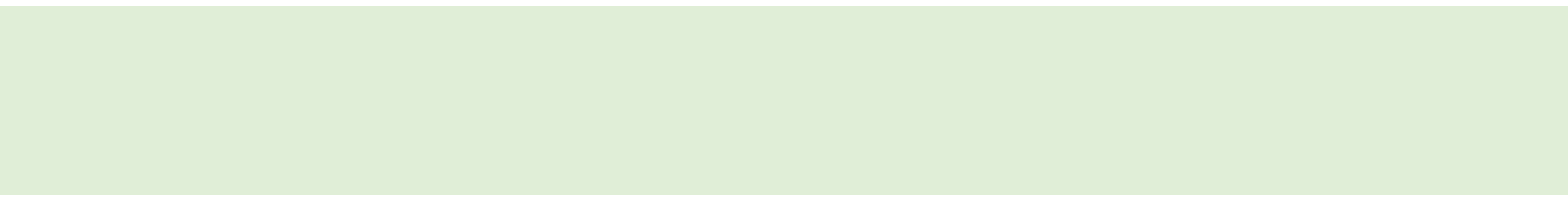




PANDEMIC PREPAREDNESS PLAN MODEL OF KODUR LSG

Health Inspector/Medical officer



MESSAGE FROM PRESIDENT/CHAIR LSGI

Kodur Grama Panchayat is committed to ensuring the health and well-being of every resident. Through this preparedness plan, we aim to enhance coordination between the health department, local administration, community organizations, and volunteers. The plan outlines strategies for early detection, rapid response, effective communication, resource mobilization, and community awareness to minimize the impact of potential pandemics.

I extend my sincere appreciation to all officials, healthcare professionals, and stakeholders who contributed to the preparation of this document. Together, let us work towards building a healthier, safer, and more resilient Kodur.

Panchayat President
Kodur Grama Panchayat

MESSAGE FROM HEALTH STANDING **COMMITTEE CHAIR**

The Pandemic Preparedness Plan of Kodur LSG is a significant initiative aimed at strengthening our community's capacity to respond effectively to public health emergencies. This plan emphasizes preparedness, coordination, and community participation to safeguard the health of our people. I appreciate the dedicated efforts of the health department, officials, and volunteers who contributed to the preparation of this plan. Together, we can build a resilient and healthier Kodur.

Standing Committee Chairperson
Kodur Grama Panchayat

MESSAGE BY MEDICAL OFFICER

The Pandemic Preparedness Plan of Kodur LSG is an important step toward strengthening our public health response system. Effective preparedness, early detection, timely intervention, and strong community participation are essential to minimize the impact of future pandemics. This plan provides a coordinated framework for health services, local governance, and community stakeholders to work together in protecting the health of the people of Kodur. I appreciate the efforts of all those involved in developing this plan and look forward to its successful implementation.

Medical Officer
Kodur Primary Health Centre

EXECUTIVE SUMMARY

Primary Health Centre (PHC) kodur functions as the primary public healthcare institution serving the population of kodur Grama Panchayath. The PHC 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 PHC 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.

Kodur PHC 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 PHC 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, Kodur Primary Health Centre stands as a vital institution in safeguarding public health and improving the quality of life of the residents of Kodur 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	NATIONALDISASTER MANAGEMENT AUTHORITY
PPE	PERSONAL PROTECTIVE EQUIPMENT
ICMR	INDIANCOUNCIL OF MEDICAL RESEARCH
CD	COMMUNICABLE DISEASES
NCD	NON-COMMUNICABLE DISEASES

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INTRODUCTION

Pandemics and emerging infectious diseases pose significant threats to public health, social stability, and economic development. Recent global experiences, particularly the COVID-19 pandemic, demonstrated how rapidly infectious diseases can spread and affect communities at every level. These events highlighted the importance of preparedness, early response, and coordinated action among health systems, local governments, and communities.

Local Self Governments (LSGs) play a crucial role in managing public health emergencies at the grassroots level. In Kodur Grama Panchayat, the experience gained during the COVID-19 pandemic emphasized the need for a structured and locally tailored preparedness plan. Strengthening surveillance, improving community awareness, ensuring resource availability, and establishing clear coordination mechanisms became essential to effectively respond to future health emergencies.

The Pandemic Preparedness Plan of Kodur LSG has therefore been developed to provide a systematic framework for prevention, preparedness, response, and recovery during potential pandemics. The plan focuses on strengthening coordination between the health department, local administration, community organizations, and volunteers. It also aims to enhance disease surveillance, risk communication, infection prevention, and continuity of essential health and social services.

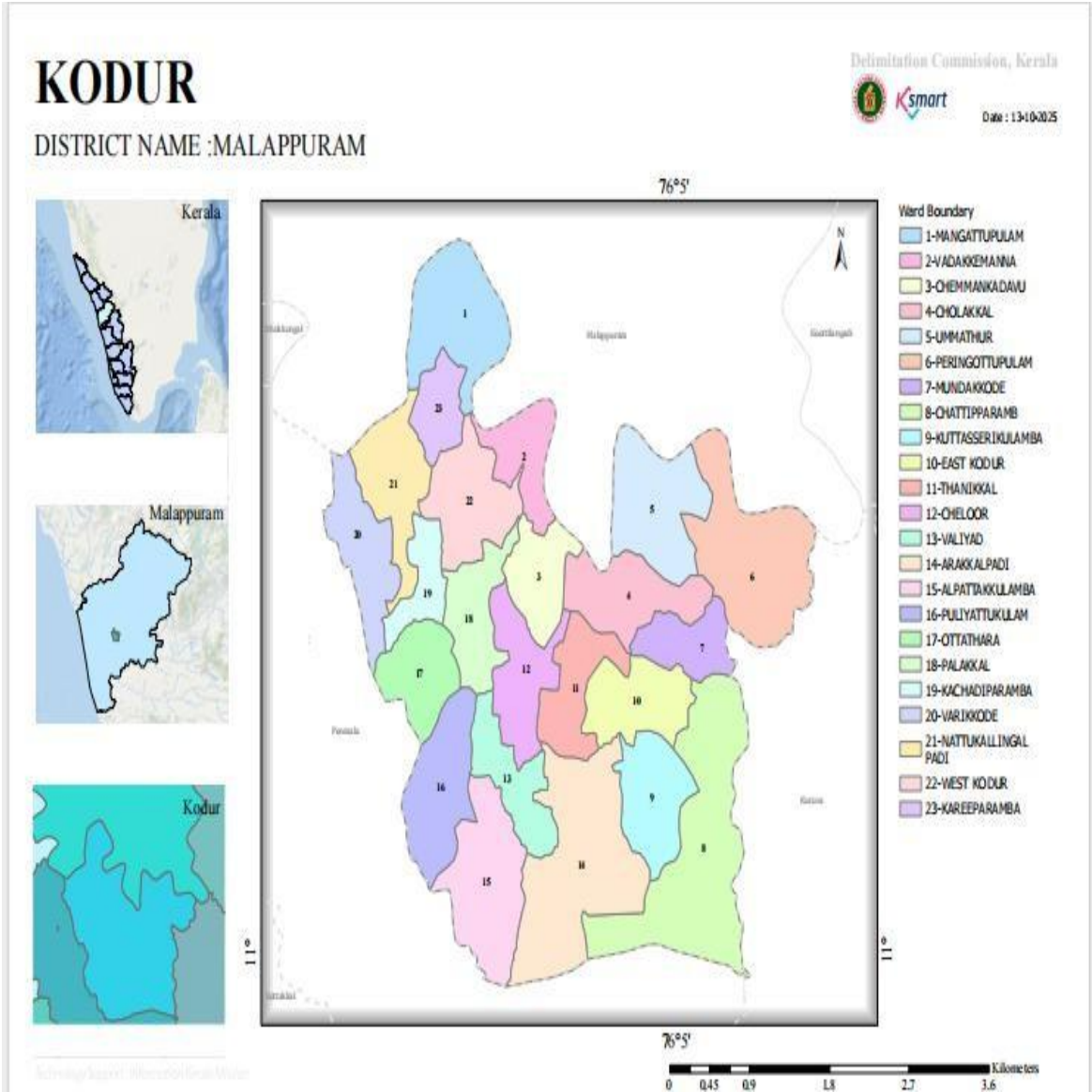
This plan serves as a guiding document to ensure that Kodur Grama Panchayat remains proactive and resilient in the face of future pandemics, safeguarding the health and well-being of its population.

LSGD AT A GLANCE

- Ward division -

Ward	Houses	Population	Migrants	Wells	Hot spots	Ed. Institutions	Hosp pvt/govt.
23	9475	47273	279	6064	0	20	1(GOV)

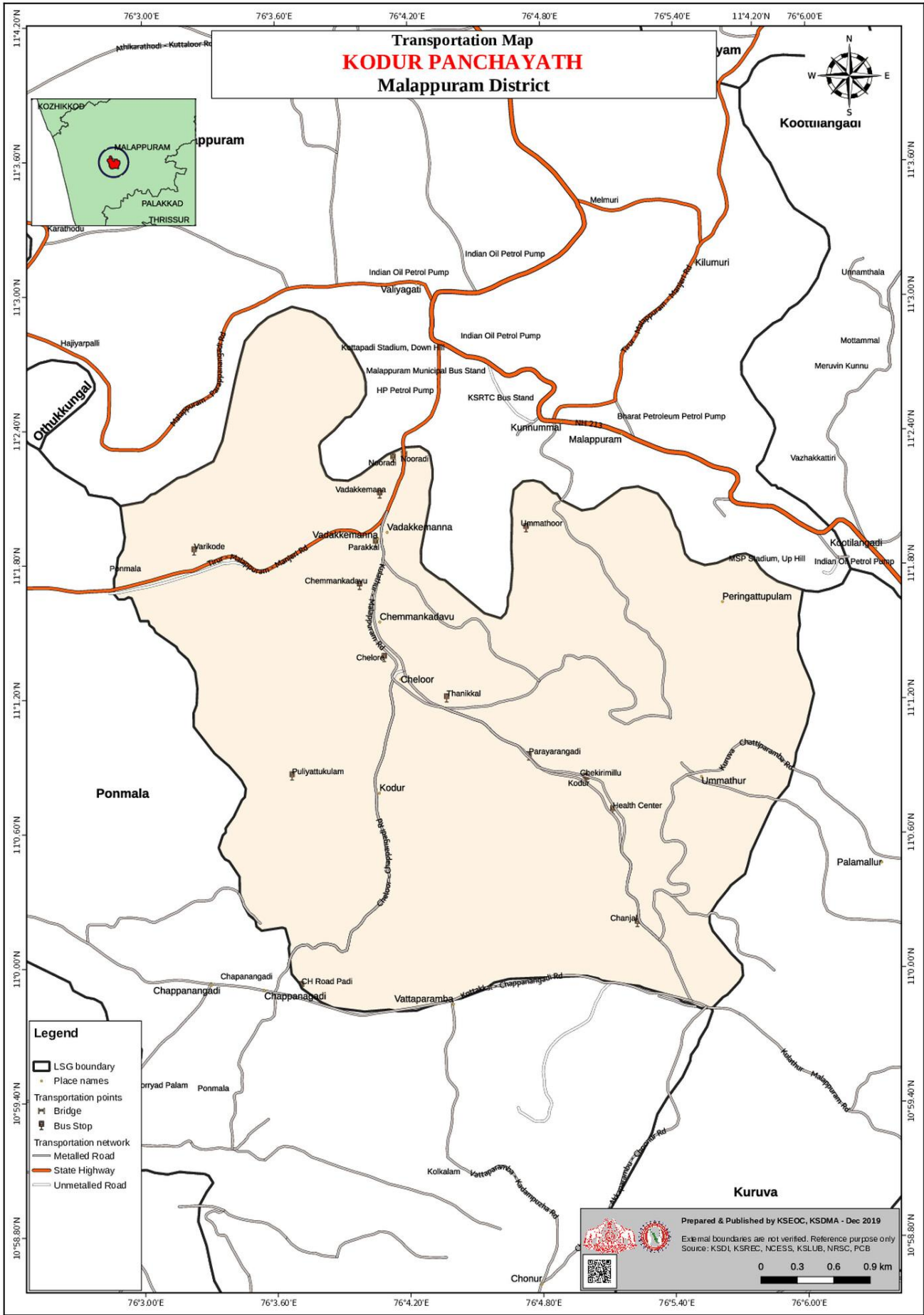
Maps - ward-based (K-Smart)

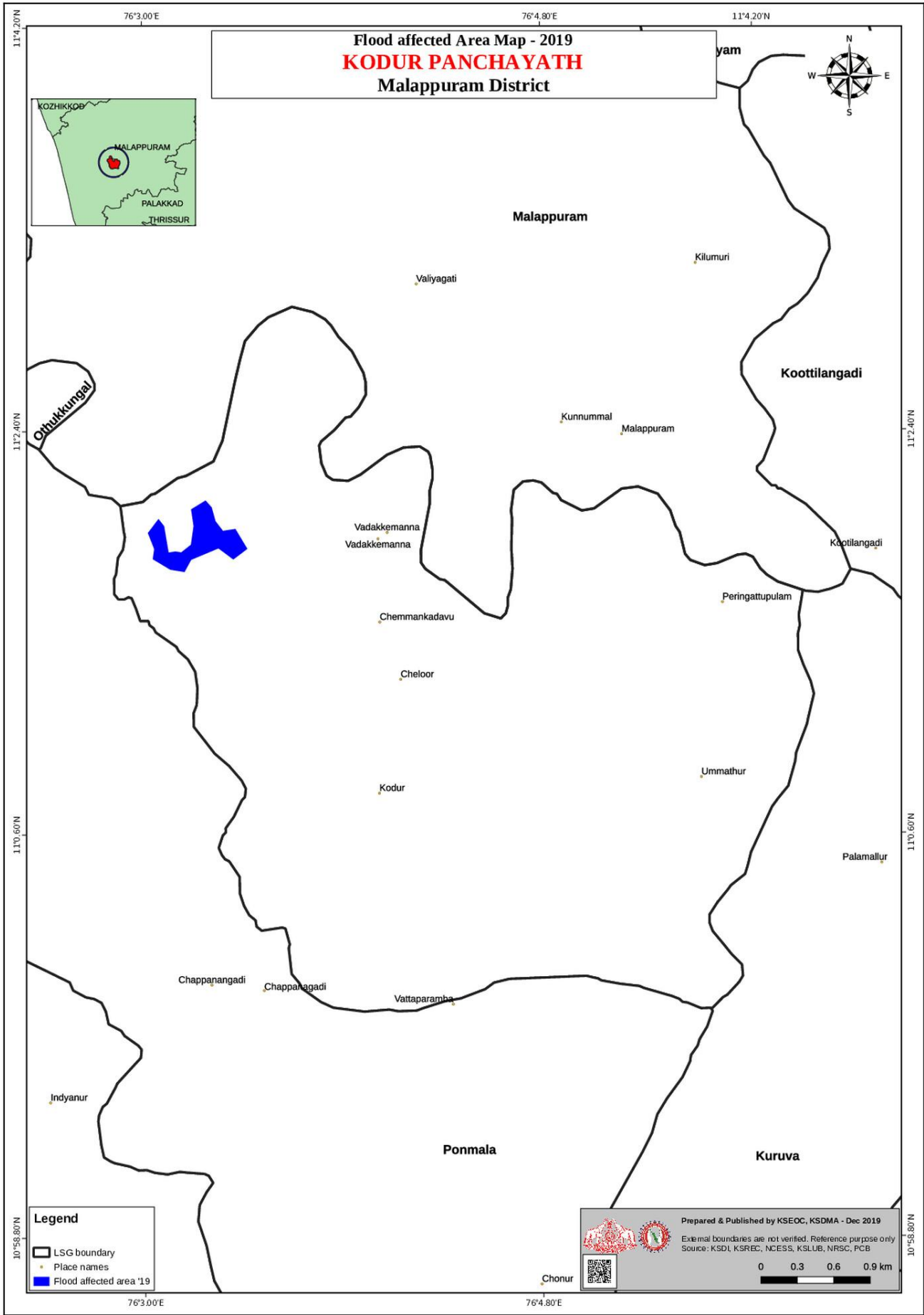


INTEGRATED HEALTH INFRASTRUCTURE MAP OF KODUR PANCHAYAT



Health Infrastructure Map





GENERAL PROFILE OF THE LSGI'S

Background of the LSGI

Kodur Grama Panchayat is a local self-government (LSG) institution in Kerala, functioning under the decentralized governance framework established by the 73rd Constitutional Amendment. It is responsible for planning, implementing, and monitoring development programs at the village level, including health, education, sanitation, and social welfare initiatives. The Panchayat is administratively divided into multiple wards, with a population largely dependent on traditional livelihoods. Agriculture—especially paddy cultivation—fishing, coir and coconut husk processing, and allied activities form the backbone of the local economy. In recent years, tourism-related activities and service-sector employment have 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, kodur LSGI has historically been vulnerable to waterborne diseases, such as Dengue and hepatitis. 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	kodur
Type (GP/Municipality / Corporation etc.)	Grama Panchayath
Block	Malappuram
District	malappuram
Number of wards	23
Total area (sq. km)	18.42
Population(Projected)	47273
Population density	persons/sq km
Terrain (coastal/low-lying/backwaters/foothills, etc.)	0
Number of rivers passing through LSGI	1
Number of water bodies in the LSGI	1
Number of educational institutions	20
Factories / small-scale industries	43
Flood-prone wards	1,2,,3,4,5,6,
Landslide-prone wards	0
Death Management and Disposal Facilities (mortuaries/crematorium, including electric)	0
Auditoriums/Marriage halls/convention centres/community halls	8

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		47273
Male		23618
Female		23655
Transgender		0
Children under 5		4110
Adolescent		9360
Elderly (>60)		5334
SOCIAL/LIVELIHOOD VULNERABILITY		
Previous EPEP family		57
BPL family		2810
Tribal communities		0
Migration	Immigrant	289
	Emigrant	4661
Socio-economically deprived		0
Fisherfolk		0
SC Community		1061
ST Community		0

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	497
Lactating mothers	1497
Bedbound patients	125
Patients under palliative care other than bedbound	311
Patients on Haemodialysis	29
Patients on CAPD	16
Cancer patients (currently on treatment)	95
Haemophilic patients	0
Mentally challenged	
Differently abled	194
Diabetic patients	2976
Hypertensive patients	2770
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	Temple festivals	Dec/jan

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 kodur	Fhc	04832800200	0	0	0	0	0
Private Healthcare Facilities								
	NIL	0	0	0	0	0	0	0
AYUSH Healthcare Facilities								
	NIL	0	0	0	0	0	0	0

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	4	1	G	0			Y	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	0	0	0	0
Nursing Colleges	0	0	0	0
Dental Colleges	0	1	0	0
Para-medical / Allied Health	0	0	0	0

Category of Institution	Govt	Private	AYUSH	Total
Pharmacy Colleges	0	0	0	0

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	0	0	0	0
Oxygen-generating systems(Y/N)	0	0	0	0
Oxygen-supported beds(Numbers)	0	0	0	0
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	0	0	0
ALS ambulances	0	0	0	0
Dialysis facilities	0	0	0	0
Dispensaries	0	0	0	0
Medical store	0	0	0	0
Industrial establishments(Medium-scale industries/small-scale industries establishments to whom we can depend in a worst-case scenario)	0	0	0	0

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 KODUR	N	N	1	0	0	0	0
0	0	0	0	0	0	0	0

Diagnostics facility mapping at the LSGI level

The diagnostic capacity of **KODUR 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	01	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	FHC KODUR	GOVT	Thanikka l	048328002 00	no	Govt approved

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	30	All wards	500	04832706467
Schools	20	8,10,14 .17.03, 4,5,6,1 5,2,	2000	0483-2734888
Colleges	1	8	2500	
Healthcare Educational Institutions				
Medical colleges (Govt/Private)	0	0		
Nursing colleges (Govt/Private)	0	0		
Dental colleges (Govt/Private)	01pvt	8		
Paramedical institutes	0	0		

(Govt/Private)				
Community Gathering Spaces				
Community halls	0	0		
Auditoriums	8	10,8,6, 3,2		
Religious buildings	0	0		
Vulnerable Group Support Facility				
Destitute homes	0	0		
Elderly homes	0			
LSGD owned other buildings	0			
Mass Fatality Management (MFM) Infrastructure				
Mortuary	0			
Crematorium	1			

*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	1	3	4
Doctors – AYUSH	1	0	1
Doctors – Veterinary	1	0	1
Doctors – Dental	0	2	2
Nursing officers	2	2	4
Lab technicians	1	6	7
Optometrist	0	0	0
Pharmacists	2	0	3
Psychologists	0	0	0
Counsellors	0	0	0

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

Pandemic Preparedness Plan

HS (Health Supervisors)	0	0	00
HI (Health Inspectors)	0		0
LHS (Lady Health Supervisor)	0		0
LHI (Lady Health Inspectors)	0		0
JPHN (Jr Public Health Nurses)	6		6
JHI (Jr Health Inspectors)	3		3
MLSP (Mid-Level Service Providers)	6		6
Palliative Nurses	1		1
RBSK Nurses	1		1
PRO	0		0
Epidemiologist	0		0
Data Manager	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	23
AWW (Anganwadi Workers)	30
Emergency Medical Volunteers (Trained)	0
Kudumbashree	220
MNREGS	340
Purusha Swayam Sahaya Sangham	0
Ex-Servicemen	10

Cadre	Number
Retired Police Officers	9
NCC/NSS Volunteers	0
Red Cross volunteers	0
One Health Community Volunteers	0
One Health Community Mentors	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	3
Religious based organizations	0
Foreign based organizations	0

Category	Total Count
Sports Club/youth clubs	1
Kudumbashree SHGs	220
Ayalkootams	220
Political organizations	0
Residential organizations	0

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	0483-2734966
Fire & Rescue Stations	0	0483-2734800
Water Pumping Points	3	
Public Distribution System (PDS)	3	

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	1
Crane	0
Heavy Trucks	0
Tractor	1
Ambulances	1
Mobile mortuaries	0
Boats	0
Taxi service	0

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 and inter-sectoral coordination,

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)	1702	All wards
	Pet Animals (Dogs/Cats)	35	All wards
	Stray Dog Population	16	All wards
	Pig Farms (Number of heads)	0	
	Small Units (Sheep / Goats – clustered)	0	
Bird Population	Poultry Units (Birds)	0	
	Poultry- (FOWL)	23676	All wards
	Wild/Migratory Birds (Observed)	0	
	Crow Mortality Events (Reported)	0	

The main risk of zoonotic diseases in **kodur** is concentrated in **Wards 5,7,8**, which is explained by the high density of cattle congregation areas, and poultry units. The stray dog population in **market areas, fish landing sites, bus stations** continues to be a substantial problem for rabies surveillance and bite prevention. There is a considerable risk of avian influenza introduction and amplification during **November - December** due to the seasonal presence of migratory and resident water birds near **ponds/ canal / river / backwater / paddy field**. Clusters of pig farms and animal shelters vulnerable to flooding further raise the risk of leptospirosis and other zoonoses mediated by the environment, especially during monsoon floods.

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	Vetenary dispemsary	GOVT	9	04832753137
Veterinary Hospital / Polyclinic	0			
Private Veterinary Clinics	0			
Mobile / Emergency Vet Service (incl. night services)	Night wet service (dvc, Malappuram			
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	1	Govt0483-2753137	0483-2753137
Private Veterinary Doctors	0		
Livestock Inspectors	2	govt	9037138546
Para-veterinary Staff/ Attenders	1	govt	8075781741
Contract / On-call Veterinary Support (if any)	0		

High-Risk Interface Points (Surveillance Sites)

High-risk interface points for zoonotic disease surveillance in kodur_Grama Panchayath include *wetland–livestock–human contact zones, backyard poultry farms, cattle sheds near water bodies, fish markets, and areas of high human–animal interaction such as community slaughter points and migratory bird congregation sites.* These are the primary surveillance sites where zoonotic spillover risks are elevated.

Type of Habitat	Type of High risk interface	Geographical vulnerability
Wetlands & Backwaters	0	0
Backyard Poultry Farms	8	LOW
Cattle Sheds near Water Bodies	14	LOW
Fish & Meat Markets	0	0

Community Slaughter Sites	0	0
Migratory Bird Congregation Areas	0	0
Rodent-Infested Grain Storage		

Category	Total Count	Key Locations (wards)
Poultry Farms	0	0
Backyard / Clustered Poultry Units	8	0
Duck Rearing Units (open water access)	0	0
Slaughterhouses/ Slaughter Points	0	0
Meat/Fish Markets	0	0
Live Bird Sale Points	5	0
Cattle Markets / Weekly Animal Fairs	01	9
Pet Shops / Breeders	3	9,

Animal Shelters / Pet Homes	14	10,11,12,7,1,23,18
Waste Disposal Sites near Animal Units	0	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	1,2,3,4,5,6	Mangattupulam, vadakkemanna, nooradi chemmakadav	high
Water bodies/wetlands	River,ponds		
Solid waste accumulation	MCF CENTER	VATTAPARAM B	LOW

Animal waste disposal issues	nil		
Rodent infestation zones	Nil		
Industrial effluent discharge	Nil		
Construction sites / abandoned buildings	Nil		
Poor drainage/blocked canals	Nil		
Drinking water source contamination risk	nil		

Disease Seasonality Mapping

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

.

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	0			

Leptospirosis	Rainy season			
Dengue/Chikungunya	Rainy season, hot season		PARAYARAN GADY	
Acute Diarrheal Diseases	Hot and rainy season			
Rabies	-			
Anthrax (rare)	-			

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	1,2,3,4,5,6	Vadakkemanna, chemmankadav, paruvamanna, peringottupuiam, umathoor	
Wetland-adjacent communities	0		
Backyard poultry / duck rearing households	0		
Livestock-rearing households	0		
Slaughterhouse & meat market workers	0		

Fisherfolk & fish market workers	0		
Sanitation workers	All wards		
Daily wage / migrant workers	All wards		
Elderly & chronically ill populations			
Pregnant Women	All wards		
Children (schools, Anganwadi's)	8973		
Limited access to safe water & sanitation	Chelur,mangattu pulam		

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.

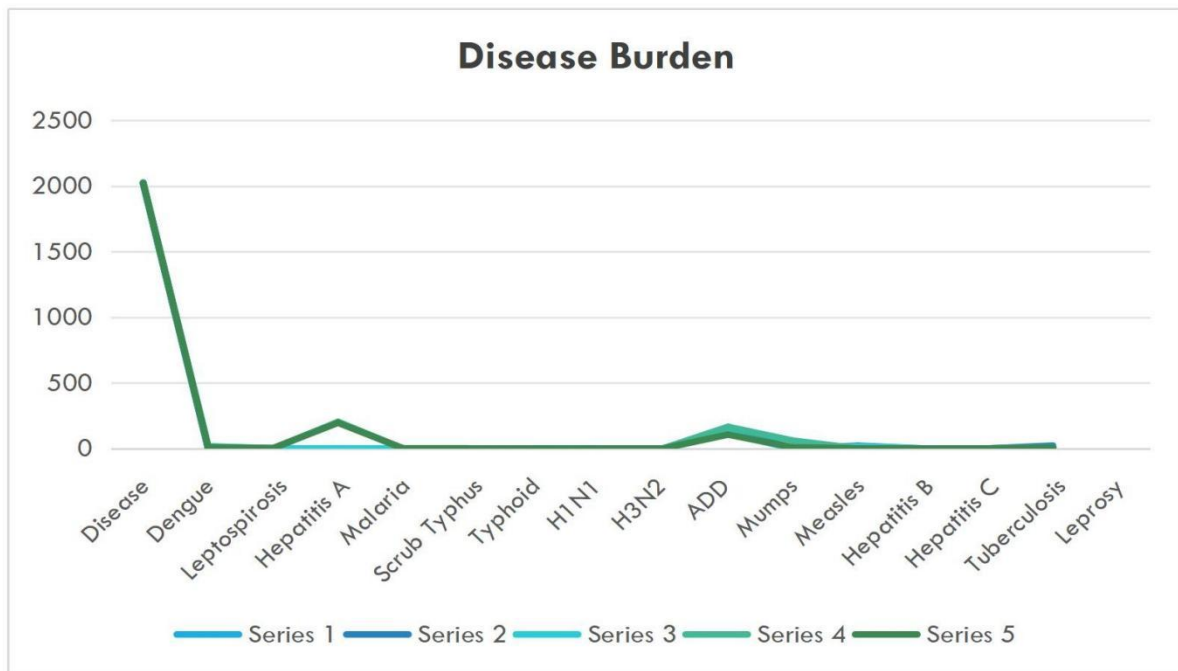
Disease Burden among human beings(Last 5 Years)

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	1	17	13	9	INCREASED IN 2023 AND THEN DECREASED
Leptospirosis	0	0	1	0	3	ALMOST STABLE

Hepatitis A	0	0	1	203	196	INCREASED IN 2024 THEN DECREASED
Malaria	0	0	01	0	1	STABLE
Scrub Typhus	0	0	0	0	0	NA
Typhoid	0	0	01	0	0	NA
H1N1	0	0	0	0	0	NA
H3N2	0	0	0	0	0	NA
ADD	128	149	115	165	106	INCREASED UPTO 2024 THEN DECREASED
Mumps	0	0	0	60	9	DECREASING
Measles	0	21	16	0	0	DECREASING
Hepatitis B	0	0	0	0	0	NA
Hepatitis C	0	0	0	0	0	NA
Tuberculosis	10	22	5	8	6	DECREASING

*(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	Dengue – Ward-wise Yearly Distribution					
	2021	2022	2023	2024	2025	Total
16	16/01	0	4/01	16/01, 14/2	01/01	6

Pandemic Preparedness Plan

8	0	08/1	0	17/02	02/01	4
13	0	0	03	1	13/01	5
15	0	0	3	15/02, 04/01	08/01	7
5	1	0	1	05/01 06/01	17/01	5
19	0	0	1	0	06/01	2
12	0	0	3	0	12/01	4

3	0	0	1	1	0	2
9	0	0	2	0	2	4
10	0	0	2	1	0	3

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	0	0	0	0
3	0	0	0	0	0	0
4	0	0	0	0	1	1
5	0	0	0	0	0	0

6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	0	0	0	0	0	0
9	0	0	0	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	1	1
14	0	0	0	0	0	0
17	0	0	1	0	1	2

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	
1	0	0	0	0	8	8

2	0	0	0	4	6	10
3	0	0	0	27	14	41
4	0	0	0	15	12	27
5	0	0	0	15	16	31
6	0	0	0	11	15	26
7	0	0	0	11	8	19
8	0	0	1	10	10	21
9	0	0	0	23	20	43

10	0	0	0	11	12	23
11	0	0	0	9	6	15
12	0	0	0	10	5	15
13	0	0	0	8	9	17
14	0	0	0	10	5	15
15	0	0	0	12	10	22
16	0	0	0	2	6	8
17	0	0	0	15	15	30
18	0	0	0	0	6	6
19	0	0	0	9	13	22
TOTAL	0	0	1	203	196	400

Outcome-Based Trend Analysis- 2025

Key diseases

Dengue Fever

Hepatitis A

Trend: Increasing in many regions

Outcomes observed:

Higher case numbers due to climate variability.

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	10	0
Water Borne Diseases	196	0
Air Borne Diseases	52	0
Blood Borne Diseases	0.	0
Food Borne Diseases	0	0

Vector-Borne Disease

Disease	No. of Cases	No. of Deaths
Dengue	9	0
Malaria	1	0
Chikungunya	0	0

Water Borne Disease

Disease	No. of Cases	No. of Deaths
Cholera	0	0
Typhoid	0	0
Hep- A	196	0
Dysentery	0	0
Amoebiasis	0	0
E- Coli infections	0	0

Air Borne Disease

Disease	No. of Cases	No. of Deaths
Influenza	0	0

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H1N1	0	0
TB	6	0
Chickenpox	46	0
Measles	0	0

Covid-19	0	0
Pertussis	0	0
Mumps	0	0

Blood-Borne Disease

Disease	No. of Cases	No. of Deaths
AIDS	00	0
Hep- B	0	0
Hep- C	0	0

Zoonotic Disease

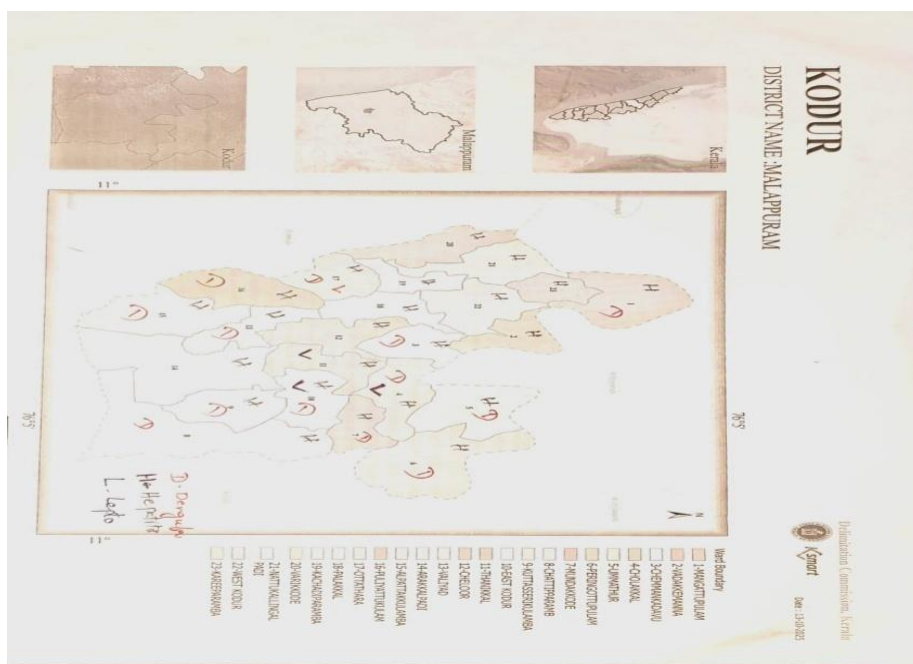
Disease	No. of Cases	No. of Deaths
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Pandemic Preparedness Plan

Rabies	0	0
Leptospirosis	03	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)



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	1	0	8	3	34	46
2	1	0	10	5	33	49
3	2	0	41	2	35	80
4	1	1	27	6	36	71
5	3	0	31	3	32	69
6	2	0	26	4	35	67
7	0	0	19	3	34	56
8	2	0	21	3	34	60
9	4	0	43	5	35	87
10	3	0	23	3	33	62

Pandemic Preparedness Plan

11	0	1	15	2	35	53
12	4	0	15	6	36	61
13	5	0	17	3	32	57
14	2	0	15	5	35	57
15	6	0	22	2	34	64
16	2	0	8	4	34	48
17	2	2	30	4	35	73
18	0	0	6	3	33	42
19	1	0	0	2	22	25
20	0	0	0	0	0	0
21	0	0	0	0	0	0

Pandemic Preparedness Plan						
22	0	0	0	0	0	0
23	0	0	0	0	0	0
TOTAL	42	4	400	69	663	1178

By overlaying five years of data, we have identified 04,10,11.'Red Zone' Wards. These are wards where at least two different categories of diseases (e.g., Dengue and Lepto) recurred in consecutive years. Ward 4 is categorized as the **Highest Priority Hotspot** due to its combination of flood vulnerability and high vector density. Future health infrastructure, such as the proposed **R.O plants at WARD 4** should be prioritized.

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	Rajesh	Panchayat President	LSGD	Chairperson	9447645539
2	Dr.Mohammed musthafa	Medical Officer (PHC/CHC)	Health Dept	Member Secretary	9497048291
3	Dr..Aslin mycle	Veterinary Officer	Animal Husbandry	Member	8593969090

4	0	Epidemiologist	Health Dept	Member	
5	Suchithra.p.k	Health Inspector/PHN	Health Dept	Surveillance	9947860653
6	SOBHANA.	ASHA Supervisor	Health Dept	Community link	9072144905
7	muhsina	ICDS Supervisor	Social Welfare	Vulnerable groups	7034725729
8	0	Police Station Officer	Police Dept	Law & order	
9		Ward Councillor Representative	LSGD	Community coordination	
10	Sabna	Kudumbashree CDO	Kudumbashree	Community mobilisation	
11		NGO/Volunteer rep	Civil Society	Support services	
12		Line Department representations			

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	DMOH		
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		

Media Surveillance			
Intersectoral coordination and convergence			
Collaborative surveillance			

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:**
2. **Event-based triggers (to be monitored and reported):**
3. **Zoonotic and animal health surveillance**
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:
 - PPE kits – 10 numbers
 - Pulse oximeters – 50 numbers
 - Hand sanitizers – 5 litres
 - Masks, gloves, 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

➤ 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, and boat jetties, 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
Boat jetty	Water transport	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: kodur Panchayath Office.

The Panchayath Office functions as the main Pandemic Control Room (PCR), serving as the central hub for coordination, monitoring, and decision-making. It houses core response teams, data management units, and communication systems. Being centrally located within the Panchayath ensures accessibility and administrative control. All emergency planning, review meetings, and reporting mechanisms are coordinated from this site.

Backup Location: Community Hall in kodur G.P.

The Community Hall serves as an alternate control room during contingencies such as infrastructure failure or surge situations. It is equipped to accommodate extended teams and emergency operations. This ensures uninterrupted functioning of pandemic response activities. The backup facility strengthens resilience and continuity planning within the health emergency framework.

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)

The RRT provides immediate field-level intervention during outbreaks, clusters, and emergency alerts. It conducts case investigations, contact tracing, and risk assessments. The team coordinates isolation, quarantine, and inter-facility referrals as required. Their swift action helps contain disease spread and reduce transmission at the community level.

2. Data Management & Analytics Team

This team collects, validates, and compiles critical health indicators including casenumbers, testing data, bed occupancy, human resources, and logistics. It performs trend analysis and forecasting to guide evidence-based decisions. Regular dashboards and situation reports are prepared for authorities. Accurate data management ensures timely policy adjustments and resource allocation.

3. Human Resource Deployment Team

The HR team assesses workforce requirements across health facilities and assigns staff based on workload and urgency. It ensures equitable distribution of doctors, nurses, paramedics, and support staff. The team also plans duty rosters and surge staffing during peak periods. Proper deployment prevents burnout and maintains service

4. Laboratory Surveillance Team

This team oversees diagnostic testing coordination, including sample collection,

transport, and timely reporting. It monitors laboratory indicators such as test volumes, positivity rates, and turnaround time. Early warning signals from lab data help detect emerging outbreaks. Continuous surveillance strengthens preparedness and response efficiency.

5. Vaccination Cell (If Required)

The Vaccination Cell plans and implements immunization drives through detailed microplanning and session scheduling. It tracks coverage rates, identifies vulnerable populations, and addresses gaps. The team coordinates with outreach workers and field staff for smooth execution. Effective vaccination management reduces disease severity and transmission.

6. Infrastructure & Patient Occupancy Team

This team monitors healthcare facility capacity, including general beds, isolation beds, ICU units, and oxygen availability. It ensures optimal patient distribution and referral management. Real-time bed-status updates prevent overcrowding and service disruption. Resource mapping enhances efficient utilization of healthcare infrastructure

7. Biomedical Waste Management (BMWM) Team

The BMWM team ensures safe segregation, collection, transportation, and disposal of biomedical waste as per regulatory norms. It monitors compliance in all healthcare facilities and temporary care centers. Proper waste management reduces environmental contamination and infection risk. Training and supervision are integral components of this pillar.

8. Communication Team

The Communication Team manages public information dissemination, awareness campaigns, and official advisories. It ensures transparent and accurate messaging to prevent misinformation and panic. Regular updates are shared through local media, social platforms, and community networks. Effective communication builds public trust and cooperation.

9. Logistics & Supply Chain Team

This team manages procurement, storage, and distribution of essential supplies such as PPE, medicines, oxygen, and equipment. It monitors stock levels and prevents shortages through advance planning. Efficient supply chain management ensures uninterrupted healthcare delivery. Coordination with district authorities strengthens resource mobilization.

10. Transportation (Inter-facility & Emergency Transport)

The transportation unit coordinates ambulance services and patient transfers between facilities. It ensures timely referral transport for critical cases. The team maintains vehicle readiness and communication with hospitals. Efficient transport systems reduce treatment delays and improve survival outcomes.

11. Media Surveillance & Call Centre

This unit monitors media reports and social media trends for outbreak signals or misinformation. The call centre addresses public queries, complaints, and emergency support requests. It provides guidance on testing, treatment, and vaccination services. Active surveillance improves community engagement and responsiveness.

12. Management of the Deceased

This team ensures dignified and safe handling of deceased persons as per public health guidelines. It coordinates documentation, transport, and support to families. Infection prevention protocols are strictly followed. Proper management upholds public health safety and humanitarian values.

13. Intersectoral Coordination & Convergence

This pillar ensures collaboration among health, local self-government, police, education, social welfare, and other departments. Regular coordination meetings align strategies and share responsibilities. Convergence enhances resource utilization and community outreach. Integrated action strengthens the overall pandemic preparedness and response system.

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	NA			Overall coordination, decision-making, and reporting to the District level.
Data Entry Operator	NA			Managing the line list, updating dashboards, and tracking testing results.
Communication Officer	NA			Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls.

Logistics Coordinator	NA			
Technical Support(IT/Data)	NA			

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 Pophint (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.

Pandemic Preparedness Plan

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**

Pandemic Preparedness Plan
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.

Channel	Responsible Person	Contact
Ward-level announcements	COUNCILORs	
Social media	Machingal mohammed	9847216362
Local Cable TV/Radio		

Key communicators

- 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: MO**
- **Contact Number: 9497048291**

Reporting Schedule and Protocols:

To Whom	What to Report	Frequency	Nodal Person
Block PHC	Complete Situation Report (Cases, Quarantine, Beds, Screening, Deaths)	NA	BLOCK MO
District IDSP Unit	Outbreaks/Clusters/Unusual Events (>5 cases same ward)	NA	DSO
Veterinary	Animal health	NA	

Officer	events/Zoonotic alerts		
State Cell	Zoonotic cross-sector events	NA	

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	0471-2945600
PPE Kits/Masks/Gloves	Local Vendors	04832979898
Oxygen Cylinders/Concentrators	KMSCL	0471-2945600
Medicines/Antivirals	KMSCL	0471-2945600
Medicines/Antivirals	Neethi Shops	04832979898
Test Kits (RTPCR/Rapid)	KMSCL	0471-2945600

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 Unions	Clubs/Student	CBO		

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 :	Case management	04832800200
Veterinary	Veterinary Surgeon:	Animal surveillance	8593969090
ICDS	Supervisor: MUHSINA	Nutrition support	7034725729
Education	Head Teacher:	School coordination	9847754838
Police		Containment enforcement	6082034250
Water Authority		Water supply	9544704848
LSGD Engineering		Quarantine infrastructure	8592925648

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
MALAYIL	AUDITORIUM	1	3	0	
ORANGE	“	1	10	0	
VISA	“	1	11	0	
LIMRA	“	1	7	0	
ROSE LOANGE	“	1	2	0	
GRAND VIEW	“	1	7	0	
MIA MIA	“	1	7	0	
HIC	“	1	6	0	

- Recovery and rehabilitation phase

After the peak of the pandemic, recovery measures will focus on restoring normal health and socio-economic conditions across all Panchayaths.

1. Recovery

The recovery phase in KODUR will focus on restoring routine health services, safely reopening institutions, and stabilising community livelihoods.

The recovery phase centres on the protracted endeavour to reconstruct and restore pre-pandemic circumstances. This entails revitalizing healthcare infrastructure, economic systems, and public service

provisions. Successful recovery requires meticulous planning, coordinated efforts, and the strategic allocation of resources to facilitate recovery across all sectors. Prioritizing the delivery of essential healthcare, addressing economic challenges, and protecting the well-being of affected communities are of utmost importance.

Priority areas include:

- Restoration of primary healthcare services
- Safe reopening of schools
- Economic stabilization
- Strengthening local health systems

Block-level coordination will be ensured between:

- Panchayaths
- Health Department
- ICDS
- Veterinary Department
- Community organisations

2. Damage and Impact Assessment

A thorough assessment of the damage to public health, infrastructure, and the economy is crucial after a pandemic. This evaluation is essential for identifying both immediate and long-term intervention needs. A detailed examination of the harm and its consequences provide vital information for resource allocation, informs policy development, and enables the precise targeting of recovery efforts. Therefore, a thorough situational analysis requires gathering real-time data and working closely with local authorities. A ward-wise assessment will be conducted across all Panchayaths.

Areas Assessed

- Disease burden
- Deaths
- Livelihood losses
- School disruptions
- Service interruptions
- Vulnerable households

Data Sources

- Health facility records
- Household surveys

- ASHA reports
- Panchayath registers

The findings will guide recovery planning.

3. Restoration of Health Services

Rebuilding healthcare infrastructure is crucial for guaranteeing the continued availability of essential medical services after a pandemic. The recovery process requires a step-by-step approach, starting with the most important services. These include emergency care, essential treatments, and vaccination programs. A key part of this restoration involves addressing staff shortages, securing enough medical supplies, and prioritizing the healthcare needs of vulnerable groups. Consequently, a meticulously devised strategy will facilitate the uninterrupted operation of the healthcare system throughout the recovery period.

Priority services to be restored:

- Maternal and child health services
 - Immunization
 - NCD treatment
 - Dialysis support
 - TB and HIV treatment
 - Emergency care
- Outreach services will be strengthened.

4. Rehabilitation of Affected Population

The rehabilitation of the affected population constitutes a critical element of the comprehensive recovery strategy. This process involves physical rehabilitation, healthcare evaluations, and social welfare support for those who suffered the most severe pandemic-related repercussions. Moreover, it is essential to address the mental, emotional, and social aspects of those impacted's lives. Therefore, ensuring access to medical services, social support systems, and economic assistance will help restore stability and resilience to the population.

Rehabilitation measures will include:

- Medical follow-up for recovered patients
- Social welfare support
- Food security support
- Livelihood support

Priority Groups:

- Elderly persons

- Daily wage workers
- Migrant workers
- Poor households
- Persons with disabilities

Convergence with Government schemes will be ensured.

5. Psychosocial and Mental Health Support

The psychological effects of a pandemic can be significant, underscoring the need to pay closer attention to psychosocial health. Offering mental health resources, such as counselling and psychological therapies, assists individuals in managing the trauma and stress associated with the pandemic. Community-based mental health services and telemedicine can enhance access to mental health resources, especially for those facing isolation or in need of immediate support. Therefore, cultivating mental resilience will contribute to the wider recovery of both individuals and communities.

Mental health support will include:

- Counselling services
- Tele-counselling
- Ward-level support
- Awareness programs

Priority Groups:

- Children
- Frontline workers
- Bereaved families
- Isolated elderly persons

6. Disease Surveillance During Recovery

Disease surveillance is a vital element of the recovery phase, monitoring potential resurgences or new outbreaks. Continuous monitoring, including testing, contact tracing, and reporting protocols, enables health authorities to identify and manage newly emerging cases swiftly. The fortification of the surveillance system facilitates early detection, the implementation of more effective control measures, and a more streamlined response to prospective new threats. Consequently, maintaining vigilance throughout the recovery period is essential to avert a secondary wave of infection.

Surveillance will continue across the wards

Activities

- Fever surveillance

- Syndromic surveillance
- Animal surveillance
- Mortality monitoring

Field Teams

- ASHA Workers
- JHI
- JPHN
- Health Inspectors

Early detection will prevent resurgence.

7. Environmental Cleanup and Sanitation

After a pandemic, environmental restoration and sanitation are crucial for keeping public areas safe and clean. Inadequate sanitation can precipitate secondary health crises, such as the spread of waterborne illnesses. Consequently, the orchestration of extensive cleanup initiatives, the enhancement of waste-disposal systems, and the dissemination of hygiene education to the populace will be indispensable for mitigating future health hazards. Furthermore, restoring sanitation systems and ensuring access to clean water are crucial for protecting public health during the recovery phase.

Block-wide sanitation drives will be conducted.

Activities

- Disinfection of public places
- Market sanitation
- Water source cleaning
- Waste removal
- Canal cleaning

Safe drinking water supply will be ensured

8. Livelihood Restoration

Rebuilding the economic well-being of individuals and businesses affected by the pandemic is essential for economic recovery. Numerous workers have experienced unemployment or financial distress, while businesses have been forced to close. Providing financial assistance, vocational training, and support for small and medium-sized enterprises will help restore economic stability. Consequently, livelihood restoration initiatives should prioritize support for vulnerable populations and stimulate economic expansion by generating employment opportunities and providing income support mechanisms. Livelihood restoration will focus on:

- Fisherfolk
- Agricultural workers
- Daily wage workers
- Kudumbashree units
- Small businesses

Support Measures

- Employment schemes
- Financial assistance
- Skill training
- Self-employment support

9. Community Engagement and Confidence Building

Restoring faith in the recovery process hinges on robust community involvement. Involving communities in decision-making, coupled with transparent communication and the cultivation of local leadership, can foster a sense of support and inclusion. Furthermore, fostering trust through community-based programs and open communication strengthens relationships and encourages adherence to public health guidelines. As a result, building confidence in the recovery process is crucial for promoting collective action and social cohesion.

Community participation will be encouraged through:

- Ward Sabhas
- Volunteer groups
- Kudumbashree units
- Youth clubs

Transparent communication will build trust.

10. Documentation and After-Action Review

Documentation and subsequent evaluations provide crucial insights into the pandemic response. Analyzing successes and challenges during the crisis enables health officials and policymakers to improve future preparedness strategies. A comprehensive after-action report facilitates the identification of both advantages and disadvantages, as well as areas requiring improvement, thereby informing the strengthening of future response plans. This assessment is essential for gauging the overall impact and efficacy of recovery initiatives.

A comprehensive report will be prepared covering:

- Actions taken

- Challenges faced
- Outcomes achieved

Review meetings will include:

- Panchayath officials
- Health staff
- Community representatives

11. Lessons Learned and Best Practices

The lessons from the pandemic provide crucial insights that can enhance how we prepare for and respond to future crises. Identifying successful strategies and key takeaways from the recovery phase enables enhancements to processes, policies, and protocols for future health emergencies. Sharing these lessons with local, national, and international partners will, in turn, strengthen the global community's ability to respond to subsequent crises. Furthermore, integrating these insights into current health systems and training initiatives will reinforce both resilience and response capabilities.

Key successful strategies will be documented:

- Ward-level coordination
- Volunteer mobilisation
- IEC campaigns
- Surveillance systems

Lessons learned will improve future preparedness.

12. Health System Strengthening

Strengthening the health system represents a continuous strategy to enhance preparedness for future pandemics. This necessitates allocating resources to healthcare infrastructure, providing training for healthcare professionals, and ensuring essential resources, including medical supplies, vaccines, and therapeutic interventions. A resilient health system is essential for an effective response to both current and future health emergencies. Furthermore, fortifying health systems not only improves pandemic response capabilities but also elevates the overall quality of healthcare delivery for the population. Post-pandemic strengthening measures:

- Improve infrastructure
 - Digital reporting systems
 - Staff training
 - Stockpile essential supplies
- This will improve long-term resilience.

13. Policy Revision and Preparedness Enhancement

Policy adjustments and preparedness improvements are essential for

bolstering the health system's capacity to manage future pandemics. This necessitates revising public health policies, enhancing inter-agency coordination, and aligning legal structures with the demands of swift response initiatives. By incorporating insights from the ongoing pandemic into policy revisions, governments can fortify their readiness for forthcoming crises, thereby strengthening the resilience of health systems, supply chains, and community involvement. Plans will be updated based on experience.

Actions

- Revise pandemic plans
- Improve coordination mechanisms
- Update SOPs
- Align with State guidelines

14. Research

Research is a crucial component in advancing pandemic preparedness and response strategies. In the wake of a pandemic, research endeavours should prioritize elucidating the disease's characteristics, formulating vaccines and therapeutic interventions, and refining diagnostic methodologies. Furthermore, scientific investigations can facilitate the identification of risk factors, the elucidation of transmission patterns, and the development of efficacious intervention strategies. Strengthening response capacities and expediting recovery require collaboration with international research networks, allocating resources to foster innovation, and prioritizing public health research initiatives.

The Block will encourage research on:

- Disease trends
- Vulnerability patterns
- Health service gaps

Collaboration

- District Health Authorities
- Academic Institutions
- Public Health Units

Research findings will support future preparedness.

After the peak of the pandemic, recovery measures will focus on restoring normal health and socio-economic conditions across all Panchayaths.

15. Recovery

The recovery phase in Pookkottur will focus on restoring routine health services, safely reopening institutions, and stabilising community livelihoods.

The recovery phase centres on the protracted endeavour to reconstruct and restore pre-pandemic circumstances. This entails revitalizing healthcare infrastructure, economic systems, and public service provisions. Successful recovery requires meticulous planning, coordinated efforts, and the strategic

allocation of resources to facilitate recovery across all sectors. Prioritizing the delivery of essential healthcare, addressing economic challenges, and protecting the well-being of affected communities are of utmost importance.

Priority areas include:

- Restoration of primary healthcare services
- Safe reopening of schools
- Economic stabilization
- Strengthening local health systems

Block-level coordination will be ensured between:

- Panchayaths
- Health Department
- ICDS
- Veterinary Department
- Community organisations

16. Damage and Impact Assessment

A thorough assessment of the damage to public health, infrastructure, and the economy is crucial after a pandemic. This evaluation is essential for identifying both immediate and long-term intervention needs. A detailed examination of the harm and its consequences provide vital information for resource allocation, informs policy development, and enables the precise targeting of recovery efforts. Therefore, a thorough situational analysis requires gathering real-time data and working closely with local authorities.

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Data Sources

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17. Restoration of Health Services

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Priority services to be restored:

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 - Immunization
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 - TB and HIV treatment
 - Emergency care
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The rehabilitation of the affected population constitutes a critical element of the comprehensive recovery strategy. This process involves physical rehabilitation, healthcare evaluations, and social welfare support for those who suffered the most severe pandemic-related repercussions. Moreover, it is essential to address the mental, emotional, and social aspects of those impacted's lives. Therefore, ensuring access to medical services, social support systems, and economic assistance will help restore stability and resilience to the population.

Rehabilitation measures will include:

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- Social welfare support
- Food security support
- Livelihood support

Priority Groups:

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- Poor households
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19. Psychosocial and Mental Health Support

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Mental health support will include:

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Priority Groups:

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After a pandemic, environmental restoration and sanitation are crucial for keeping public areas safe and clean. Inadequate sanitation can precipitate secondary health crises, such as the spread of waterborne illnesses. Consequently, the orchestration of extensive cleanup initiatives, the enhancement of waste-disposal systems, and the dissemination of hygiene education to the populace will be indispensable for mitigating future health hazards. Furthermore, restoring sanitation systems and ensuring access to clean water are crucial for protecting public health during the recovery phase.

Block-wide sanitation drives will be conducted.

Activities

- Disinfection of public places
- Market sanitation
- Water source cleaning
- Waste removal
- Canal cleaning

Safe drinking water supply will be ensured

22. Livelihood Restoration

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- Fisherfolk

- Agricultural workers
- Daily wage workers
- Kudumbashree units
- Small businesses

Support Measures

- Employment schemes
- Financial assistance
- Skill training
- Self-employment support

23. Community Engagement and Confidence Building

Restoring faith in the recovery process hinges on robust community involvement. Involving communities in decision-making, coupled with transparent communication and the cultivation of local leadership, can foster a sense of support and inclusion. Furthermore, fostering trust through community-based programs and open communication strengthens relationships and encourages adherence to public health guidelines. As a result, building confidence in the recovery process is crucial for promoting collective action and social cohesion.

Community participation will be encouraged through:

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- Volunteer groups
- Kudumbashree units
- Youth clubs

Transparent communication will build trust.

24. Documentation and After-Action Review

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A comprehensive report will be prepared covering:

- Actions taken
- Challenges faced

- Outcomes achieved

Review meetings will include:

- Panchayath officials
- Health staff
- Community representatives

25. Lessons Learned and Best Practices

The lessons from the pandemic provide crucial insights that can enhance how we prepare for and respond to future crises. Identifying successful strategies and key takeaways from the recovery phase enables enhancements to processes, policies, and protocols for future health emergencies. Sharing these lessons with local, national, and international partners will, in turn, strengthen the global community's ability to respond to subsequent crises. Furthermore, integrating these insights into current health systems and training initiatives will reinforce both resilience and response capabilities.

Key successful strategies will be documented:

- Ward-level coordination
- Volunteer mobilisation
- IEC campaigns
- Surveillance systems

Lessons learned will improve future preparedness.

26. Health System Strengthening

Strengthening the health system represents a continuous strategy to enhance preparedness for future pandemics. This necessitates allocating resources to healthcare infrastructure, providing training for healthcare professionals, and ensuring essential resources, including medical supplies, vaccines, and therapeutic interventions. A resilient health system is essential for an effective response to both current and future health emergencies. Furthermore, fortifying health systems not only improves pandemic response capabilities but also elevates the overall quality of healthcare delivery for the population. Post-pandemic strengthening measures:

- Improve infrastructure
 - Digital reporting systems
 - Staff training
 - Stockpile essential supplies
- This will improve long-term resilience.

27. Policy Revision and Preparedness Enhancement

Policy adjustments and preparedness improvements are essential for bolstering the health system's capacity to manage future pandemics. This necessitates revising public health policies, enhancing inter-agency

coordination, and aligning legal structures with the demands of swift response initiatives. By incorporating insights from the ongoing pandemic into policy revisions, governments can fortify their readiness for forthcoming crises, thereby strengthening the resilience of health systems, supply chains, and community involvement. Plans will be updated based on experience.

Actions

- Revise pandemic plans
- Improve coordination mechanisms
- Update SOPs
- Align with State guidelines

28. Research

Research is a crucial component in advancing pandemic preparedness and response strategies. In the wake of a pandemic, research endeavours should prioritize elucidating the disease's characteristics, formulating vaccines and therapeutic interventions, and refining diagnostic methodologies. Furthermore, scientific investigations can facilitate the identification of risk factors, the elucidation of transmission patterns, and the development of efficacious intervention strategies. Strengthening response capacities and expediting recovery require collaboration with international research networks, allocating resources to foster innovation, and prioritizing public health research initiatives.

The Block will encourage research on:

- Disease trends
- Vulnerability patterns
- Health service gaps

Collaboration

- District Health Authorities
- Academic Institutions
- Public Health Units

Research findings will support future preparedness.

CONCLUSION

The Pandemic Preparedness Plan of Kodur Grama Panchayat reflects a comprehensive and coordinated approach to safeguarding the health and well-being of the community. By integrating the efforts of the Primary Health Centre, sub-centres, field health workers, Anganwadi centres, private healthcare providers, and community organizations, the plan ensures early detection, timely response, and effective management of public health

emergencies.

This plan emphasizes community engagement, resource mobilization, risk communication, and continuous monitoring as key strategies to minimize the impact of pandemics. Through proactive preparedness, clear protocols, and strong collaboration between the Panchayat, health authorities, and local stakeholders, Kodur is better equipped to respond to current and future health challenges.

Ultimately, this plan strengthens the resilience of Kodur Grama Panchayat, enabling it to protect its residents, sustain essential services, and ensure the continuity of healthcare delivery during any pandemic or health crisis.

Additional points

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 in KODUR 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

Fire emergency Response

A mock drill was conducted to simulate a fire emergency during a pandemic situation, aimed at evaluating the effectiveness of emergency response procedures while ensuring adherence to infection control protocols. Upon activation of the fire alarm due to a simulated incident (electrical fire), all personnel were instructed to evacuate through designated emergency exits while maintaining physical distancing and wearing appropriate protective equipment such as masks. Trained staff initiated preliminary fire response actions, and floor wardens facilitated an orderly and staggered evacuation to prevent crowding. Special provisions were made for the safe evacuation of individuals in isolation or with suspected infection, handled by designated responders using proper PPE. At the assembly point, personnel were organized with adequate spacing, attendance was recorded, and individuals displaying symptoms were segregated as a precaution. The drill successfully assessed coordination, communication, evacuation efficiency, and compliance with both fire safety and pandemic-related guidelines.

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	MANGATTUPULAM	1	RAMEESA	9946561960
2	VADAKKEMANA	2	SABHNA	9947766499
3	CHEMMANKADAVU	3	ARIFA RAHMAN	9142111455
4	CHOLAKKAL	4	SAJNAMEIL	9400391983
5	UMMATHOOR	5	ABIDHA	9656567002
6	PERINGOTTUPULAM	6	NADEERA	9065351145
7	MUNDAKODE	7	AFSATH	8714231145
8	CHATTIPARAMBU	8	ASLAM	9061566667

9	KUTTASSERIKULAMBU	9	NAJMA	8606674251
10	EAST KODUR	10	SHAHANA SHERIN	7510259516
11	THANIKKAL	11	YOOSAF	9744414345
12	CHELLORR	12	MARIYATHUL KIBTHIYA	8139037891
13	VALIYAD	13	KM SUBAIR	9846559595
14	ARAKKALPADI	14	SHOUKATHALI	9847171355
15	ALPETTAKULAMBU	15	FOUSIYA	9605611628
16	PULIYATTUKULAM	16	ABDUL RASAK	9656393896
17	OTTATHARA	17	MOHAMMED MACHINGAL	9847216362
18	PALAKKAL	18	MOHAMMED MUSTHAFA	9745039762
19	KACHADIPARAMBU	19	JUMAILA	9188342094
20	VARIKODE	20	SHAJI CP	9846121112
21	NK PADI	21	REENA	9497845824
22	WEST KODUR	22	NEELAKANDAN	9446840591
23	KAREEPARAMBU	23	FAZIL KAREEM	9633119521

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

Sl. No.	Name	Contact number
1.	PHC	2800200

1.3. Important offices of grama panchayat/municipality/ corporation

Sl.No	Name of the office	Contact person	Contact number
1.	Village Office	Village Officer	9495891345
2.	Agriculture Office	Agriculture Officer	9497404735
3.	Animal Husbandry Office	Animal Husbandry Doctor	8593969090
4.	Police Station	Police Officer	04832734966
5.	BSNL Office	Officer	04832731910
6.	Block Office	Officer	04832734909
7.	KSEB Office	Officer	049332442100
8.	Fisheries Office	Officer	8089957766
9.	Fire and Rescue	Officer	04832734800

1.4. Health Services

Sl. No	Name of the hospital/institution	Location	Phone number
1.	Government hospitals/PHC	Thanikkal	04832800200
2.	Private hospitals	0	
3.	Clinical laboratories	7	

4.	Chemist/pharmacy	2	
5.	Blood donors		
6.	Other language experts (Bihari, Hindi, Bengali, Asamees)	0	

1.5. Veterinary Services

Sl. No	Name of the Clinic	Name of the Surgeon/Doctor	Place/location	Phone number
1	Govt. Veterinary Hospital	Dr. Aslin mycle	Eastkodur	8593969090

1.6. Helpline numbers

Helpline	Phone number
Police	6082034250
Fire and Rescue	04832734800
KSEB	049332442100

1.7. Public and Private Schools Contact details

S.No	Name of School	Institution type	Phone number
1	PMSAMA HSS	Aided	9847608877
2	AMUPS UMMATHOOR	Aided	9020262123
3	ALHUDHA	Private	7907602827
4	GLPS KODUR	Govt	9497658160
5	ICET PUBLIC SCHOOL	Private	7736130639
6	GLPS PULIYATTUKULAM	GOVT	9400056930
7	AMLPS OTTATHARA	AIDES	7907630518
8	GLPS PERINGOTTUPULAM	Govt	9446666544
9	GMUPS CHEMMANKADAVU	Govt	9847754838
10	GLPS KUTTASSERI KULAMBU	GOVT	9961956082

1.9. Anganwadi Contact Details

Ward No	Name of Anganwadi Teachers	Phone number
6	JAMEELA	9747769338
10	AJITHA	9562151866
5	DHANALAKSHMI	9446010606
4	LALITHA	7012682802
11	SOUMYA	9895982660
3	ARIFA	9142111455

Ward No	Anganwadi No and Name of Teacher	Phone number
7	SHILPA	9946497939
9	K VALLI	9288150104
9	MEENAKSHI	8714407268

1.12. Information regarding resources

Means of transportation	Name of Owner	Phone Number
Heavy Trucks	NA	
Tractor	MUNEER	9947304294
Ambulances	RAHEES	9846412635
Boats	NA	
Taxi service	SHIHAB	7907053634

Annexure 1: LSG Baseline Data Collection Format

A. Baseline data

Sl. No.	Indicator / Field	Baseline Data	Source / Remarks
1	Name of LSG	KODUR	
2	District	MALAPPURAM	
3	Block / Taluk	MALAPPURAM/PE RINTHALMANNA	
4	Type of LSG (Gram Panchayat / Municipality / Corporation)	GRAMA PANJAYATH	
5	Area (sq. km)	18.42	
6	No. of wards	23	
7	GIS boundary file available	(Yes/No)N	
8	Key contact person & phone	SECR	9447645539

B. Demography

Indicator / Field	Baseline Data	Source / Remarks
Total population	45472	
Males	21681	
Females	23791	
Transgender population	0	
Age distribution (<5, 5–14, 15–59, ≥60)	45472	
No. of households	9475	
Population density (persons/sq.km)	NA	
No. of migrant workers	289	
Major occupational groups		

C. Vulnerable Populations & Social Risks

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	No. of elderly (≥ 60)	1032	
2	No. of persons with disability	97	
3	No. of bedridden persons	130	
4	No. of chronic disease cases (DM/HTN/COPD/CKD etc.)	5799	
5	Pregnant women (current estimate)	598	
6	Children <5 years	4110	
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	0.	
11	Orphanages / old age homes (number & capacity)	0	
12	Hostels / prisons / shelters (number & capacity)	0	
13	Poverty / BPL estimate	3218	

14	Food insecurity hotspots	0	
15	Any history of stigma/discrimination issues (Yes/No)	N	

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)	PHC	
2	PHC/Family Health Centre details (name, location)	FHC KODUR	
3	Subcentres / Health & Wellness Centres (number)	06	
4	Private clinics / hospitals (number)	0	
5	Labs available (public/private)	08	
6	Availability of ambulance services (Yes/No, number)	N	
7	Availability of isolation/quarantine facilities (Yes/No, details)	N	

8	Cold chain facilities (Yes/No, details)	Y	
9	Stockpile space available (Yes/No)	N	
10	PPE / mask / sanitizer availability plan (Yes/No)	Y	
11	Surveillance staff available (JHI/JPHN/ASHA count)	32	
12	Existing emergency referral pathways (Yes/No)	N	

E. Points of Entry & Mobility

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Bus stands / depots (number)	0	
2	Railway stations (number)	0.	
3	Boat jetties / fishing harbours (number)	0	
4	Ports / airports nearby (specify distance)	35KM	
5	Major highways/roads passing through	5	

6	Border crossings (state/district)	N	
7	Major markets / weekly markets	Y	
8	Tourism hubs / major event venues	N	
9	Schools/colleges with hostels (number)	20	
10	Factories / large workplaces (number)	N	

F. Water, Sanitation & Hygiene (WASH)

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Major drinking water sources (piped / wells / borewells / springs)	WELL	
2	No. of public wells	44	
3	No. of households with piped water connection	3411	
4	Water quality testing routine (Yes/No)	N	
5	Common contamination risks (flooding, salinity, industrial waste)	N	
6	Open defecation free status	N	

	(Yes/No)		
7	Solid waste management system (Yes/No)	Y	
8	Bio-medical waste disposal mechanism (Yes/No)	Y	
9	No. of public toilets	Y	
10	Handwashing stations in public places (Yes/No)	Y	

G. Zoonotic Risks & One Health

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Livestock population (cattle/goats/pigs/poultry) – estimates	35	
2	No. of dairy farms / poultry farms / pig farms	0	
3	Slaughterhouses / meat shops (number)	0	
4	Animal markets (Yes/No, details)	0	
5	Veterinary dispensaries (number)	1	
6	History of zoonotic outbreaks (rabies, leptospirosis, avian flu etc.)	0	
7	Stray dog population management	NA	

	measures (Yes/No)		
8	Rodent infestation hotspots (Yes/No)	N	
9	Wetlands / waterlogged areas prone to leptospirosis	Y	
10	Bat roosting areas / caves / fruit orchards (if any)	0	
11	Human-animal interface hotspots (farms near residences)	NA	

H. Climate & Disaster Risks (Pandemic Amplifiers)

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Flood-prone wards (list)	6	
2	Landslide-prone wards (list)	0	
3	Cyclone/sea surge risk (Yes/No)	0	
4	Heatwave risk zones (Yes/No)	0	
5	Waterlogging areas (list)	0	
6	Shelter homes / relief camps (number, capacity)	0	
7	Past disaster displacement history	N	
8	Disruption to water supply/transport common (Yes/No)	Y	

I. Critical Infrastructure & Logistics

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Schools (number)	19	
2	Anganwadis (number)	30	
3	Colleges (number)	1	
4	Community halls (number)	8	
5	Places of worship with large gatherings (number)	0	
6	Large markets / shopping areas (number)	0	
7	Warehouses / cold storages (number)	0	
8	Telecom/mobile network coverage gaps (Yes/No)	Y	
9	Power outage frequency (high/medium/low)	MED	
10	Availability of generators in key facilities	Y	

J. Risk Communication & Community Networks

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks

1	Ward-level rapid response teams (Yes/No)	Y	
2	Jagratha samithis / committees active (Yes/No)	Y	
3	Kudumbashree presence and strength (number of units)	Y	
4	Volunteer network (number, coverage)	230	
5	Community-based surveillance mechanisms (Yes/No)	Y	
6	IEC dissemination channels (WhatsApp groups, community radio, PA systems)	Y	
7	Rumour tracking mechanisms (Yes/No)	N	
8	Languages spoken / literacy considerations	MALAYALAM	
9	Vulnerable groups communication strategy available (Yes/No)	Y	

K. Preparedness Planning & Governance

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	LSG emergency plan available (Yes/No)	Y	

2	Pandemic preparedness plan available (Yes/No)	Y	
3	Incident Command System identified (Yes/No)	Y	
4	Rapid procurement mechanism available (Yes/No)	Y	
5	Emergency fund available (Yes/No, amount)	Y	
6	Past outbreak response experience (Yes/No, details)	Y	
7	Intersectoral coordination mechanism (Health, Police, LSG, Veterinary, Education)	Y	
8	Mock drills conducted in last 12 months (Yes/No)	Y	
9	Training coverage for staff/volunteers (Yes/No)	Y	

L. Surveillance & Data Systems

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Digital reporting tools used (e.g., DHIS2, portals)	PORTALS	
2	Availability of line-listing format (Yes/No)	Y	

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

M. Additional Notes & Observations

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Key challenges perceived by LSG	Y	
2	Top 5 high-risk wards (reason)	1-6 FLOOD	
3	Any unique local risks (industrial pollution, refugee camps, etc.)	N	
4	Recommendations for preparedness strengthening	NILL	