (public/private)	4	
6	Availability of ambulance services (Yes/No, number)	Private-2	
7	Availability of isolation/quarantine facilities (Yes/No, details)	yes college of ship technology-	

		MC Palace saphalya auditorium	
8	Cold chain facilities (Yes/No, details)	yes,in FHC	
9	Stockpile space available (Yes/No)	YES	
10	PPE / mask / sanitizer availability plan (Yes/No)	yes	
11	Surveillance staff available (JHI/JPHN/ASHA count)	JHI-2 JPHN-4 ASHA-18	
12	Existing emergency referral pathways (Yes/No)	Yes	

E. Points of Entry & Mobility

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
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1	Bus stands / depots (number)	0	
2	Railway stations (number)	0	
3	Boat jetties / fishing harbours (number)	0	
4	Ports / airports nearby (specify distance)	0	
5	Major highways/roads passing through	1.Vaniyampara-Puth ukode-Ottapalam road. 2.Vadakkenchery-M napadam-Thonikada vu road	
6	Border crossings (state/district)	Plazhy -thrissur boarder crossing	
7	Major markets / weekly markets	0	
8	Tourism hubs / major event venues	CHENDAKALLU	

9	Schools/colleges with hostels (number)	SCHOOLS-8 COLLEGE-1	
10	Factories / large workplaces (number)	LARGE FACTORY-1	

F. Water, Sanitation & Hygiene (WASH)

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Major drinking water sources (piped / wells / borewells / springs)	wells-712	
2	No. of public wells	48	
3	No. of households with piped water connection		
4	Water quality testing routine (Yes/No)	yes	
5	Common contamination risks (flooding, salinity, industrial waste)	flooding,salinity	

6	Open defecation free status (Yes/No)	yes	
7	Solid waste management system (Yes/No)	yes	
8	Bio-medical waste disposal mechanism (Yes/No)	yes	
9	No. of public toilets	-	
10	Handwashing stations in public places (Yes/No)	no	

G. Zoonotic Risks & One Health

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Livestock population (cattle/goats/pigs/poultry) – estimates	642	
2	No. of dairy farms / poultry farms / pig farms	100 pigs goat cluster-20 fowls-7009	

3	Slaughterhouses / meat shops (number)	21	
4	Animal markets (Yes/No, details)	no	
5	Veterinary dispensaries (number)	1	
6	History of zoonotic outbreaks (rabies, leptospirosis, avian flu etc.)	no	
7	Stray dog population management measures (Yes/No)	yes	
8	Rodent infestation hotspots (Yes/No)	no	
9	Wetlands / waterlogged areas prone to leptospirosis	-	
10	Bat roosting areas / caves / fruit orchards (if any)	bat roost nayarthara-ward 4	
11	Human-animal interface hotspots (farms near residences)	arangattukadavu,thi ruvadi,nayarthara	

H. Climate & Disaster Risks (Pandemic Amplifiers)

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Flood-prone wards (list)	2,1,5,13,3,11,15	
2	Landslide-prone wards (list)	14-chendakallu	
3	Cyclone/sea surge risk (Yes/No)	no	
4	Heatwave risk zones (Yes/No)	no	
5	Waterlogging areas (list)	-	
6	Shelter homes / relief camps (number, capacity)	as given in annexure	
7	Past disaster displacement history	in 2022 floods ward 2-kanakanoor, ward 1-thiruvadi, ward 5-malankadu, ward 13-shankarathuparambu	
8	Disruption to water supply/transport common (Yes/No)	no	

I. Critical Infrastructure & Logistics

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Schools (number)	8	
2	Anganwadis (number)	21	
3	Colleges (number)	1	
4	Community halls (number)	10	
5	Places of worship with large gatherings (number)	1-annapoorneshwari temple puducode-navaratri festival	
6	Large markets / shopping areas (number)	-	
7	Warehouses / cold storages (number)	-	
8	Telecom/mobile network coverage gaps (Yes/No)	yes	
9	Power outage frequency (high/medium/low)	medium	

10	Availability of generators in key facilities	yes	
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J. Risk Communication & Community Networks

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Ward-level rapid response teams (Yes/No)	yes	
2	Jagratha samithis / committees active (Yes/No)	yes	
3	Kudumbashree presence and strength (number of units)	241	
4	Volunteer network (number, coverage)	17	
5	Community-based surveillance mechanisms (Yes/No)	yes	
6	IEC dissemination channels (WhatsApp groups, community radio, PA systems)	yes-whatsapp group local channel-starnet	

7	Rumour tracking mechanisms (Yes/No)	yes	
8	Languages spoken / literacy considerations	languages-malayalam,tamil	
9	Vulnerable groups communication strategy available (Yes/No)	yes	

K. Preparedness Planning & Governance

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	LSG emergency plan available (Yes/No)	yes	
2	Pandemic preparedness plan available (Yes/No)	yes	
3	Incident Command System identified (Yes/No)	yes	
4	Rapid procurement mechanism available (Yes/No)	yes	

5	Emergency fund available (Yes/No, amount)	yes	
6	Past outbreak response experience (Yes/No, details)	yes 2022 floods-mainly wards2,1,5,13	
7	Intersectoral coordination mechanism (Health, Police, LSG, Veterinary, Education)	yes	
8	Mock drills conducted in last 12 months (Yes/No)	no	
9	Training coverage for staff/volunteers (Yes/No)	no	

L. Surveillance & Data Systems

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Digital reporting tools used (e.g., DHIS2, portals)	IHIP,IDSP	

2	Availability of line-listing format (Yes/No)	yes	
3	Contact tracing team identified (Yes/No)	yes	
4	Mapping of high-risk households available (Yes/No)	yes	
5	Testing sample transport mechanism (Yes/No)	yes	
6	Reporting timeline adherence (good/average/poor)	good	
7	Data sharing between departments (Yes/No)	yes	
8	Availability of dashboard for monitoring (Yes/No)	yes	

M. Additional Notes & Observations

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
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1	Key challenges perceived by LSG	immediate evacuation measures-lack of ambulance in government sector	
2	Top 5 high-risk wards (reason)	2,1,5,13,(flood prone)ward 5-nayarthara(bat roost)	
3	Any unique local risks (industrial pollution, refugee camps, etc.)		
4	Recommendations for preparedness strengthening		