

COVID 19

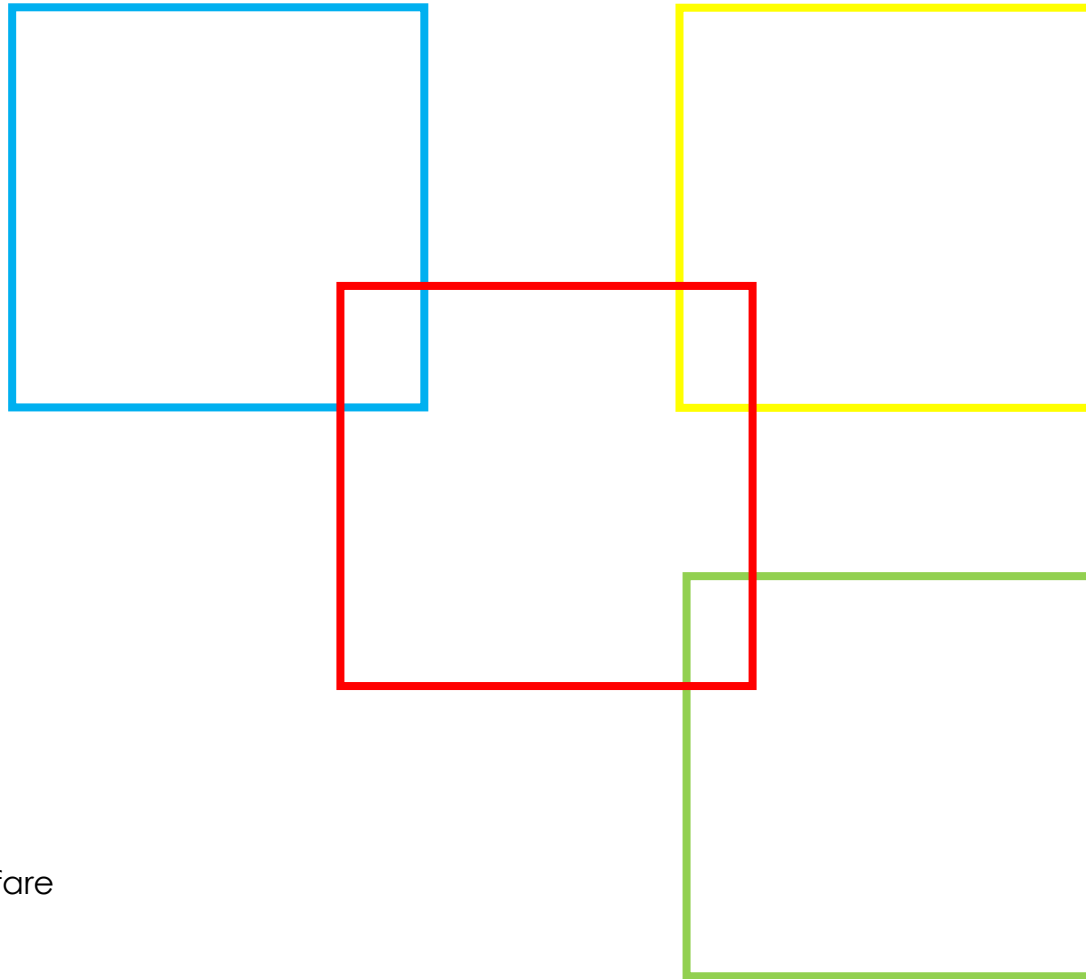
STATE REPORT ON CLUSTERS

(Aug - Sept 2020)



Department of Health & Family Welfare

Government of Kerala



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Message

I am happy to release the third volume of State Report on Clusters. It is informed to me that we are the only Department periodically publishing the cluster reports and other reports in the country. It gives information regarding cluster management and containment activities. I am pleased to note the analytical capacities of the functionaries at the field level. They have been taking all out efforts to contain the pandemic by taking strategic actions. These actions are taken all across the state as per the field requirements. Their works at the field level get reflected from this report.

I am confident that these efforts will go a long way in strengthening Kerala Health.

I would urge the readers to read the cluster reports in series for proper understanding.

I wish all the success to the efforts of Kerala health team.

K K Shailaja Teacher

**Minister Health & Family Welfare
Social Justice
Woman & Child Development**

Introduction

The third volume of the cluster report gives information regarding the clusters and containment measures planning and the activities undertaken by the field functionaries.

The field teams are continuing their efforts in identifying vulnerable population for testing and the lab teams are processing thousands of samples in a day. The field teams are coping up with the huge challenges of sample collection, testing, post result follow up for treatment and care. The report gives information regarding the output of these interventions done to control the pandemic.

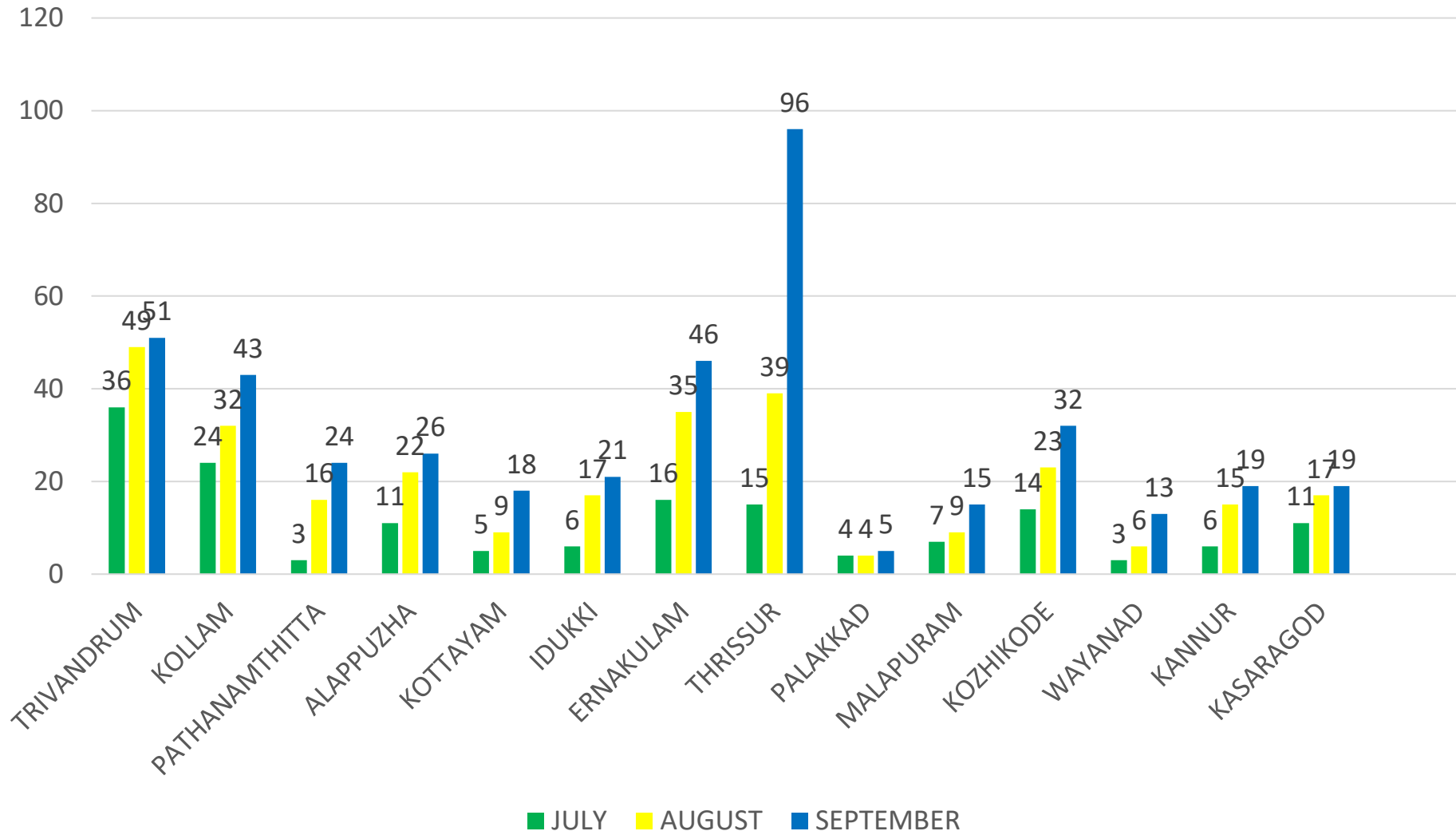
The report is presented as follows -

State basic data on COVID19 clusters.

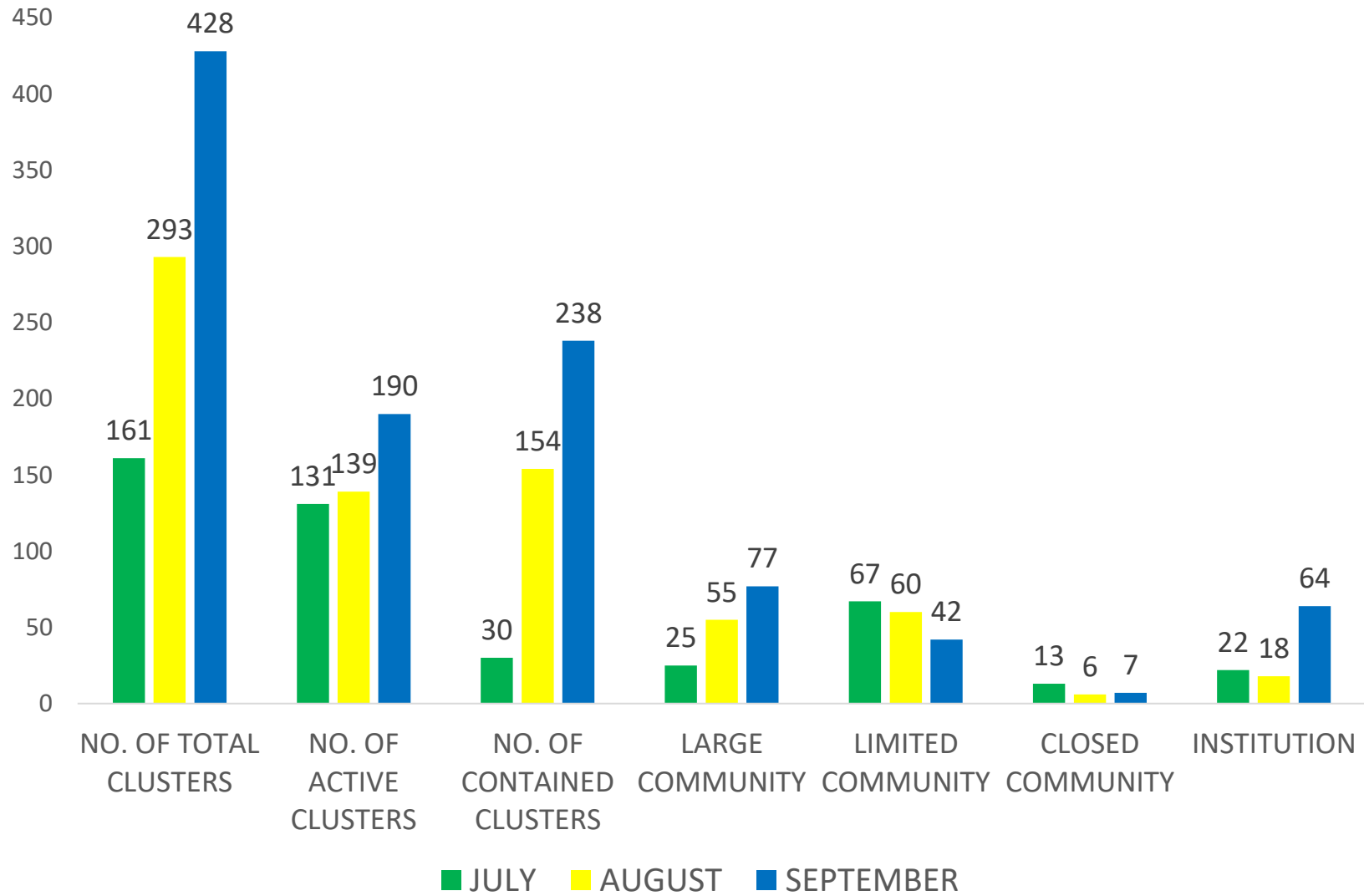
Details of each districts giving details of active cases, new cases, clusters and trends in the clusters.

The Department has developed a specific SoP for conduct of death audit by the Institutional Medical Board and State Death Audit Committee. In the report, the declared deaths at the district level are mentioned. The final numbers of the deaths may vary once the State Death Audit Committee completes the death audit of all the cases with respect to the COVID death. These reports are published periodically.

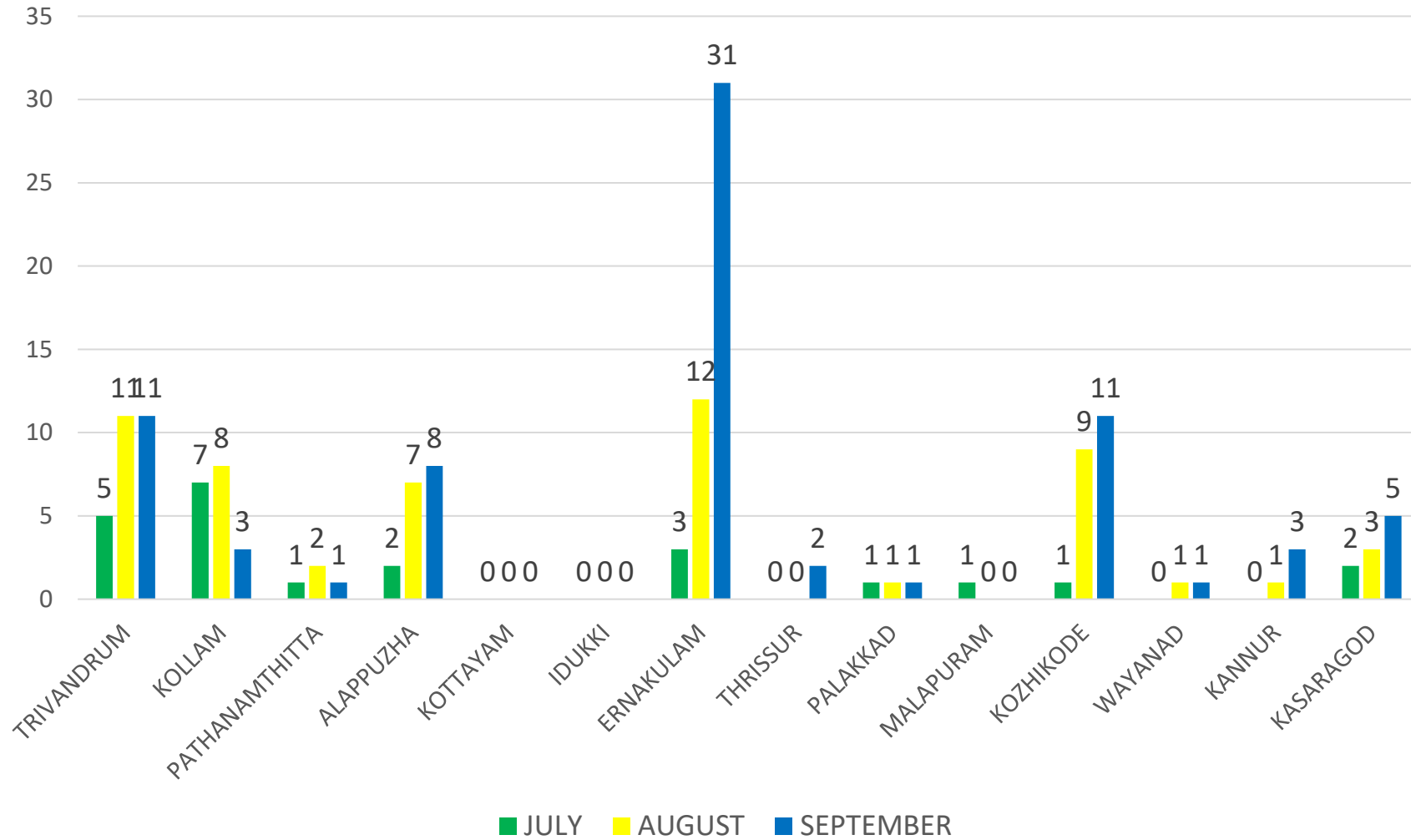
District Wise Trend of Total Number of Clusters



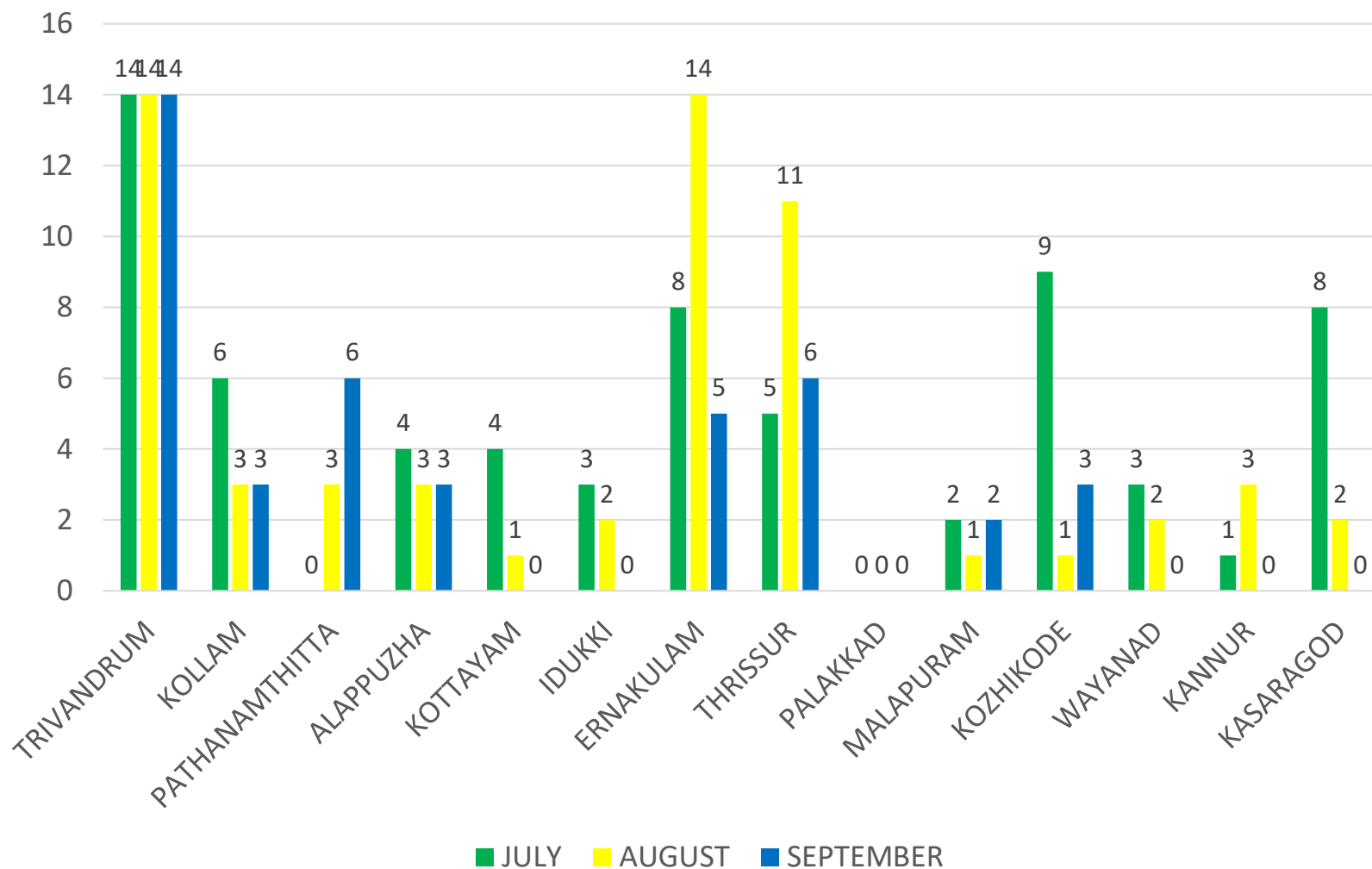
Month wise trend of Type of clusters



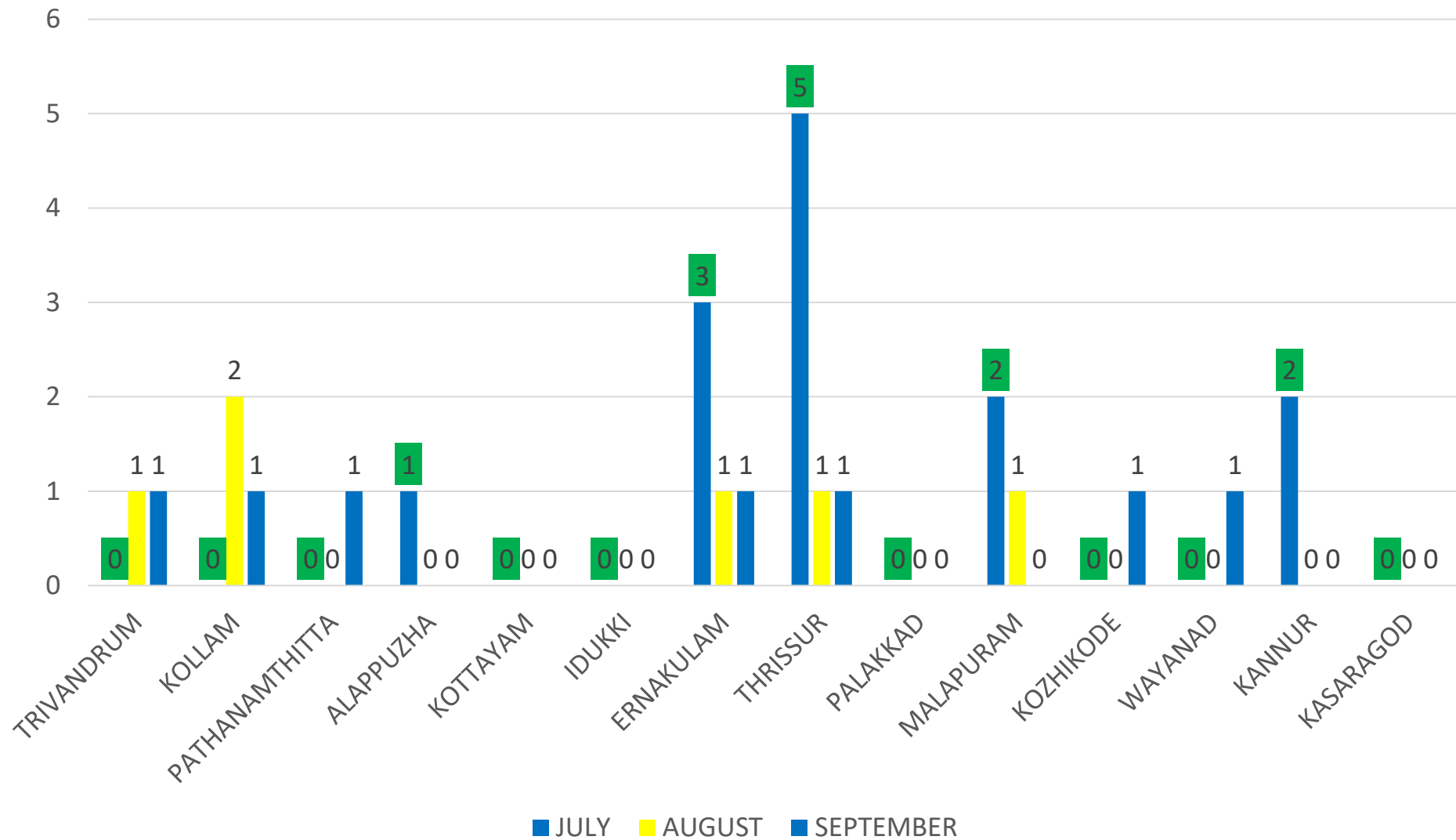
Month wise trend of active Large community clusters in districts



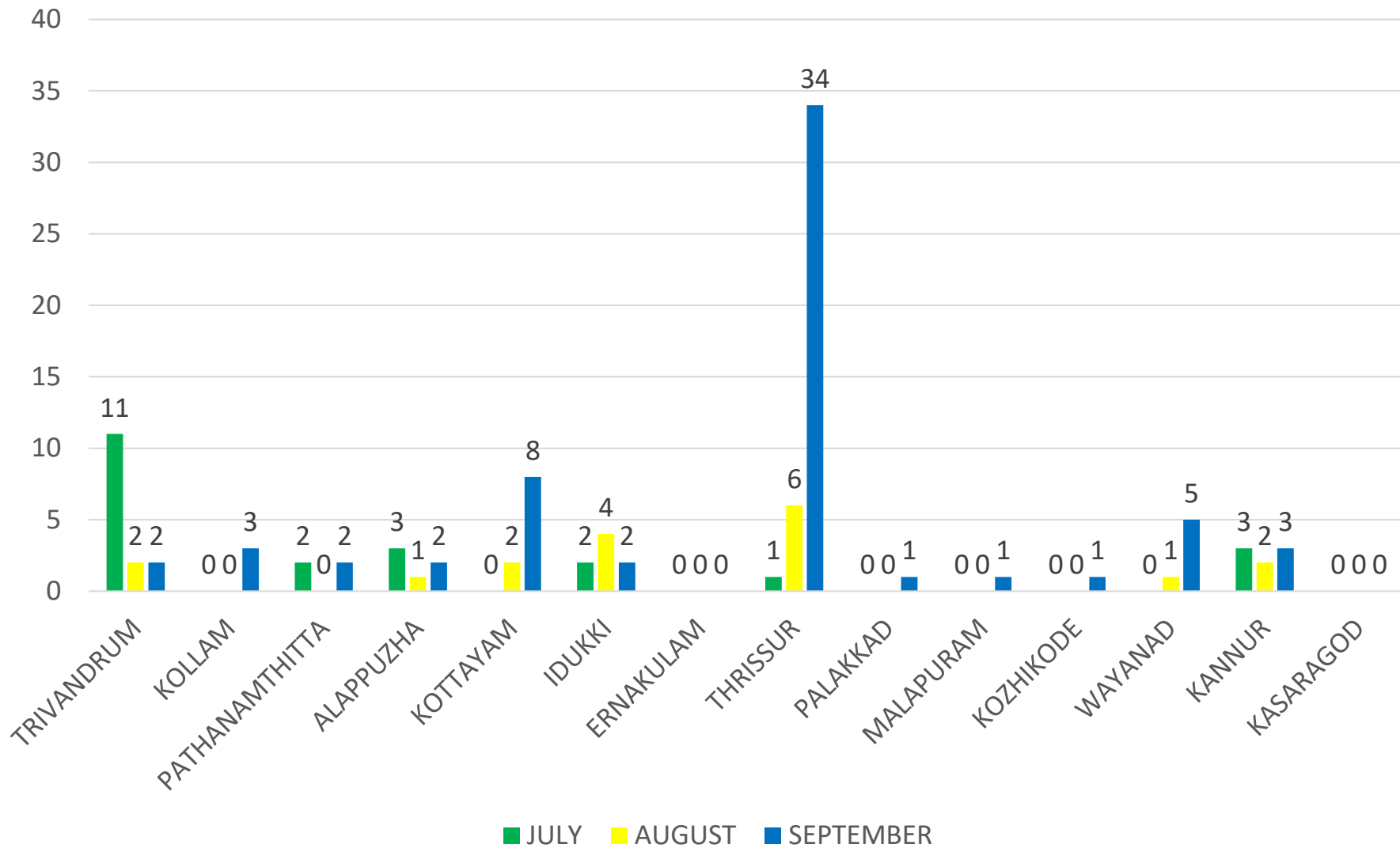
Month wise trend of active Limited community clusters in districts



Month wise trend of active Closed community clusters in districts



Month wise trend of active Institutional clusters in districts



Summary of Analysis of Cases within Clusters (August)

DISTRICT	A. TOTAL CASES REPORTED IN THE DISTRICT IN AUG	B. TOTAL CASES REPORTED FROM THE CLUSTERS IN AUG	% OF TOTAL CASES REPORTED FROM CLUSTER (B/A*100)	D. TOTAL TESTS PERFORMED IN THE CLUSTER IN AUG	E. TEST POSITIVITY RATE INSIDE CLUSTERS (B/D*100)
TRIVANDRUM	10265	3866	37.66	33960	11.38
KOLLAM	2612	382	14.62	8350	4.57
PATHANAMTHITTA	2002	684	34.17	3983	17.17
ALAPPUZHA	4045	2189	54.12	20779	10.53
KOTTAYAM	2828	306	10.82	8182	3.74
IDUKKI	940	287	30.53	1675	17.13
ERNAKULAM	4359	2171	49.81	12261	17.71
THRISSUR	3008	1064	35.37	1802	59.05
PALAKKAD	2969	1148	38.67	12077	9.51
MALAPURAM	7379	466	6.32	3967	11.75
KOZHIKODE	4112	1213	29.50	21622	5.61
WAYANAD	872	298	34.17	6670	4.47
KANNUR	2209	456	20.64	6050	7.54
KASARAGOD	3375	751	22.25	2925	25.68
TOTAL	50975	18278	29.98	144303	10.59

Summary of Analysis of Cases within Clusters (September)

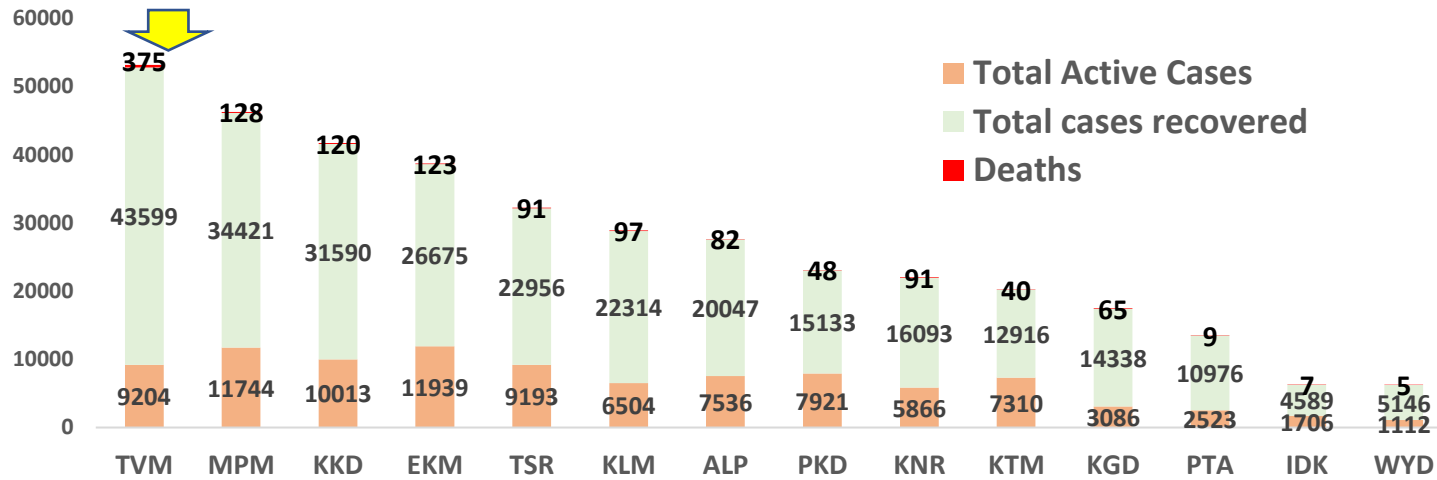
DISTRICT	A. Total Cases Reported in the District in Sep	B. Total Cases Reported from the clusters in Sep	% of total cases reported from cluster (B/A*100)	D. Total Tests performed in the cluster in Sep	E. Test Positivity Rate inside clusters (B/D*100)
KOLLAM	9660	925	9.58	6869	13.47
PATHANAMTHITTA	4396	346	7.87	3542	9.70%
ALAPPUZHA	8488	1989	23.43	12148	16.40%
KOTTAYAM	6712	441	6.57	3466	12.7
IDUKKI	1718	327	19.03	1065	31%
THRISSUR	9170	3166	34.53	24576	12.88
PALAKKAD	7193	2393	33.27	14502	16.5
MALAPURAM	13118	168	1.28	832	20%
KOZHIKODE	18823	3507	18.63	29167	12.02%
WAYANAD	2146	250	11.65	5498	4.54
KANNUR	7892	622	7.88	5430	11.45
KASARAGOD	5645	266	4.71	1471	18%

THIRUVANANTHAPURAM

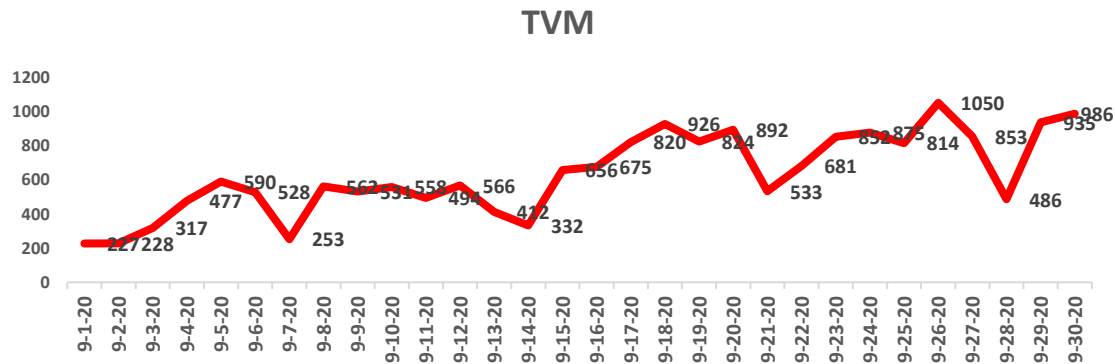
Thiruvananthapuram - COVID

As on 23-10-2020	KERALA	Thiruvananthapuram	Percentage
Population 2011 census	33406061	33,01,427	9.88
Total Number of CONFIRMED Cases	377834	53223	14.09
Total cases recovered	280793	43599	15.53
Deaths	1281	375	29.27
Total Active Cases	95657	9204	9.62
Cases per 1 lakh population	1131	1612	
Case fatality % (Deaths/Cases)	0.34	0.70	
Recovery rate %	74	82	

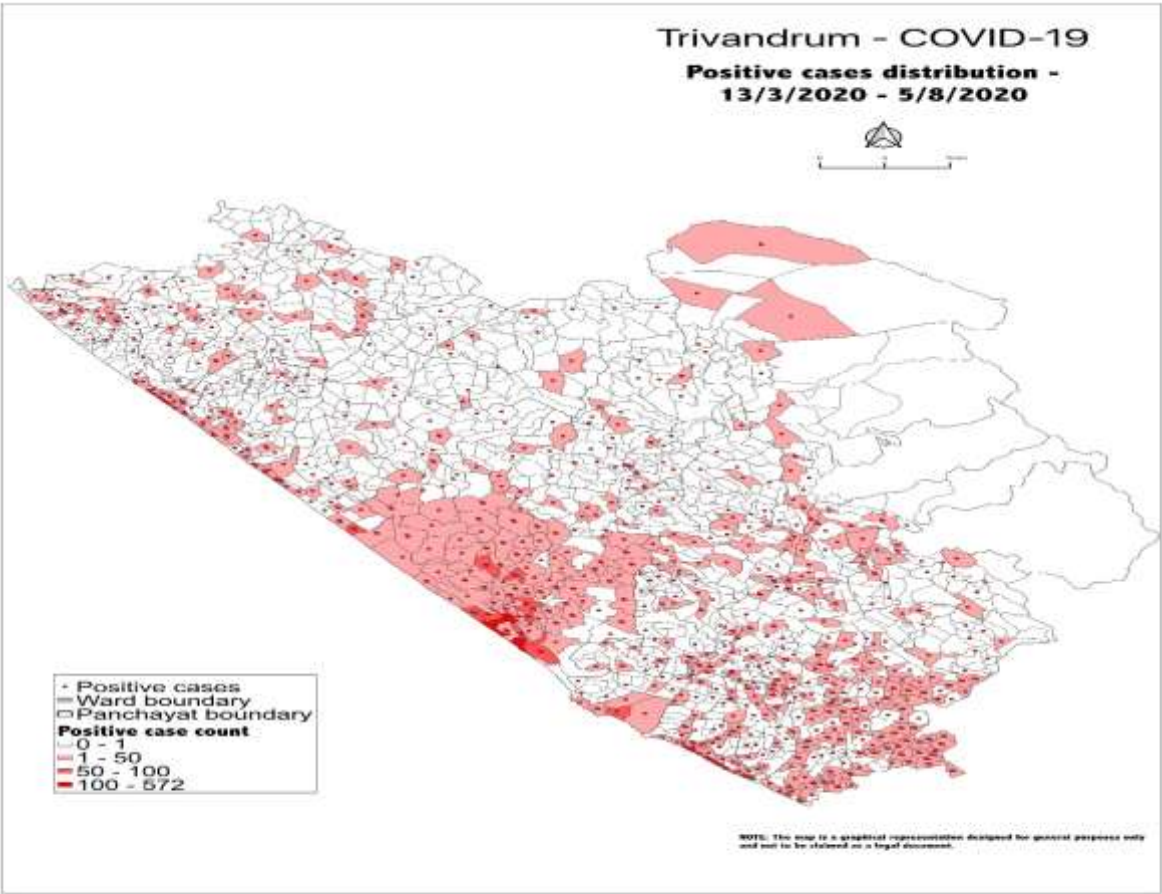
Statistics as on 23-10-2020



Thiruvananthapuram daily trend of new cases – September 2020



Distribution of COVID cases in Thiruvananthapuram district



Summary of Clusters – August 31st 2020

NAME OF CLUSTER	TYPE OF CLUSTER	TOTAL TESTS PERFORMED IN THE CLUSTER	TOTAL NUMBER OF CASES FROM THE CLUSTER	CURRENT STATUS OF CLUSTER	TREND IN CLUSTER BASED ON NUMBER OF LOCALLY ACQUIRED CASES
ATTUKAL	LIMITED COMMUNITY	563	26	CONTAINED	CONTAINED
POONTHURA	LARGE COMMUNITY	5293	1000	ACTIVE	DECREASING
VENGANOOR PANCHAYATH	LIMITED COMMUNITY	374	31	CONTAINED	CONTAINED
MANACADU	LIMITED COMMUNITY	726	24	CONTAINED	CONTAINED
PALAYAM	LIMITED COMMUNITY	337	6	CONTAINED	CONTAINED
VENGANOOR (CORP AREA, VIZHINJAM, HARBOR, KOTTAPPURAM	LARGE COMMUNITY	3755	456	ACTIVE	STATIC
THIRUVALLAM, VELLAR	LIMITED COMMUNITY	1522	113	ACTIVE	STATIC

KARAKULAM	LIMITED COMMUNITY	236	16	CONTAINED	CONTAINED
VALIYATHURA (87,77,76)	LARGE COMMUNITY	3255	635	ACTIVE	INCREASING
AZHOOR GP (WARD 1)	LIMITED COMMUNITY	359	20	CONTAINED	CONTAINED
AMACHAL	LIMITED COMMUNITY	902	95	CONTAINED	CONTAINED
KULATHOOR GP (9-14)	LARGE COMMUNITY	2807	396	ACTIVE	DECRE
VELI	LIMITED COMMUNITY	708	77	ACTIVE	DECREASING
ANCHUTHENGU GP	LARGE COMMUNITY	3310	725	ACTIVE	DECREASING
CHIRANYINKEEZHU GP (5-14)	LIMITED COMMUNITY	1181	141	ACTIVE	DECREASING
KARUMKULAM	LARGE COMMUNITY	2264	600	ACTIVE	DECREASING
KADINAMKULAM GP	LIMITED COMMUNITY	2959	546	ACTIVE	DECREASING

PANAVOOR GP	LIMITED COMMUNITY	344	10	CONTAINED	CONTAINED
KUNNATHUKAL GP (19)	LIMITED COMMUNITY	1348	226	ACTIVE	DECERASING
PARASSALA GP	LARGE COMMUNITY	2777	392	ACTIVE	STATIC
KADAKKAVOOR (9)	LIMITED COMMUNITY	407	48	CONTAINED	CONTAINED
ARYANAD GP	LIMITED COMMUNITY	1164	37	CONTAINED	CONTAINED
KOLLAYIL	LIMITED COMMUNITY	261	42	ACTIVE	DECREASING
POOVAR	LARGE COMMUNITY	1392	282	ACTIVE	STATIC
POOVACHAL PANCHAYATH	LIMITED COMMUNITY	649	59	CONTAINED	CONTAINED
KALLIKKADU	LIMITED COMMUNITY	1067	101	CONTAINED	CONTAINED

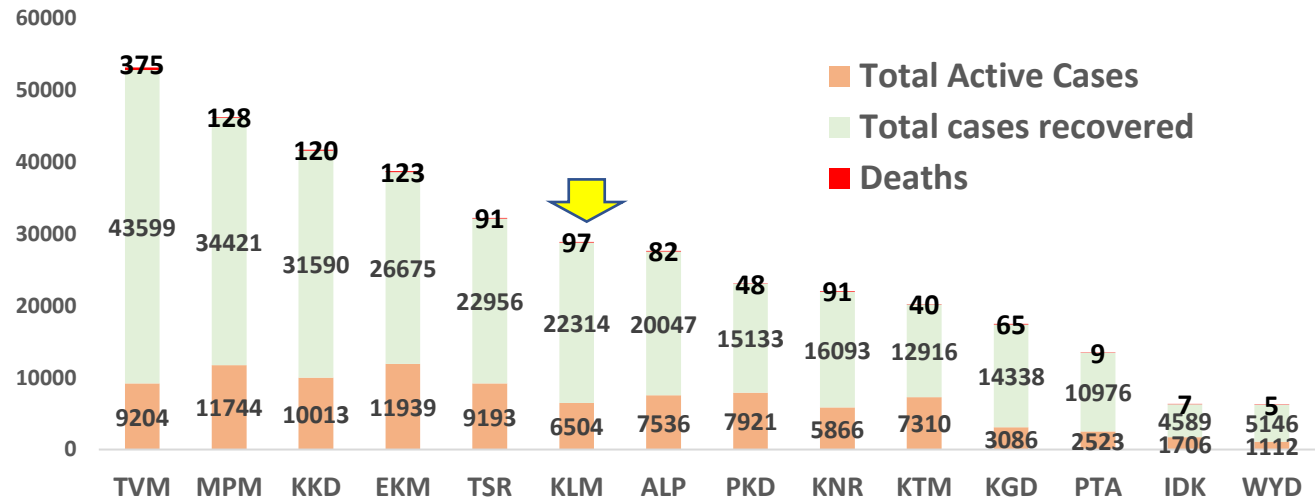
KOTTUKAL	LARGE	1306	194	ACIVE	DECREASING
CHALA	LIMITED	1172	45	CONTAINED	CONTAINED
KALADY	LARGE	1246	188	ACTIVE	INCREASING
NEYATTINKARA	LARGE	3148	541	ACTIVE	STATIC

KOLLAM

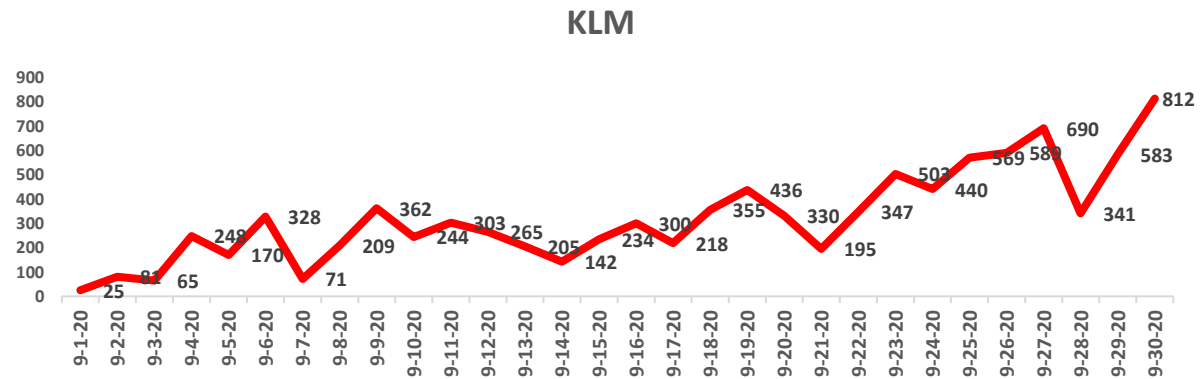
Kollam - COVID scenario

As on 23-10-2020	KERALA	Kollam	Percentage
Population 2011 census	33406061	26,35,375	7.89
Total Number of CONFIRMED Cases	377834	28920	7.65
Total cases recovered	280793	22314	7.95
Deaths	1281	97	7.57
Total Active Cases	95657	6504	6.80
Cases per 1 lakh population	1131	1097	
Case fatality % (Deaths/Cases)	0.34	0.34	
Recovery rate %	74	77	

Statistics as on 23-10-2020



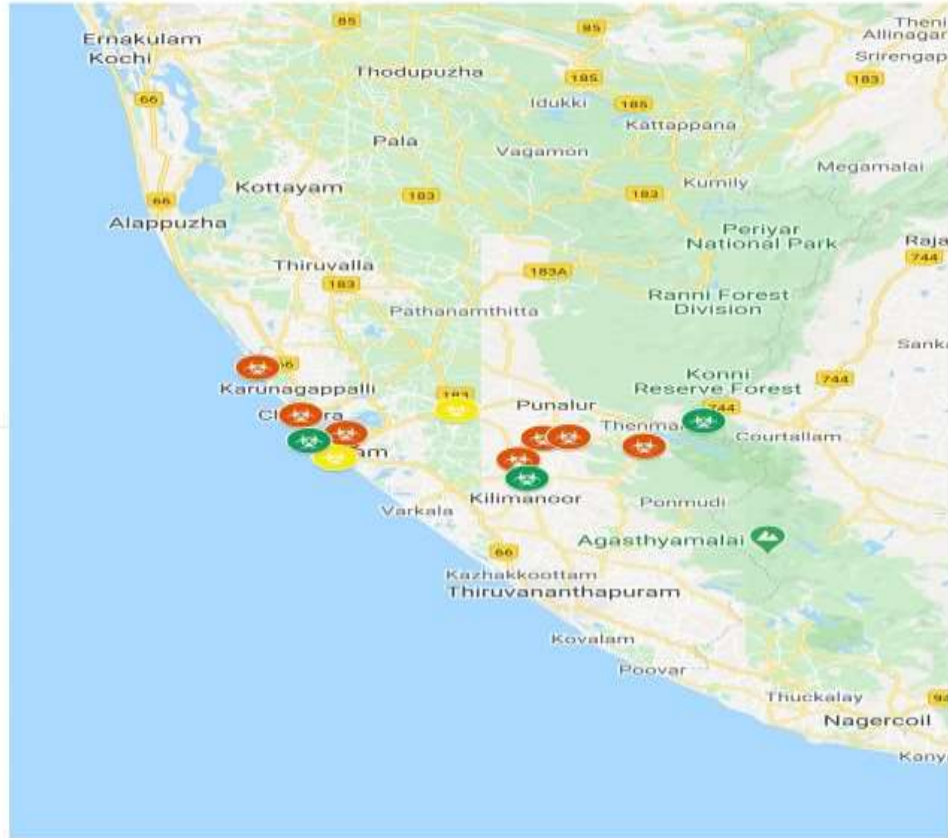
Kollam daily trend of new cases – September 2020



Active Clusters- August

Active Clusters_Kollam

- Untitled layer
- Chavara
 - Anchal
 - Yeroor
 - Kulathupuzha
 - Trikadavoor
 - Chadayamangalam
 - Perinad
 - Nilamel
 - Beach Road, Kollam
 - Sakthikulangara
- Taluk Headquarters Hospital, Kottarakkara
- Alappad
 - Aryankavu

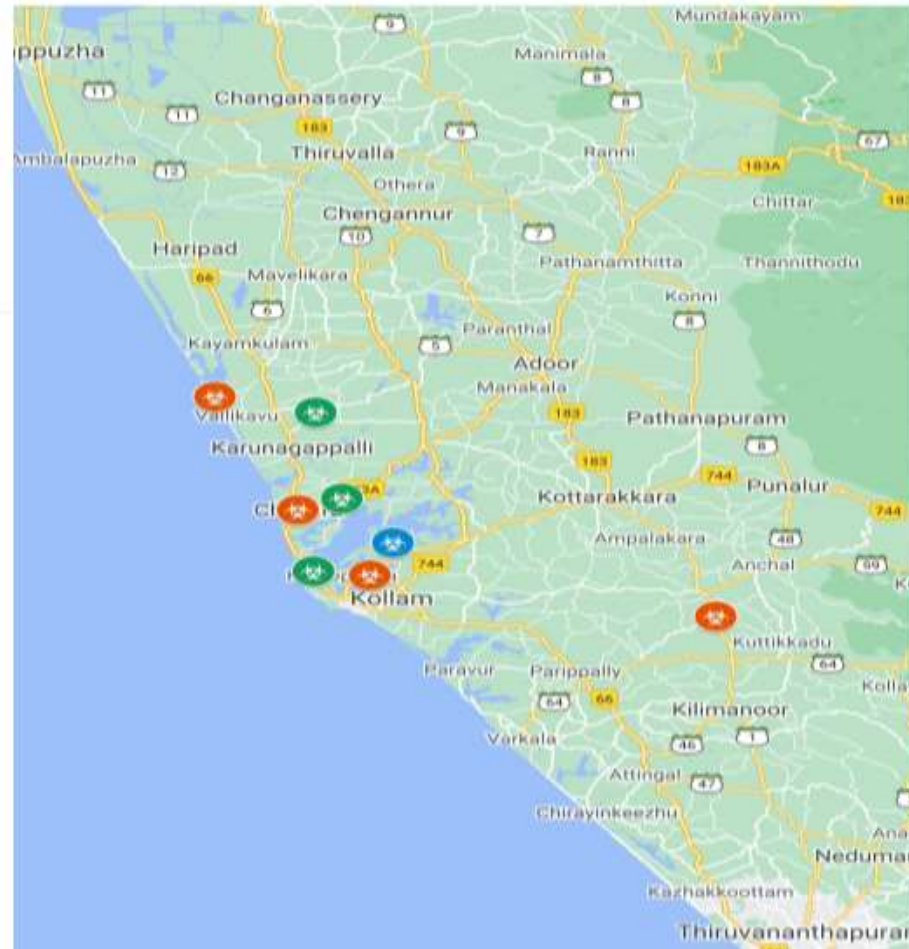


Active Clusters- September

Active Clusters_Kollam

Untitled layer

- Trikadavoor
- Chadayamangalam
- Sakthikulangara
- Alappad
- Thevalakkara
- Chavara
- Thazhava
- Primary Health centre



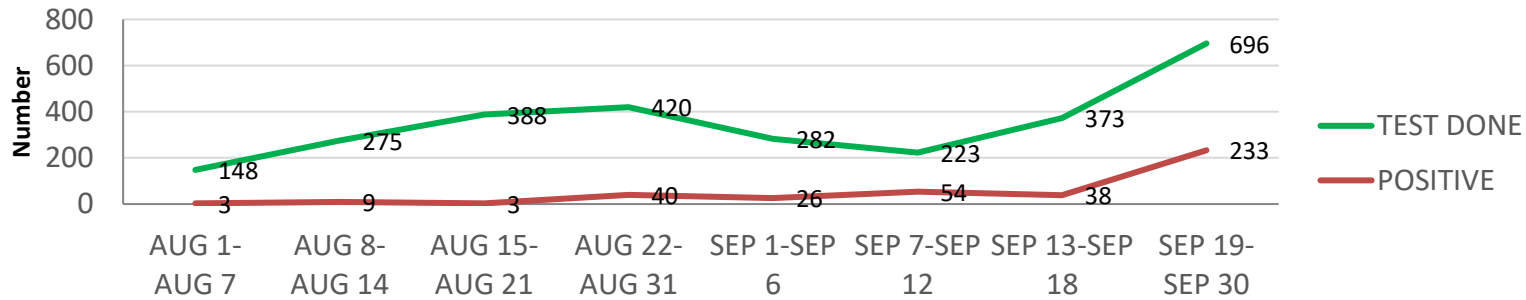
Summary of Active Clusters- Sep 30th

Name of Cluster	Type of Cluster (Large/Limited/Institutional/ Closed)	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
Chavara/Panmana	Large Community	3907	477	INCREASING
Chadayamangalam	Large Community	1984	125	INCREASING
Thrikkadavoor	Large Community Cluster	1875	247	STATIC
Sakthikulangara	Limited Community Cluster	905	56	INCREASING
Alappad	Large Community	2565	461	INCREASING
Thazhava(New)	Limited Community	77	14	DECREASING
Thevalakkara	Limited Community	394	27	DECREASING
FHC Perumon	Institutional cluster	10	5	DECREASING

Summary of Large Community Cluster- Chavara

WEEK	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (01/08/20 to 07/08/20)	148	3	2.02
Week2(08/08/20to 14/08/20)	275	9	3.27
Week 3(15/08/20to 21/08/20)	388	3	0.77
Week 4(22/08/20 to 31/08/20)	420	40	9.52
Sep Week 1(01/09/20 to 06/09/20)	282	26	9.21
Sep Week 2(07/09/20 to 12/09/20)	223	54	24.21
Sep Week 3(13/09/20 to 18/09/20)	373	38	10.19
Sep Week 4(19/09/20 to 30/09/20)	696	60	8.6
TOTAL	2805	233	8.30

CHAVARA



Summary of Large Community Clusters-Anchal

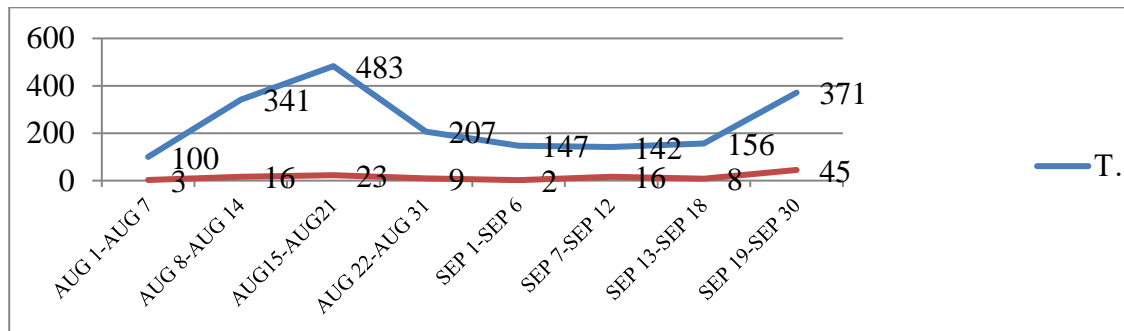
WEEK	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from 01/08/20to 07/08/20)	368	3	0.81
Week2(Date from 08/08/20to 14/08/20)	459	8	1.74
Week 3(Date from 15/08/20to 21/08/20)	379	4	1.06
Week 4(Date from 22/08/20to 31/08/20)	137	3	2.18
TOTAL	1343	18	1.34

Summary of Large Community Cluster- Yeroor

WEEK	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from 01/08/20to 07/08/20)	120	3	2.5
Week2(Date from 08/08/20to 14/08/20)	215	3	1.39
Week 3(Date from 15/08/20to 21/08/20)	180	9	5
Week 4(Date from 22/08/20to 31/08/20)	129	2	1.55
TOTAL	644	17	2.64

Summary of Large Cluster- Chadayamangalam

WEEK	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from 01/08/20to 07/08/20)	100	3	3
Week2(Date from 08/08/20to 14/08/20)	341	16	4.69
Week 3(Date from 15/08/20to 21/08/20)	483	23	4.76
Week 4(Date from 22/08/20to 28/08/20)	207	9	4.34
Sep Week 1(01/09/20 to 06/09/20)	147	2	1.36
Sep Week 2(07/09/20 to 12/09/20)	142	16	11.27
Sep Week 3(13/09/20 to 18/09/20)	156	8	5.13
Sep Week 4(19/09/20 to 30/09/20)	371	45	12.13
TOTAL	1947	122	6.27



Summary of Large Cluster- Thrikkadavoor

WEEK	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from 01/08/20to 07/08/20)	0	0	0
Week2(Date from 08/08/20to 14/08/20)	522	23	4.44
Week 3(Date from 15/08/20to 21/08/20)	893	28	3.13
Week 4(Date from 22/08/20to 28/08/20)	763	20	2.62
Sep Week 1(01/09/20 to 06/09/20)	256	26	10.2
Sep Week 2(06/09/20 to 12/09/20)	451	23	5.09
Sep Week 3(13/09/20 to 18/09/20)	242	68	28.09
Sep Week 4(19/09/20 to 30/09/20)	300	58	19.33
TOTAL	3427	246	7.17

Summary of Large Cluster- Alappad

WEEK	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 4(Date from 22/08/20to 28/08/20)	948	106	11.18
Sep Week 1(01/09/20 to 06/09/20)	137	25	18.25
Sep Week 2(07/09/20 to 13/09/20)	522	61	11.69
Sep Week 3(13/09/20 to 18/09/20)	304	79	11.95
Sep Week (19/09/20 to 30/09/20)	881	234	26.56
TOTAL	2792	505	18.08

District Summary (Kollam) as on 31.08.2020

	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	12	17	0	3	32
ACTIVE	8	3	0	1	12
CONTAINED	4	14	0	2	20
TOTAL LOCALLY ACQUIRED CASES	892	335	0	187	1414
TOTAL DEATHS	31	5	0	0	36
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	23.18	8.71	0	4.87	36.76

District Summary (Kollam) as on September 30th

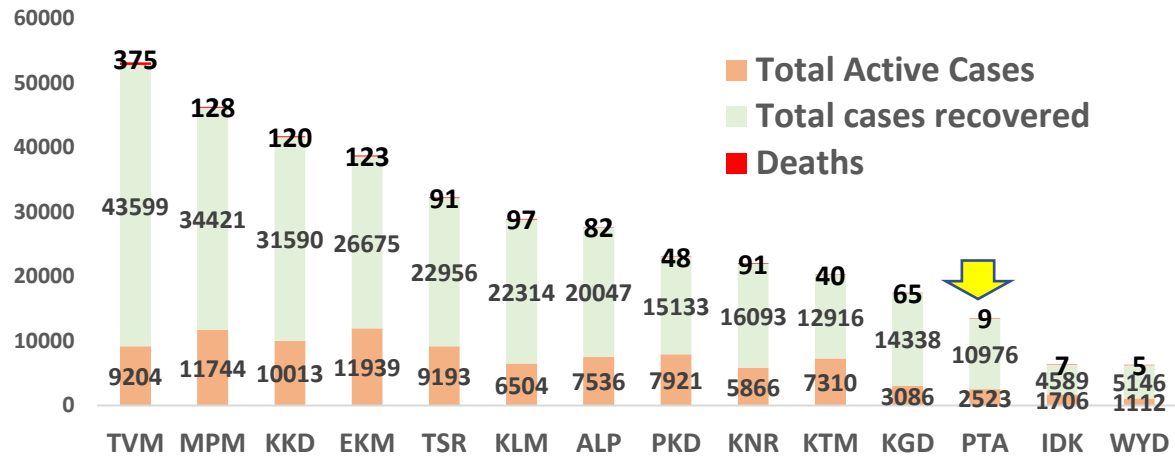
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	12	19	3	4	38
Active	4	3	1	0	8
Contained	8	16	2	4	30
Total Locally acquired Cases	1845	754	35	223	2857
Total Deaths	40	5	0	0	45
% of Total Cases reported in active clusters in Sep out of total new cases reported in the district in Sep	8.51	1	0.05	0	9.5

PATHANAMTHITTA

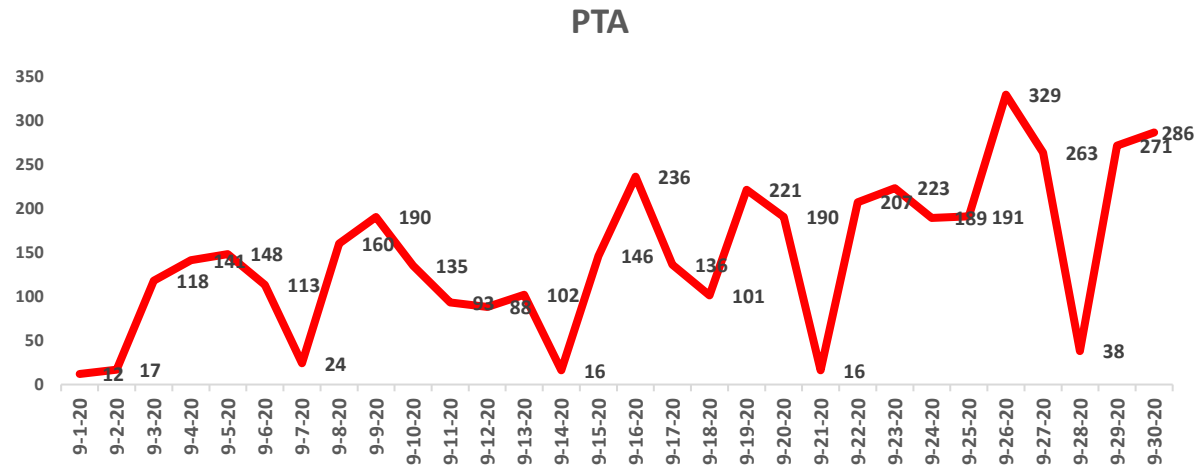
Pathanamthitta - COVID scenario

As on 23-10-2020	KERALA	Pathanamthitta	Percentage
Population 2011 census	33406061	11,97,412	3.58
Total Number of CONFIRMED Cases	377834	13509	3.58
Total cases recovered	280793	10976	3.91
Deaths	1281	9	0.70
Total Active Cases	95657	2523	2.64
Cases per 1 lakh population	1131	1128	
Case fatality % (Deaths/Cases)	0.34	0.07	
Recovery rate %	74	81	

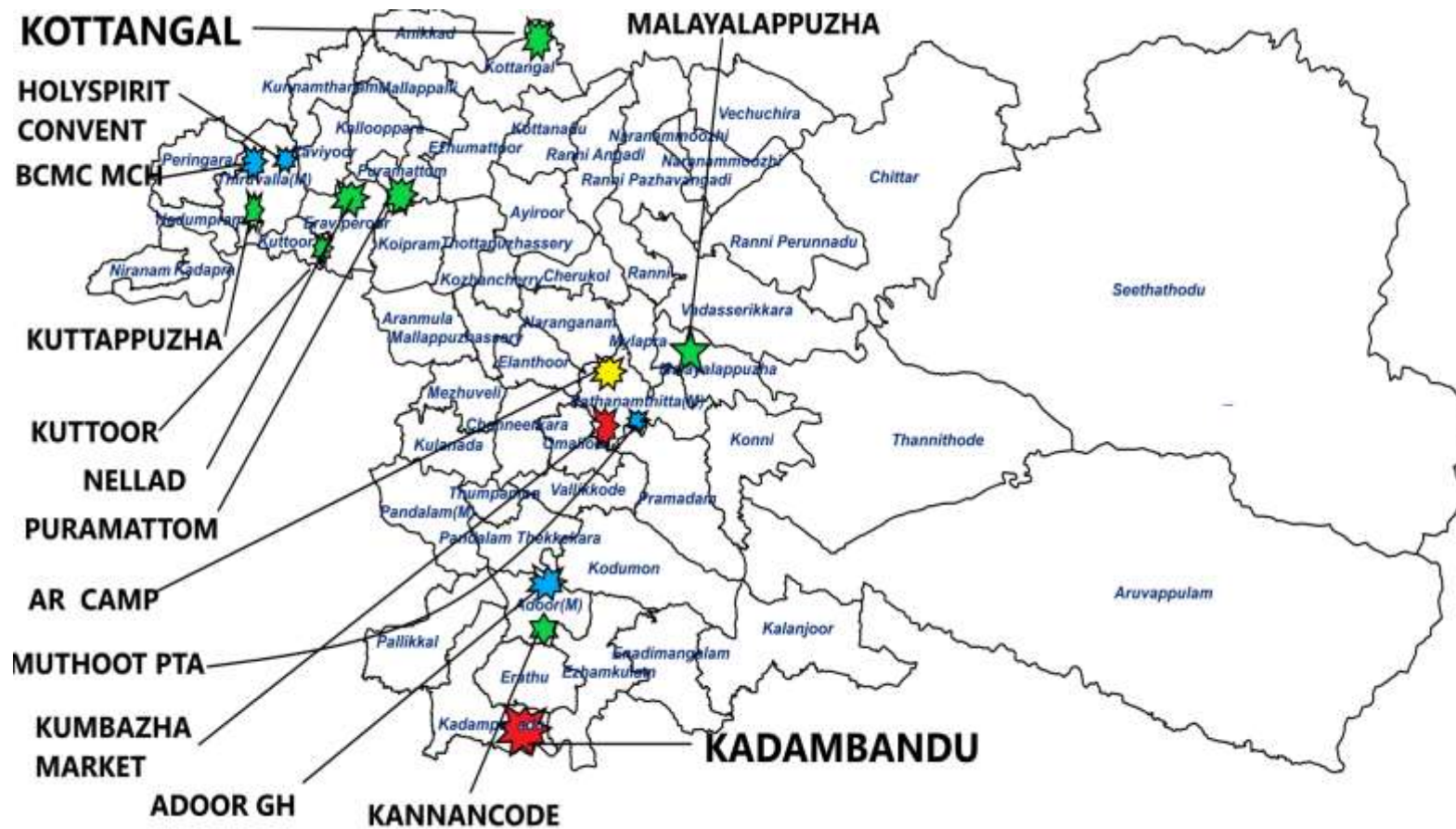
Statistics as on 23-10-2020



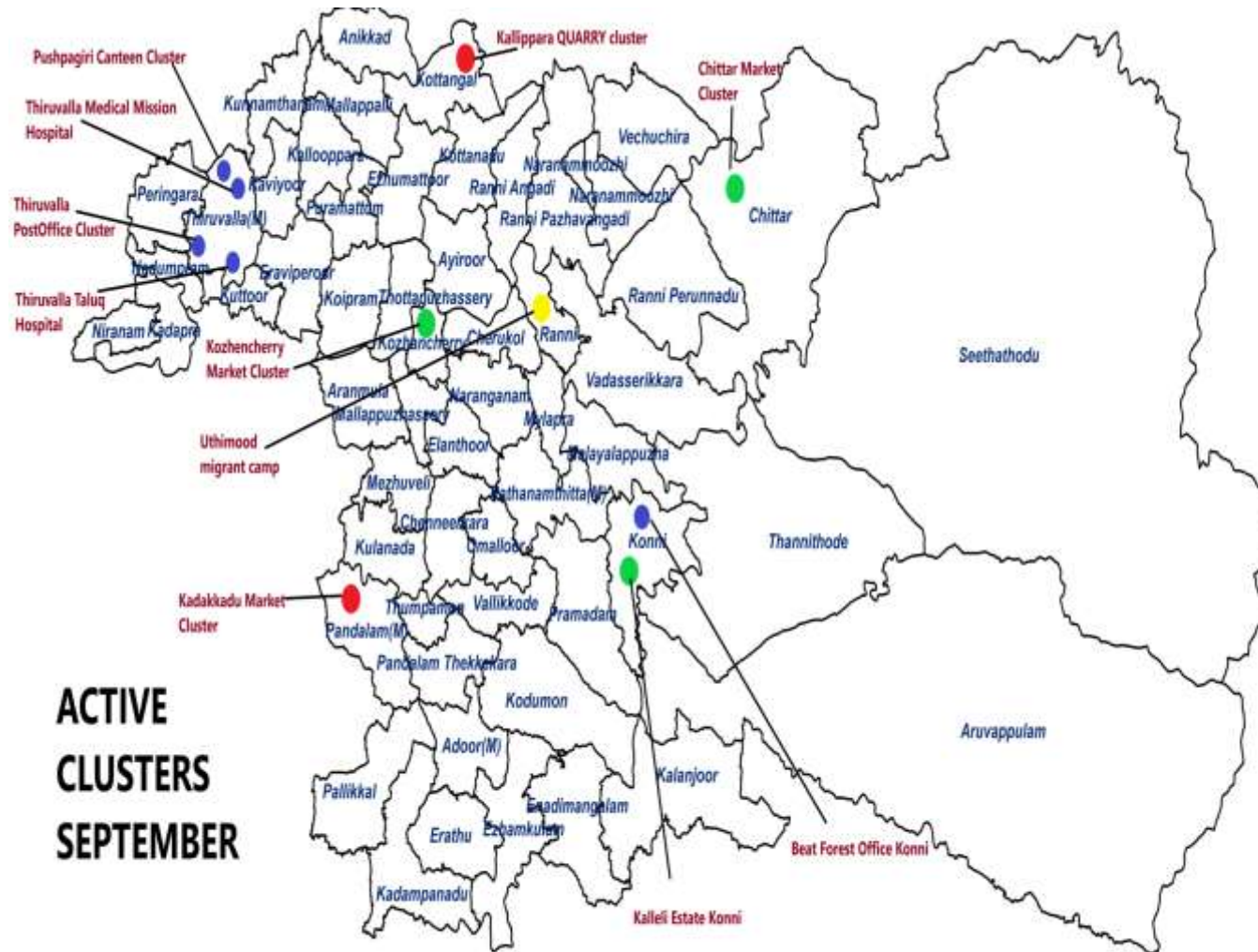
Pathanamthitta daily trend of new cases – September 2020



Clusters in Pathanamthitta- August



Clusters in September



**ACTIVE
CLUSTERS
SEPTEMBER**

Summary of Active Clusters- Pathanamthitta

NAME OF CLUSTER	TYPE OF CLUSTER (LARGE/LIMITED/INSTITUTIONAL/ CLOSED)	TOTAL TESTS PERFORMED IN THE CLUSTER	TOTAL NUMBER OF CASES FROM THE CLUSTER	TREND IN CLUSTER BASED ON NUMBER OF LOCALLY ACQUIRED CASES
Kadakkadu	Large community cluster	1482	450	Contained
Believer's church	Institutional	683	214	Contained
TMM Hospital Thiruvalla	Institutional	248	68	increasing
Thiruvalla Taluq Hospital	Institutional	107	12	static
Kozhencherry market	limited Community Cluster	152	23	Contained
Chittar market	limited Community Cluster	91	16	Contained
Kallipara quarry	Large community cluster	180	54	static
Uthimood Labour camp	closed community cluster	70	5	contained
Pushpagiri Medical college canteen	Institutional	34	7	increasing
Thiruvalla Post Office	Institutional	63	13	contained
BFO Konni division	nstitutional Cluster	38	5	contained
Kalleli Estate Konni	Limited community cluster	74	4	contained

District Summary (Pathanamthitta)- August 31st

	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	4	6	4	1	15
ACTIVE	3	1	1	0	5
CONTAINED	1	5	3	1	10
TOTAL LOCALLY ACQUIRED CASES	808	142	268	10	1228
TOTAL DEATHS	2	0	8	0	10
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS IN AUG OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	24%	7%	13%	0.009%	44%

District Summary- September

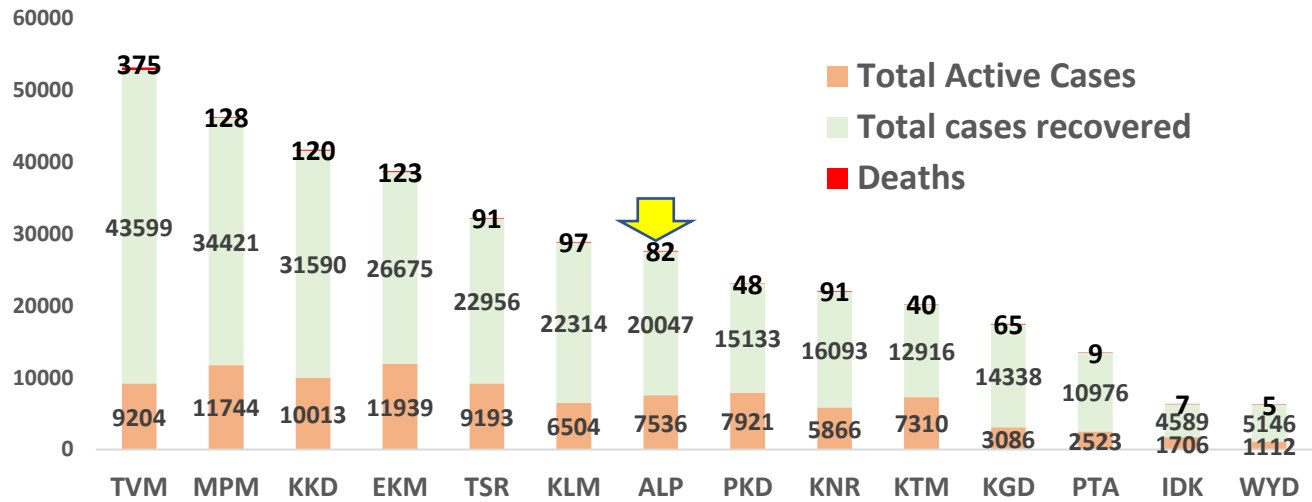
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	5	7	10	2	24
Active	2	4	4	1	11
Contained	3	3	6	1	13
Total Locally acquired Cases	1051	161	387	15	1614
Total Deaths	4	0	12	0	16
% of Total Cases reported in active clusters in Sep out of total new cases reported in the district in Sep	7.5%	0.4%	2.7%	0.1%	10.7%

ALAPPUZHA

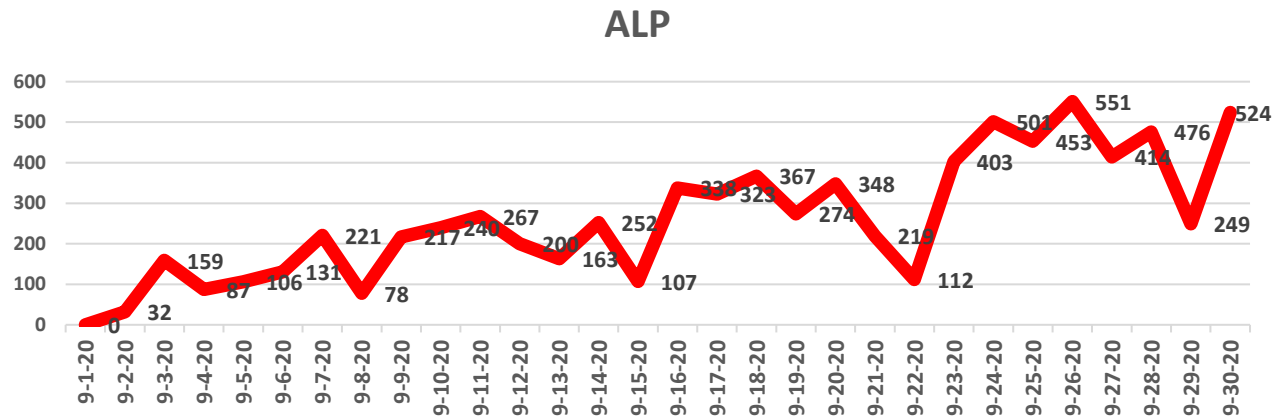
Alappuzha - COVID scenario

As on 23-10-2020	KERALA	Alappuzha	Percentage
Population 2011 census	33406061	21,27,789	6.37
Total Number of CONFIRMED Cases	377834	27679	7.33
Total cases recovered	280793	20047	7.14
Deaths	1281	82	6.40
Total Active Cases	95657	7536	7.88
Cases per 1 lakh population	1131	1301	
Case fatality % (Deaths/Cases)	0.34	0.30	
Recovery rate %	74	72	

Statistics as on 23-10-2020



Alappuzha daily trend of new cases – September 2020



Map of Alappuzha showing Clusters- August



Map showing Clusters

- Large Cluster**
 - 1, Kayamkulam Municipality
 - 2, Pallithode
 - 3, Chettikad
 - 4, Kadakkarapally
 - 5, Vettackal
 - 6, Thumpoly
 - 7, Punnapra North
 - 8, Cherthala South
 - 9, Aryad
 - 10, Punnapra South
 - 11, Ambalappuzha South
- Limited Cluster**
 - 1, Mavelikkara Kurathikad
 - 2, Pallipad
 - 3, Pallipuram
 - 4, Panavally
- Closed Community Cluster**
 - 1, ITBP Nooranad
 - 2, ITBP New
- Institutional**
 - 1, Alappuzha South Police Station
 - 2, Cherthala THQH
 - 3, AFDC Ezhupunna
 - 4, Kodamthuruth/Kuthiyathode G panch office
 - 5, MCH Alappuzha

Map of Alappuzha – September



Large Cluster

- 1, Kayamkulam Municipality
- 2, Pallithode
- 3, Chettikad
- 4, Kadakkapally
- 5, Vettackal
- 6, Thumpoly
- 7, Punnapra North
- 8, Cherthala South
- 9, Aryad
- 10, Punnapra South
- 11, Ambalappuzha South
- 12, Purakkad
- 13, Arattupuzha



Limited Cluster

- 1, Mavelikkara Kurathikad
- 2, Pallipad
- 3, Pallipuram (ward 14)
- 4, Panevelly
- 5, Pallipuram (Ward 7)



Closed Community Cluster

- 1, ITBP Nooranad
- 2, ITBP New



Institutional

- 1, Alappuzha South Police Station
- 2, Cherthala THQH
- 3, AFDC Erhupunna
- 4, Kodamthuruth/Kuthiyathode G panch office
- 5, MCH Alappuzha
- 6, Safe Panel Co Pallipuram

District M:

Summary of Clusters (Alappuzha)

Name of Cluster	Type of Cluster (Large/Limited/Institutional/ Closed)	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
Kadakkrapally(ward 1, 14,7,10,11,13)	Large	924	140	Decreasing
Chettikad(12,15,19,20,23)	Large	2230	238	Decreasing
Punnapra North (ward 16,10,1,6,11)	Large	643	143	Decreasing
Ambalappuzha South(ward 15,14,2)	Large	1598	190	Decreasing
Vettackal (ward 5,12,13,14,17,15,19)	Large	593	68	Decreasing
Punnapra South(ward1, 4,8,10,12,15,3,13,14)	Large	1685	327	Increasing
Aryad(Ward 17,9,10,12)	Large	868	93	Decreasing
Purakkad(Ward 1,2,3,4,5,15,16,18,9)	Large	1276	295	Decreasing

Arattupuzha(ward 13,11,14,15,16,18,9,6,12)	Large	1691	298	Decreasing
MCH ALP	Institutional	292	77	Decreasing

Trend within Clusters

Kadakkarapally	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	94	2	2%
Week 2 (Date from Sept 8th to sept 14th)	229	40	17%
Week 3(Date from sept 15 th to sept 21 st)	144	23	16%
Week 4 (Date from Sept 22nd to sept 30th)	457	75	16%
Total	924	140	15%

Punnapra North	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	52	9	17%
Week 2 (Date from Sept 8th to sept 14th)	87	14	16%
Week 3 (Date from sept 15 th to sept 21 st)	60	5	8%
Week 4 (Date from Sept 22nd to sept 30th)	331	96	29%
Total	643	143	22%

Chettikad	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	399	26	7%
Week 2 (Date from Sept 8th to sept 14th)	406	31	8%
Week 3 (Date from sept 15 th to sept 21 st)	288	20	7%

Week 4 (Date from Sept 22nd to sept 30th)	1137	161	14%
Total	2230	238	11%
Ambalappuzha South	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	200	6	3%
Week 2 (Date from Sept 8th to sept 14th)	375	8	2%
Week 3 (Date from sept 15 th to sept 21 st)	438	75	17%
Week 4 (Date from Sept 22nd to sept 30th)	585	101	17%
Total	1598	190	12%

Vettackal	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	124	8	6%
Week 2 (Date from Sept 8th to sept 14th)	117	17	15%
Week 3 (Date from sept 15 th to sept 21 st)	150	10	7%
Week 4 (Date from Sept 22nd to sept 30th)	202	33	16%
Total	593	68	11%

Punnapra South	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	337	28	8%
Week 2 (Date from Sept 8th to sept 14th)	254	30	12%
Week 3 (Date from sept 15 th to sept 21 st)	435	86	20%
Week 4 (Date from Sept 22nd to sept 30th)	659	183	27%

Total	1685	327	19%
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Aryad	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	96	16	17%
Week 2 (Date from Sept 8th to sept 14th)	213	18	8%
Week 3(Date from sept 15 th to sept 21 st)	122	5	4%
Week 4 (Date from Sept 22nd to sept 30th)	437	54	12%
Total	868	93	11%

Purakkad	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	149	67	45%

Week 2 (Date from Sept 8th to sept 14th)	351	129	37%
Week 3 (Date from sept 15 th to sept 21 st)	377	26	7%
Week 4 (Date from Sept 22nd to sept 30th)	399	73	18%
Total	1276	295	23%

Arattupuzha	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from Sept 1 to Sept 7th)	126	18	15%
Week 2 (Date from Sept 8th to sept 14th)	608	94	15%
Week 3 (Date from sept 15 th to sept 21 st)	409	55	13%
Week 4 (Date from Sept 22nd to sept 30th)	548	131	24%
Total	1691	298	18%

District Summary (Alappuzha) of Clusters- August 2020

	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	11	5	4	2	22
Active	8	0	1	0	9
Contained	3	5	3	2	13
Total Locally acquired Cases	2127	121	229	209	2686
Total Deaths	3	2	0	0	5
% of Total Cases reported in active clusters in Aug out of total new cases reported in the district in Aug	40%		2%		41%

District Summary (Alappuzha) of Clusters- September 2020

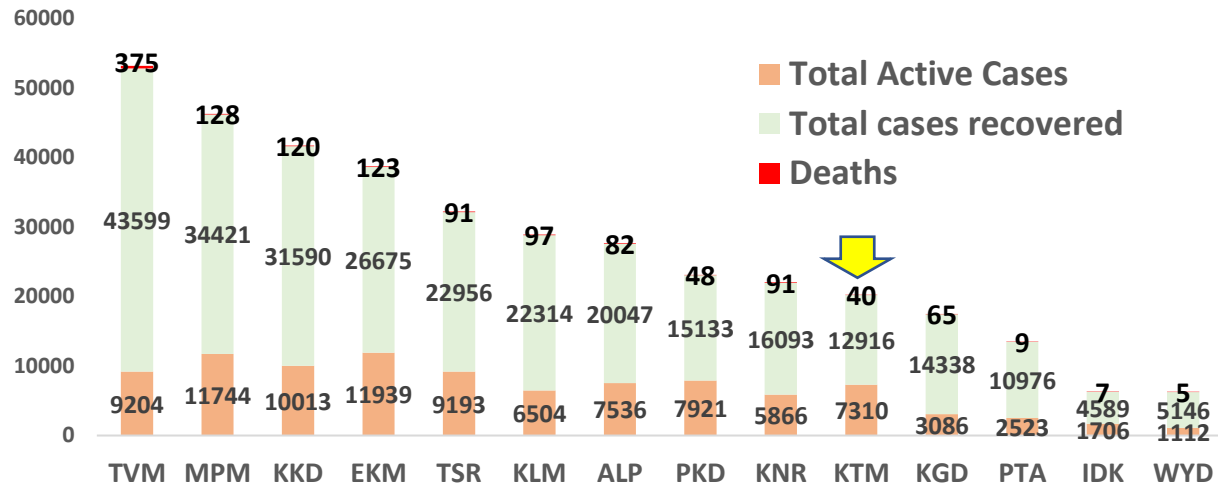
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	13	5	6	2	26
Active	9	0	1	0	10
Contained	4	5	5	2	16
Total Locally acquired Cases	6017	158	349	209	6733
Total Deaths	38	2	0	0	40
% of Total Cases reported in active clusters in September out of total new cases reported in the district in September	29.17%	.43%	1.9%	0	32.51%

KOTTAYAM

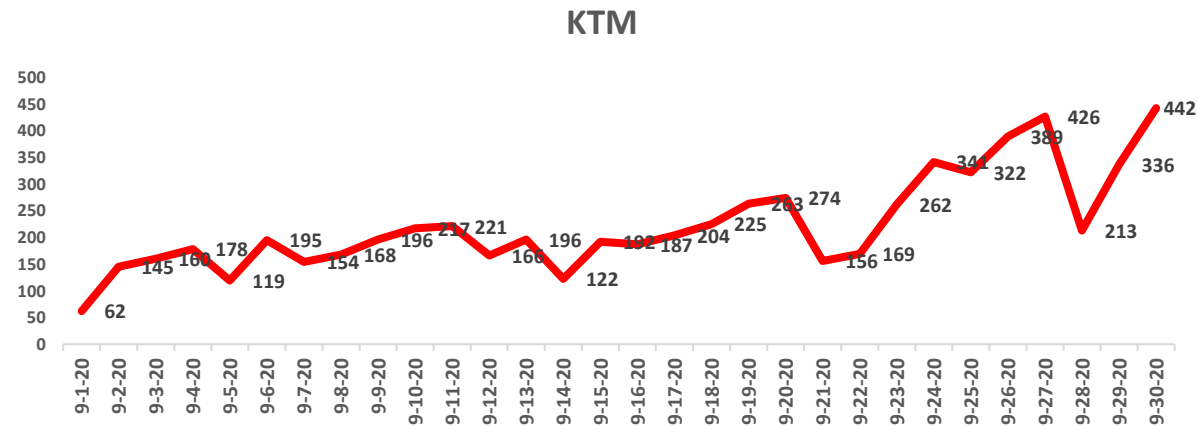
Kottayam - COVID scenario

As on 23-10-2020	KERALA	Kottayam	Percentage
Population 2011 census	33406061	19,74,551	5.91
Total Number of CONFIRMED Cases	377834	20266	5.36
Total cases recovered	280793	12916	4.60
Deaths	1281	40	3.12
Total Active Cases	95657	7310	7.64
Cases per 1 lakh population	1131	1026	
Case fatality % (Deaths/Cases)	0.34	0.20	
Recovery rate %	74	64	

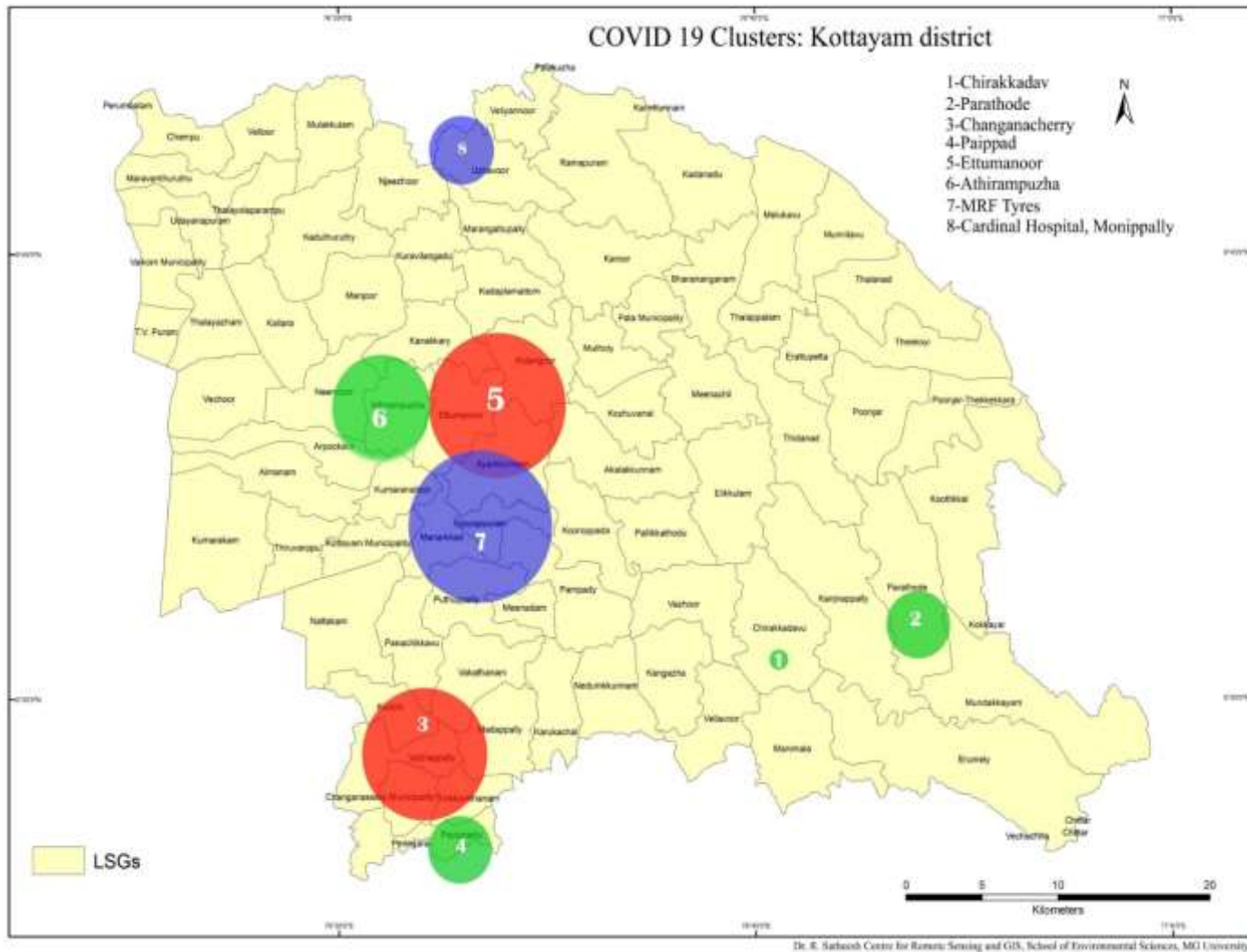
Statistics as on 23-10-2020



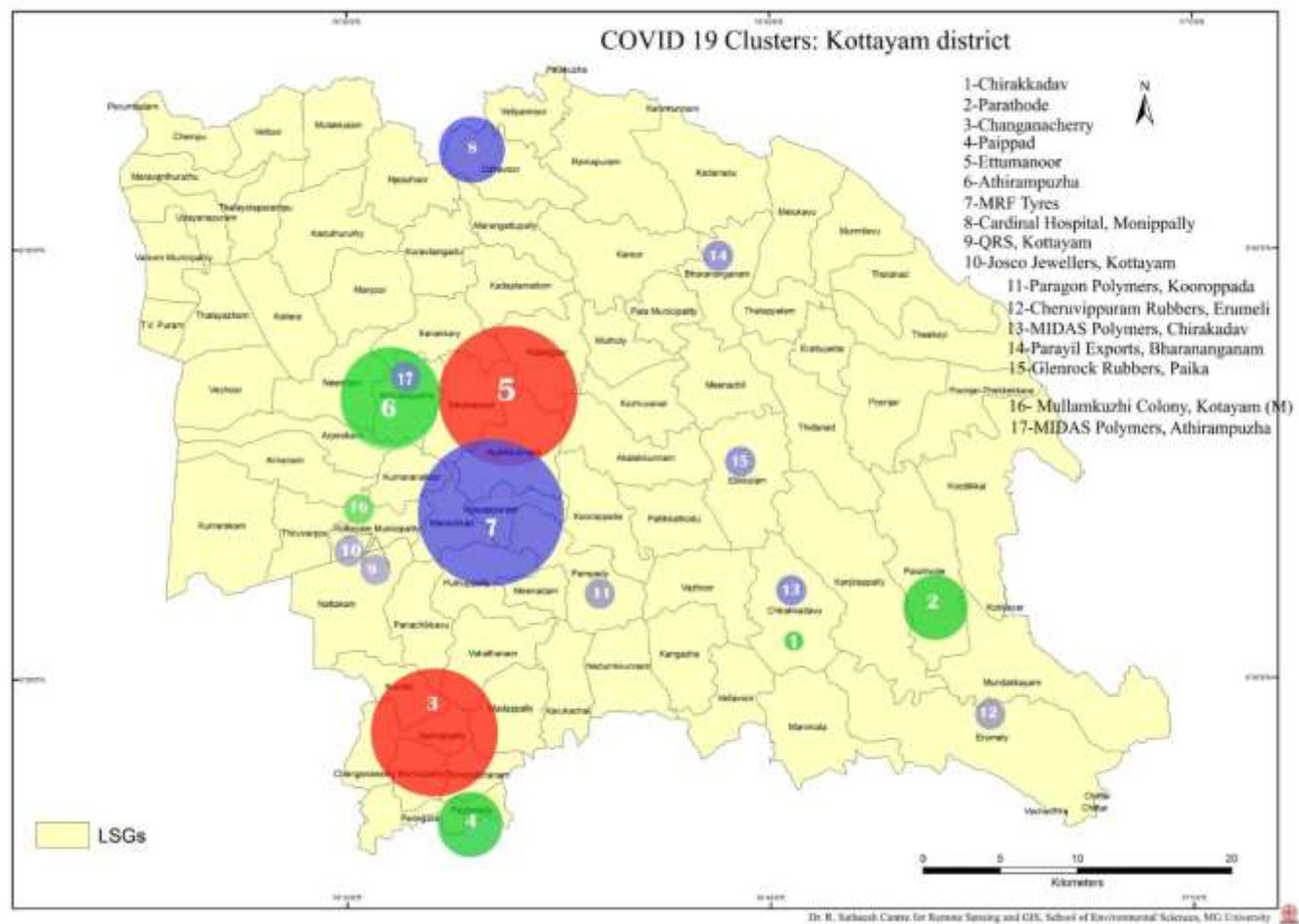
Kottayam daily trend of new cases – September 2020



Map showing clusters in Kottayam (August)



Map showing clusters in Kottayam (September)



Summary of Active Clusters- Kottayam

Name of Cluster	Type of Cluster (Large/Limited/Institutional/ Closed)	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
MRF Tyres	Institutional	3918	262	Decreasing
QRS , Kottayam	Institutional	119	48	Decreasing
Josco Jewellers , Kottayam	Institutional	236	53	Decreasing
Midas polymers, Athirampuzha	Institutional	175	75	Decreasing
Midas polymer compounds, Chirakkadavu	Institutional	109	29	Decreasing
Parayil Exports, Bharananganam	Institutional	168	17	Decreasing
Glenrock Rubbers, Paika	Institutional	177	41	Decreasing
Navjeevan Trust ,Arpookara	Institutional	255	88	Decreasing

Summary of Ettumanoor Market Cluster

	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate
Week 1 (Date from 24/07/20 to 31/07/20)	436	51	11.6
Week 2 (Date from 01/08/20 to 08/08/20)	655	36	5.4
Week 3 (Date from 09/08/20 to 15/08/20)	431	18	4.17
Week 4 (Date from 16/08/20 to 22/08/20)	432	2	0.4
Week 5 (Date from 22/08/20 to 29/08/20)	659	0	0
Total	2626	107	4.07

Summary of Chaganashery Market Cluster

	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate
Week 1 (Date from 16/07/20 to 23/07/20)	685	65	9.4
Week 2 (Date from 24/07/20 to 31/07/20)	1014	24	2.3
Week 3 (Date from 01/08/20 to 08/08/20)	975	6	0.6
Week 4 (Date from 09/08/20 to 15/08/20)	399	1	0.25
Week 5 (Date from 16/08/20 to 22/08/20)	383	5	1.3
Week 6 (Date from 22/08/20 to 29/08/20)	550	0	0
Total	4077	101	2.47

District Summary (Kottayam) of Clusters as on 31.08.2020

	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	2	5	2	0	9
ACTIVE	0	1	2	0	3
CONTAINED	2	4	0	0	6
TOTAL LOCALLY ACQUIRED CASES	48	93	165	0	306
TOTAL DEATHS	0	0	0	0	0
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS IN AUG OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	1.6%	3.2%	5.8%	0	10.8%

District Summary of Clusters – Kottayam- September

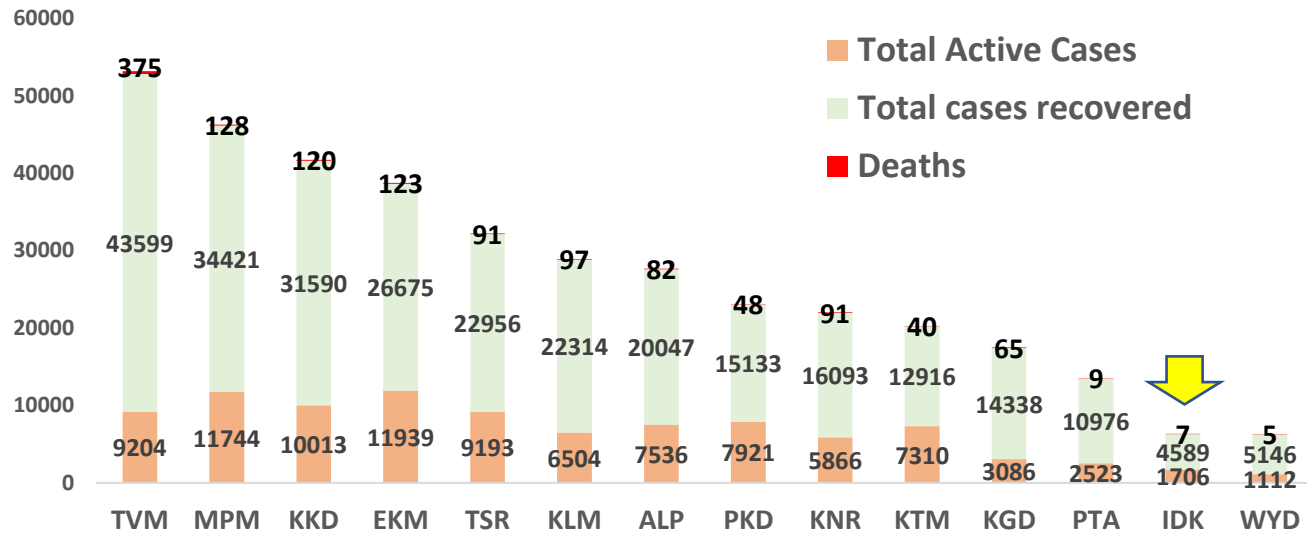
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	2	5	11	0	18
Active	0	0	8	0	8
Contained	2	5	3	0	10
Total Locally acquired Cases	208	236	719	0	1163
Total Deaths	0	0	0	0	0
% of Total Cases reported in active clusters in Sep out of total new cases reported in the district in Sep	0	0	6.5	0	6.5

IDUKKI

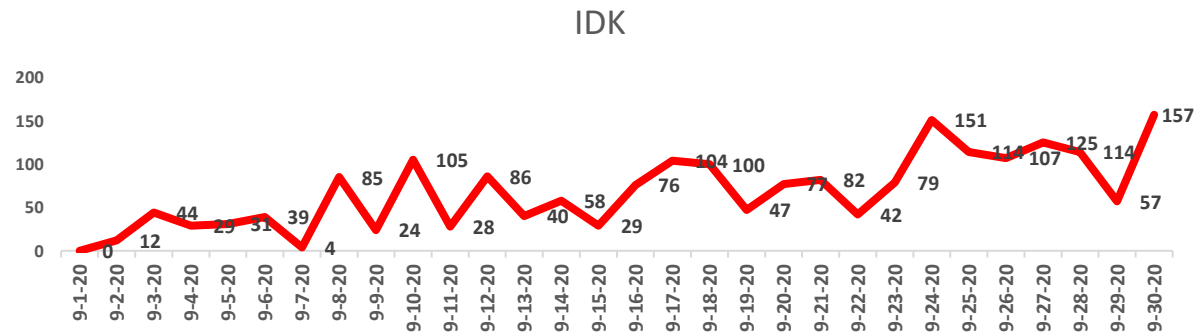
Idukki - COVID scenario

As on 23-10-2020	KERALA	Idukki	Percentage
Population 2011 census	33406061	11,08,974	3.32
Total Number of CONFIRMED Cases	377834	6304	1.67
Total cases recovered	280793	4589	1.63
Deaths	1281	7	0.55
Total Active Cases	95657	1706	1.78
Cases per 1 lakh population	1131	568	
Case fatality % (Deaths/Cases)	0.34	0.11	
Recovery rate %	74	73	

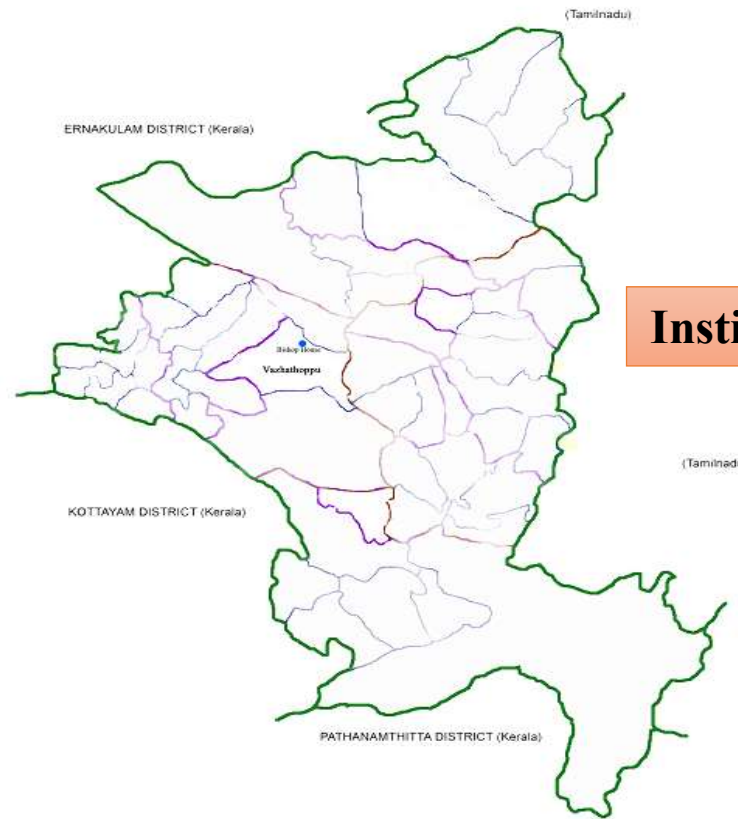
Statistics as on 23-10-2020



Idukki daily trend of new cases – September 2020



Map of active cluster in Idukki



Institutional Cluster – Bishop House -1

Summary of active clusters (Idukki)

Name of Cluster	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
Ward 8, Kumily	183	24	Contained
Ward 13, Elapara	162	33	Contained
Ward 06, Upputhara	372	17	Contained
Ward 4, Bishop House, Vazhathope	80	8	Contained
Al Azher Medical College Kumaramangalam, Ward X	251	19	Contained
Hotel Mezban , Adimaly	82	10	Contained

District Summary of Clusters (Idukki) as on Aug 31 2020

	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	0	10	8	0	18
ACTIVE	0	1	1	0	2
CONTAINED	0	9	7	0	16
TOTAL LOCALLY ACQUIRED CASES	0	203	84	0	287
TOTAL DEATHS	0	0	0	0	0
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS IN AUG OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	0	10%	2%	0	12%

District Summary as on September 30

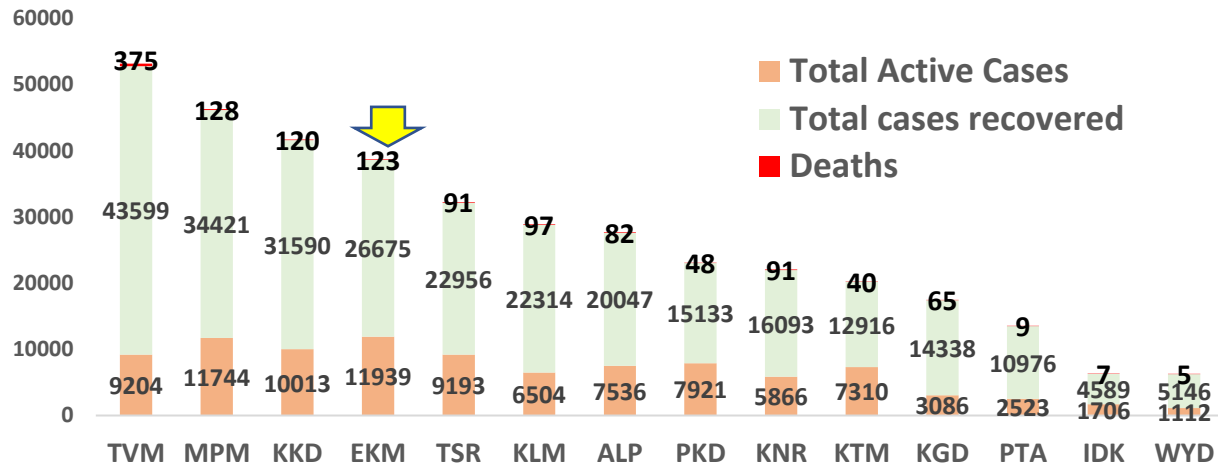
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	0	11	10	0	23
Active	0	3	3	0	6
Contained	0	8	7	0	15
Total Locally acquired Cases	0	214	113	0	327
Total Deaths	0	0	0	0	0
% of Total Cases reported in active clusters in Sep out of total new cases reported in the district in Sep	0	12%	7%	0	19%

ERNAKULAM

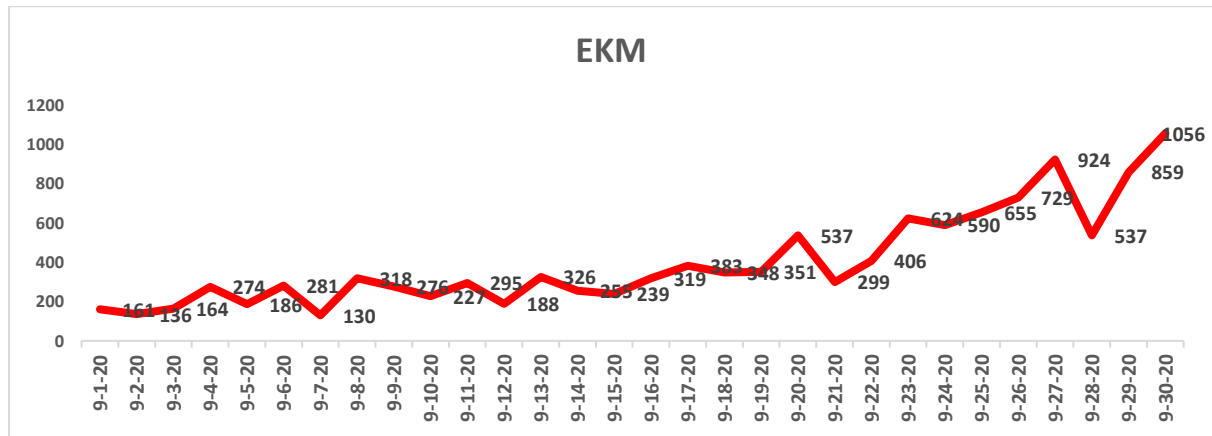
Ernakulam - COVID scenario

As on 23-10-2020	KERALA	Ernakulam	Percentage
Population 2011 census	33406061	32,82,388	9.83
Total Number of CONFIRMED Cases	377834	38746	10.25
Total cases recovered	280793	26675	9.50
Deaths	1281	123	9.60
Total Active Cases	95657	11939	12.48
Cases per 1 lakh population	1131	1180	
Case fatality % (Deaths/Cases)	0.34	0.32	
Recovery rate %	74	69	

Statistics as on 23-10-2020



Ernakulam daily trend of new cases – September 2020



Map of Ernakulam showing Clusters

Ernakulam District



Summary of Active Clusters in Ernakulam

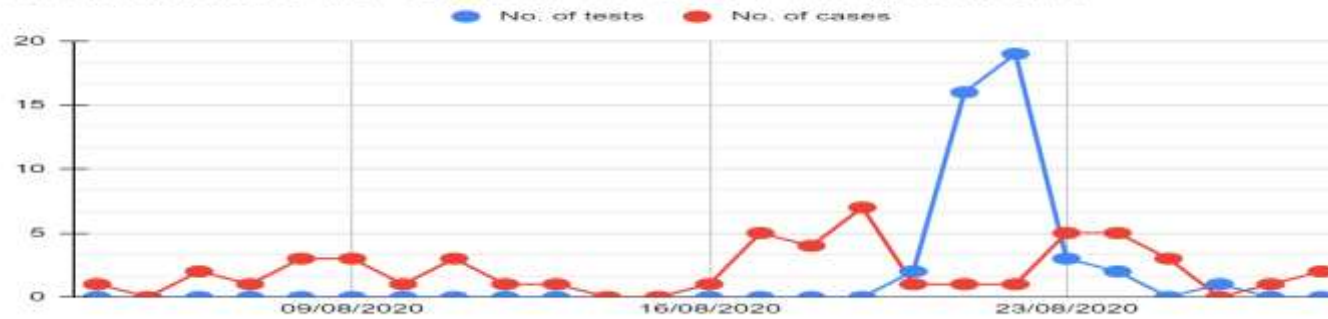
Name of Cluster	Type of Cluster (Large/Limited/Institutional/ Closed)	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
Chellanam	Large	341	68	Static
Aluva market	Large	1187	105	Static
Keezhmad	Large	182	77	Static
Kadungalloor	Large	77	129	Static
Karumalloor	Large	286	105	Static
Choornikkara	Large	186	78	Static
Chengamanad	Large	452	54	Static
West Kochi	Large	2282	1550	Increasing
Edathala	Large	235	208	Increasing
Kalady	Large	348	72	Static
Thuravoor	Large	338	53	Static
Nellikuzhi	Large	241	74	Static
Kottuvally	Large	297	21	Static

Thrikkakara	Large	620	375	Static
Vengola	Large	1487	240	Increasing
Kottapady	Large	269	39	Static
Ayavana	Large	143	35	Static
Vazhakkulam	Large	426	83	Static
Kothamangalam	Large	1465	160	Static
Kalamassery	Large	567	216	Static
Thrippunithura	Large	1876	293	Increasing
Kunnathunadu	Large	52	122	Static
Cheranallor	Large	731	139	Static
Kumbalangi	Large	712	113	Static
Varapetty	Large	473	96	Static
Mazhuvannoor	Large	245	73	Static
Mookkannoor	Large	503	106	Static
North Paravur	Large	420	147	Static
Rayamangalam	Large	695	190	Increasing
Pallippuram	Large	468	80	Decreasing
Kunnukara	Large	111	75	Static
Maradu	Large	304	63	Decreasing

Pampakuda	Large	262	57	Decreasing
Vadavucodu	Large	46	102	Static
Moothakunnam	Large	210	109	Increasing
Ayyampuzha	Large	348	82	Increasing
Udayamperoor	Large	-	113	Increasing
Chittattukara	Large	169	43	Increasing
Chendamangalam	Large	-	58	Increasing
Asamannoor	Large	-	25	Increasing
Eloor	Large	262	126	Increasing
Elankunnapuzha	Large	-	81	Increasing
Sreemoolanagaram	Large	200	90	Increasing

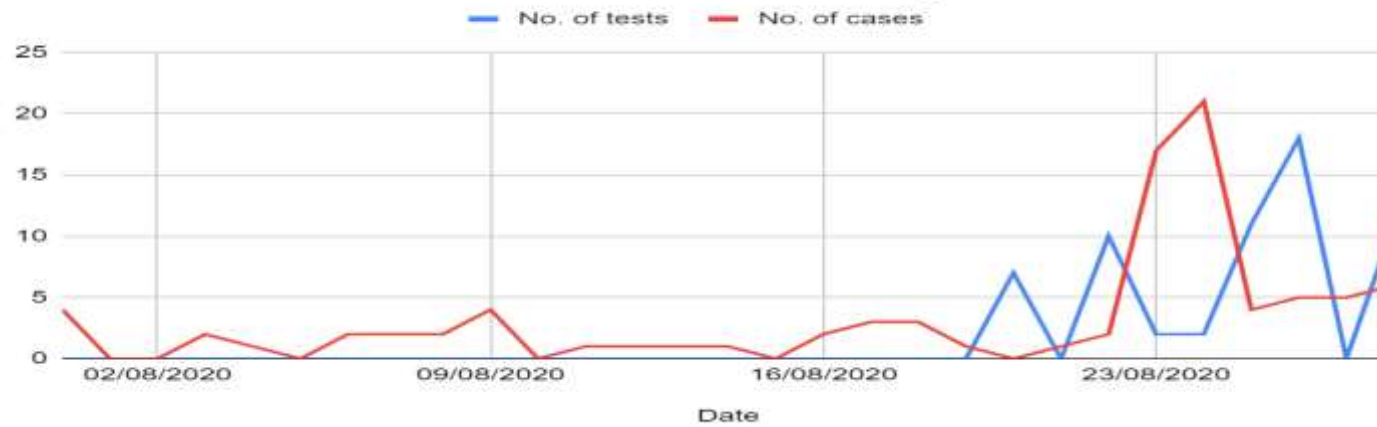
Trend in clusters

No. of cases & no. of tests Vs Date : Thrippunithura



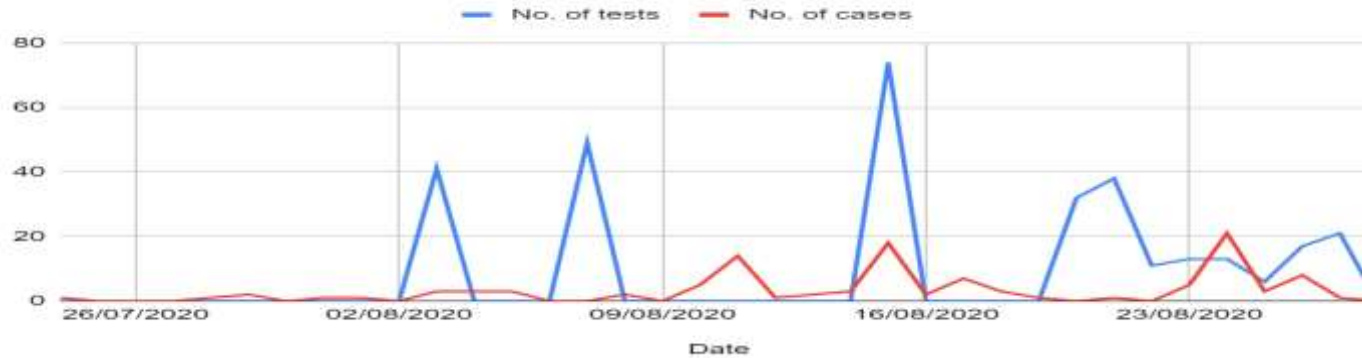
Thrippunithura	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 1-Sep-2020 to 7-Sep-2020	230	23	10.00%
Week 2 8-Sep-2020 to 14-Sep-2020	457	75	16.41%
Week 3 15-Sep-2020 to 21-Sep-2020	444	75	16.89%
Week 4 22-Sep-2020 to 28-Sep-2020	596	88	14.77%
Total	1727	261	15.11%

No. of tests and No. of cases: Kalamassery



Kalamassery	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 1-Sep-2020 to 7-Sep-2020	66	38	57.58%
Week 2 8-Sep-2020 to 14-Sep-2020	192	46	23.96%
Week 3 15-Sep-2020 to 21-Sep-2020	138	43	31.16%
Week 4 22-Sep-2020 to 28-Sep-2020	171	50	29.24%
Total	567	177	31.22%

No. of tests and No. of cases : Vengola



Vengola	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 1-Sep-2020 to 7-Sep-2020	244	36	14.75%
Week 2 8-Sep-2020 to 14-Sep-2020	480	43	8.96%
Week 3 15-Sep-2020 to 21-Sep-2020	329	52	15.81%
Week 4 22-Sep-2020 to 28-Sep-2020	362	81	22.38%
Total	1415	212	14.98%



Thrikkakara	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 1-Sep-2020 to 7-Sep-2020	96	66	68.75%
Week 2 8-Sep-2020 to 14-Sep-2020	53	52	98.11%
Week 3 15-Sep-2020 to 21-Sep-2020	151	69	45.70%
Week 4 22-Sep-2020 to 28-Sep-2020	100	143	143.00%
Total	400	330	82.50%

District Summary (Ernakulam)- August 31, 2020

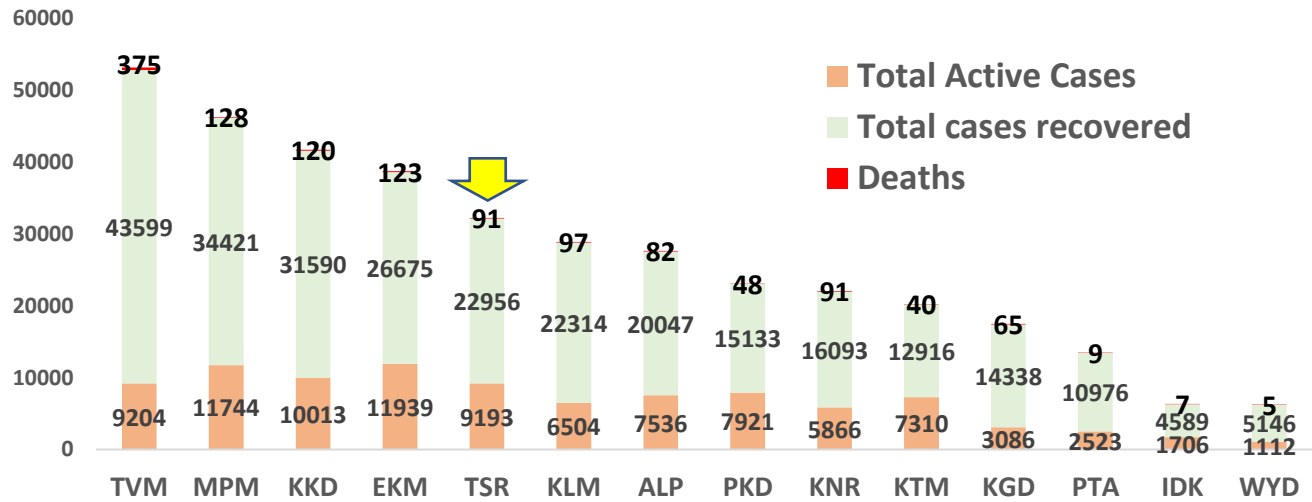
	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	17	11	0	5	33
ACTIVE	17	7	0	1	25
CONTAINED	0	4	0	4	8
TOTAL LOCALLY ACQUIRED CASES	1856	240	0	75	2171
TOTAL DEATHS	17	2	0	2	21
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS IN AUG OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	42.65%	5.51%	0	1.72%	49.81%

THRISSUR

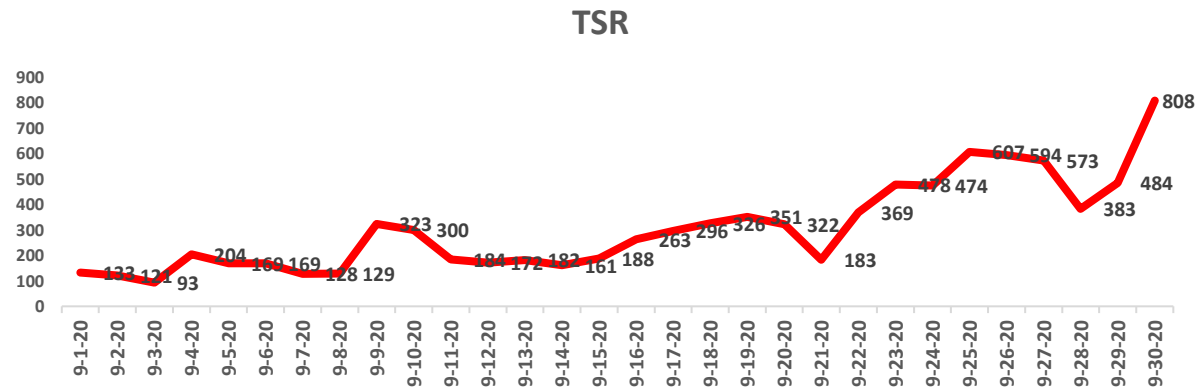
Thrissur - COVID scenario

As on 23-10-2020	KERALA	Thrissur	Percentage
Population 2011 census	33406061	31,21,200	9.34
Total Number of CONFIRMED Cases	377834	32244	8.53
Total cases recovered	280793	22956	8.18
Deaths	1281	91	7.10
Total Active Cases	95657	9193	9.61
Cases per 1 lakh population	1131	1033	
Case fatality % (Deaths/Cases)	0.34	0.28	
Recovery rate %	74	71	

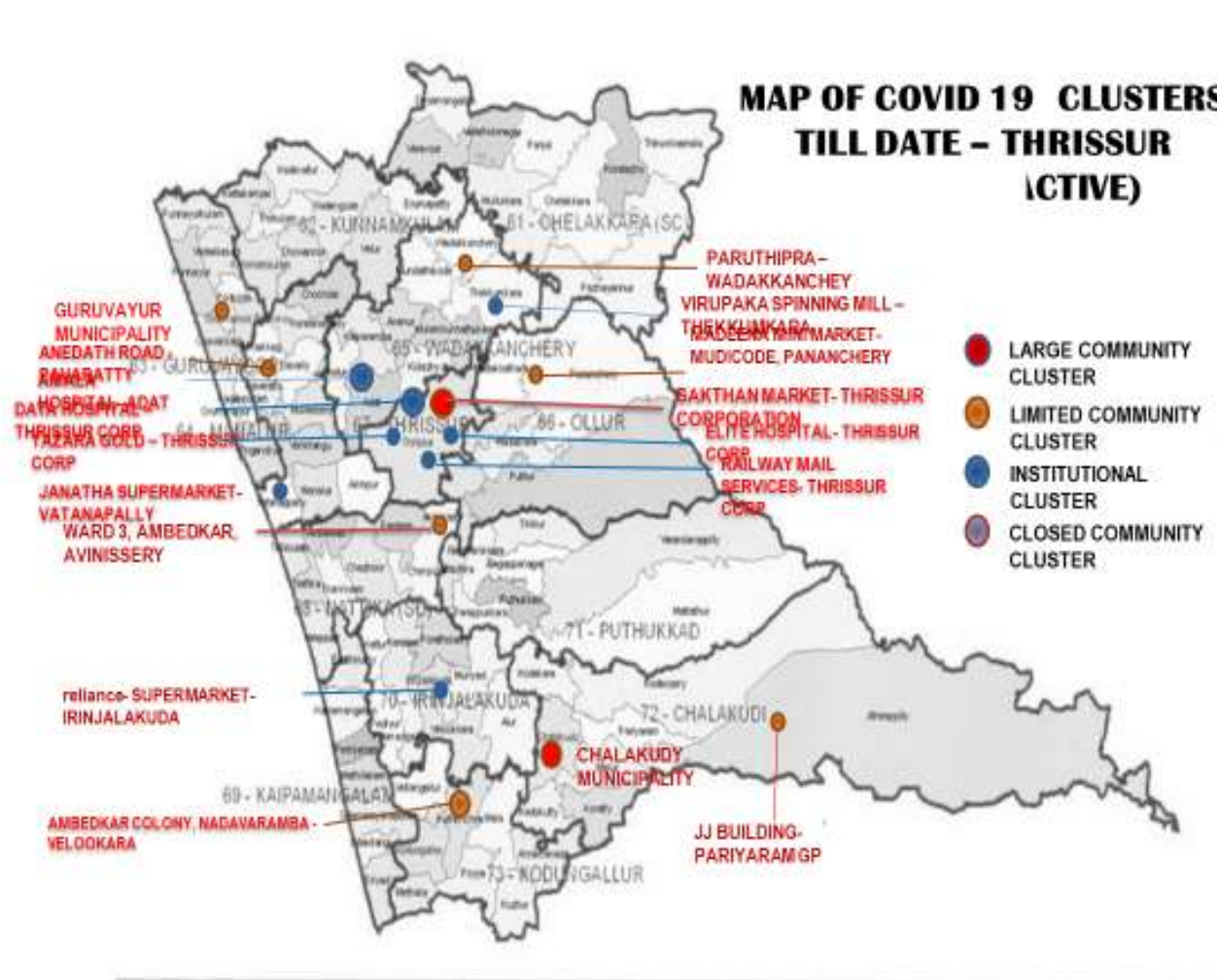
Statistics as on 23-10-2020



Thrissur daily trend of new cases – September 2020

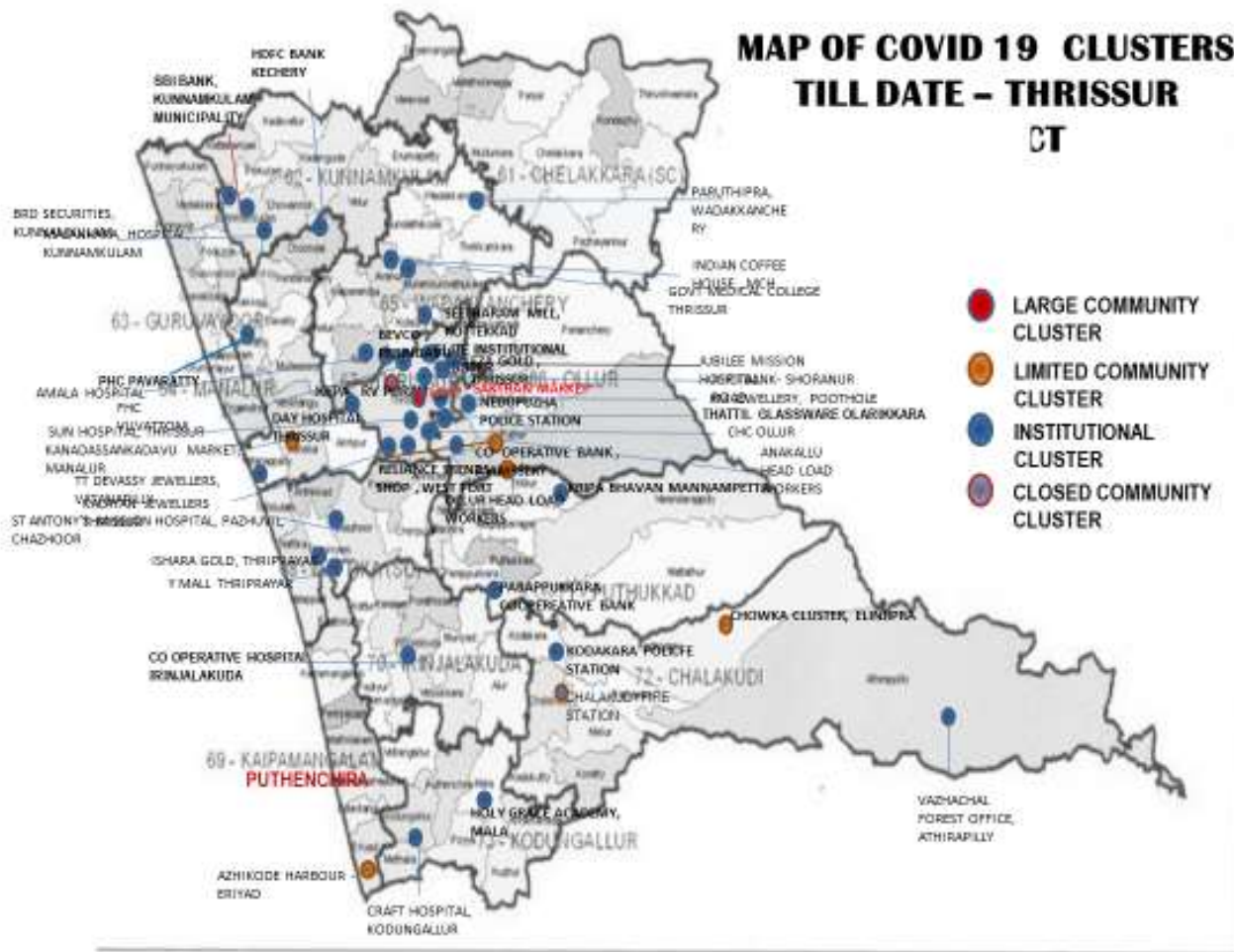


Map of Clusters (August)- Thrissur



Map of Clusters (September)- Thrissur

MAP OF COVID 19 CLUSTERS TILL DATE - THRISSUR CT



Summary of Active Clusters- Thrissur

Name of Cluster	Type of Cluster (Large/Limited/Institutional/ Closed)	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
DH Wadakkanchery	Institutional	62	15	Increasing
Guruvayur temple police station	Institutional	140	18	Increasing
Co-operative hospital Thrissur	Institutional	86	25	Increasing
Tata ala life insurance	Institutional	82	8	Static
Kalyan co-operative office Pookunnam	Institutional	62	8	Static
Leo medicals Kuttanallur	Institutional	185	16	Increasing
Unity hospital	Institutional	84	9	Increasing
Aswini hospital	Institutional	85	6	Increasing
Hy-tech hospital west fort	Institutional	82	5	Increasing
Sun hospital	Institutional	485	8	Increasing

Royal hospital KKM	Institutional	270	14	Decreasing
Tax affairs, mg road	Institutional	79	8	Static
Brd securities KKM	Institutional	109	15	Decreasing
MCH TSR institutional cluster-	Institutional	583	33	Increasing
Mother hospital TSR cluster	Institutional	108	12	Decreasing
Y mall Thruprayar	Institutional	359	21	Decreasing
GH Thrisur	Institutional	1853	15	Increasing
St.antonys mission hospital Pazhuvil	Institutional	101	10	Decreasing
JMMC	Institutional	716	97	Increasing
Amala hospital	Institutional	4524	286	Decreasing
Daya institutional cluster	Institutional	3549	140	Decreasing
Dhanalakshmi bank, Poonkunnam	Institutional	54	6	Decreasing
Akshaya center Anakallu	Institutional	96	5	Decreasing

Dr plus medical store	Institutional	92	5	Decreasing
Hdfc bank Kechery	Institutional	86	8	Decreasing
Asian paints Padavarad	Institutional	102	15	Decreasing
Holy grace mala	Institutional	139	12	Decreasing
Nedupuzha police station cluster	Institutional	98	14	Decreasing
Peeyar exporter jewellery cluster	Institutional	56	10	Decreasing
Seetharam kottekkad cluster	Institutional	185	16	Decreasing
Kodakara police station cluster	Institutional	67	12	Decreasing
Nest matrimony vatanapally	Institutional	96	14	Decreasing
Ishara gold cluster	Institutional	46	196	Decreasing
Co-operative bank Avinissery	Institutional	82	10	Decreasing
East fort police station	Institutional	485	23	Decreasing
Ollur parcel service	Institutional	270	18	Decreasing

Kalyan jewellery Thrissur	Institutional	98	31	Decreasing
Josco Palakkad	Institutional	170	37	Decreasing
Tt devassy jewellery vadanapilly	Institutional	152	36	Decreasing
Peringavu bevco cluster	Institutional	110	11	Decreasing
Hdfc bank Chavakkad	Institutional	60	7	Decreasing
Co-operative hospital Irijalakkuda	Institutional	215	9	Decreasing
Bhima Thrissur	Institutional	89	6	Decreasing
Al dahab jewellery	Institutional	130	30	Decreasing
Eza gold cluster	Institutional	86	7	Decreasing
Food home restaurant Patturaikkal	Institutional	60	7	Decreasing
Alankar hotel TSR, cluster	Institutional	88	12	Decreasing
Malankara hospital KKM cluster	Institutional	148	8	Decreasing

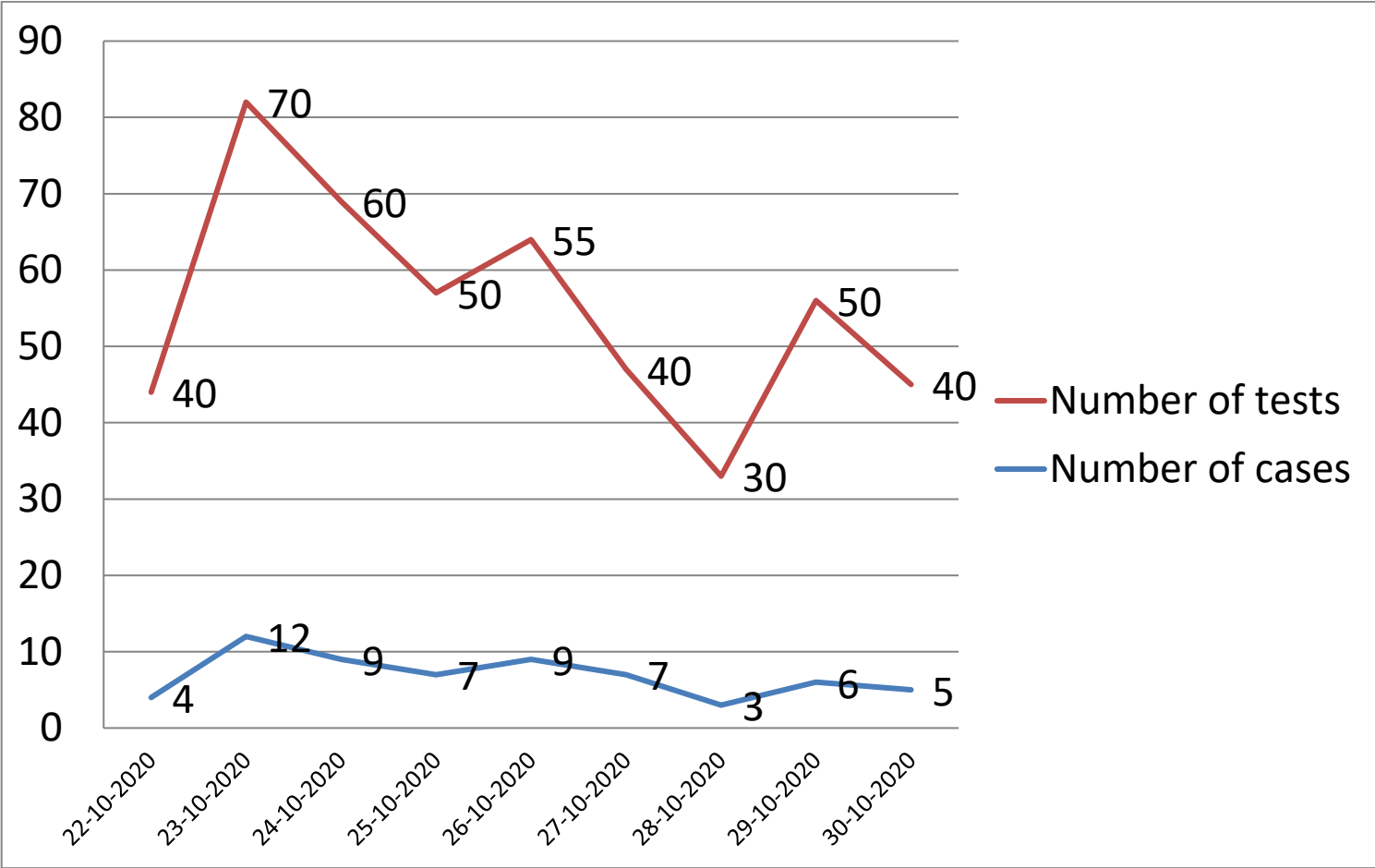
Kmj Pothole cluster	Institutional	170	50	Decreasing
CHC Ollur	Institutional	120	28	Decreasing
SBI Kunnamkulam	Institutional	98	19	Decreasing
Vazhachal forest station cluster	Institutional	189	29	Decreasing
FHC vilvattam	Institutional	76	10	Decreasing
ICICI Shornur road	Institutional	160	37	Decreasing
Elite Institutional cluster	Institutional	359	130	Decreasing
Phc Pavaratty cluster	Institutional	95	6	Decreasing
Thattil glass house, Olarikkara	Institutional	60	11	Static
Ich MCH cluster	Institutional	102	12	Decreasing
Chalakkudy fire station	Institutional	150	40	Decreasing
Rr medicals Kodungallur	Institutional	96	16	Decreasing
Modicare perumbilavu	Institutional	55	10	Decreasing

Foodmazone	Institutional	92	33	Decreasing
Co-operative spinning mill, Vazhani	Institutional	330	160	Decreasing
MIT Kodungallur	Institutional	52	4	Decreasing
UAE exchange kodungallur	Institutional	60	3	Decreasing
Rms- Thrissur	Institutional	180	58	Decreasing
Muthoot Wadakkanchery	Institutional	82	7	Decreasing
KK- muriyanthode, Valappad	Institutional	90	11	Decreasing
Ottupara cluster	Limited community	69	19	Decreasing
Kunnamkulam fish market	Limited community	121	30	Decreasing
Highroad Puthanpalli	Limited community	78	11	Increasing
Shaktan Thrissur 2	Large community	435	62	Increasing
Padukkad wedding cluster	Limited community	120	24	Increasing

Ollur headload workers cluster	Limited community	196	42	Decreasing
Kunnamkulam union	Limited community	88	14	Decreasing
Anakkallu intuc	Limited community	62	10	Decreasing
Blangad beach cluster	Limited community	130	22	Decreasing
Didik edassery cluster	Limited community	91	13	Decreasing
Rakesh kunnamkulam cluster	Limited community	85	19	Decreasing
Chowka cluster	Limited community	86	25	Decreasing
Azhikode harbour	Limited community	190	77	Decreasing
Paruthipra	Limited community	230	91	Decreasing
Munambam cluster	Limited community	190	30	Decreasing
North chalakkudy cluster	Limited community	98	26	Decreasing
Kaaniyambal cluster	Limited community	150	37	Decreasing

Paravattany cluster	Limited community	96	10	Decreasing
Chakochira puthukkad cluster	Limited community	88	18	Decreasing
Rms- Thrissur	Limited community	205	58	Decreasing
Vatanapilly fish market	Limited community	88	14	Decreasing
Minaloor	Limited community	190	35	Decreasing
ULCS labour society guruvayur	Gated community	89	37	Decreasing
Kepa, RV puram	Gated community	1220	197	Increasing
Devamatha provincial house	Gated community	88	5	Decreasing
St raphel Poonissery cluster	Gated community	88	15	Decreasing
Kripa bhavan manampetta cluster	Gated community	102	23	Decreasing
Bishop house Arthat	Gated community	55	4	Decreasing

Trend in Large Cluster- Sakthan Market



District Summary (Thrissur) as on 31.08.2020

	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	4	11	13	2	22
ACTIVE	2	5	7	0	14
CONTAINED	2	6	6	12	5
TOTAL LOCALLY ACQUIRED CASES	524	245	671	105	1545
TOTAL DEATHS	2	0	2	0	4
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS IN AUG OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	10.1	6.6	22.9	0	9.9

District Summary of Clusters (September)

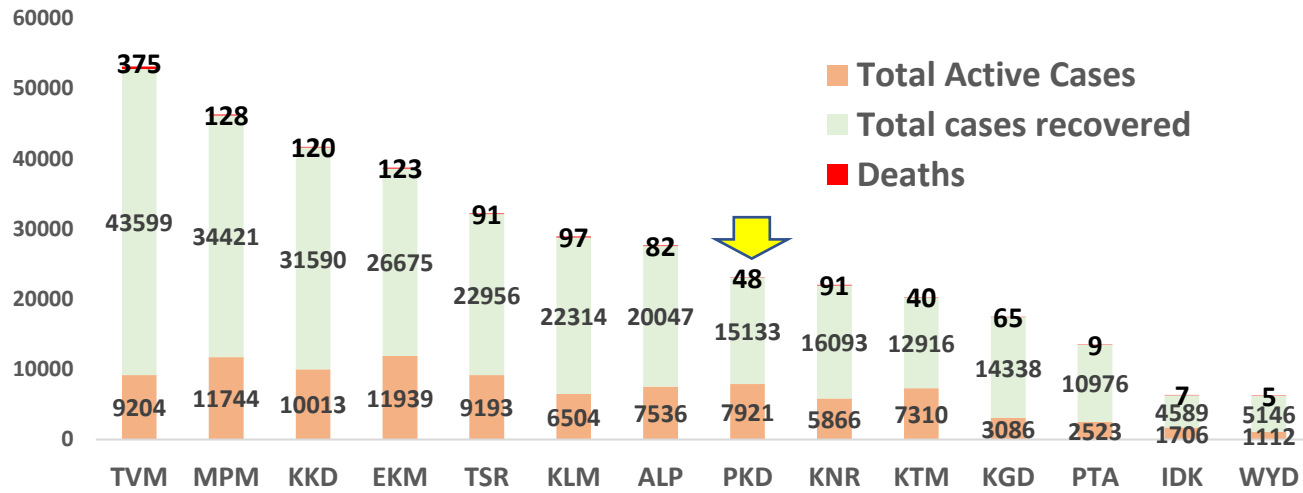
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	1	21	70	6	99
Active	1	6	21	2	59
Contained	0	15	49	4	40
Total Locally acquired Cases	62	687	2136	281	3166
Total Deaths	0	0	0	0	
% of Total Cases reported in active clusters in Sep out of total new cases reported in the district in Sep	0.68%%	7.49%	23.29%%	3.06%	34.52%

PALAKKAD

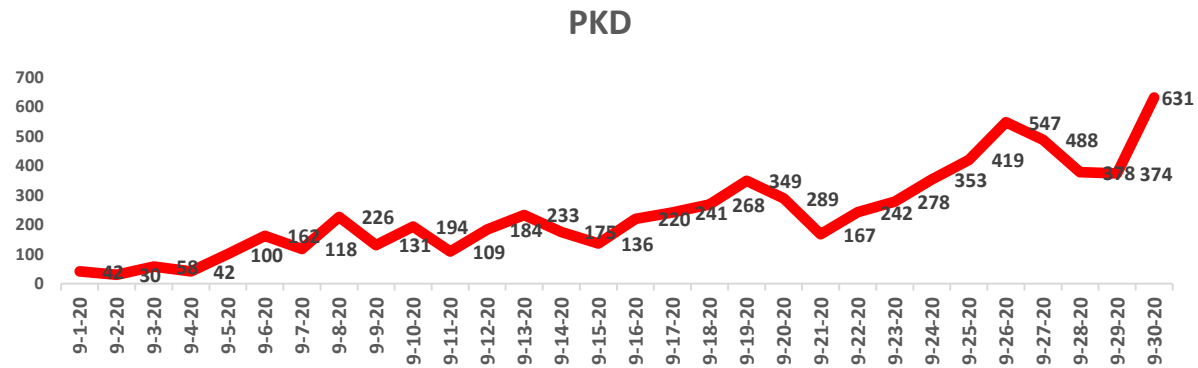
Palakkad- COVID scenario

As on 23-10-2020	KERALA	Palakkad	Percentage
Population 2011 census	33406061	28,09,934	8.41
Total Number of CONFIRMED Cases	377834	23103	6.11
Total cases recovered	280793	15133	5.39
Deaths	1281	48	3.75
Total Active Cases	95657	7921	8.28
Cases per 1 lakh population	1131	822	
Case fatality % (Deaths/Cases)	0.34	0.21	
Recovery rate %	74	66	

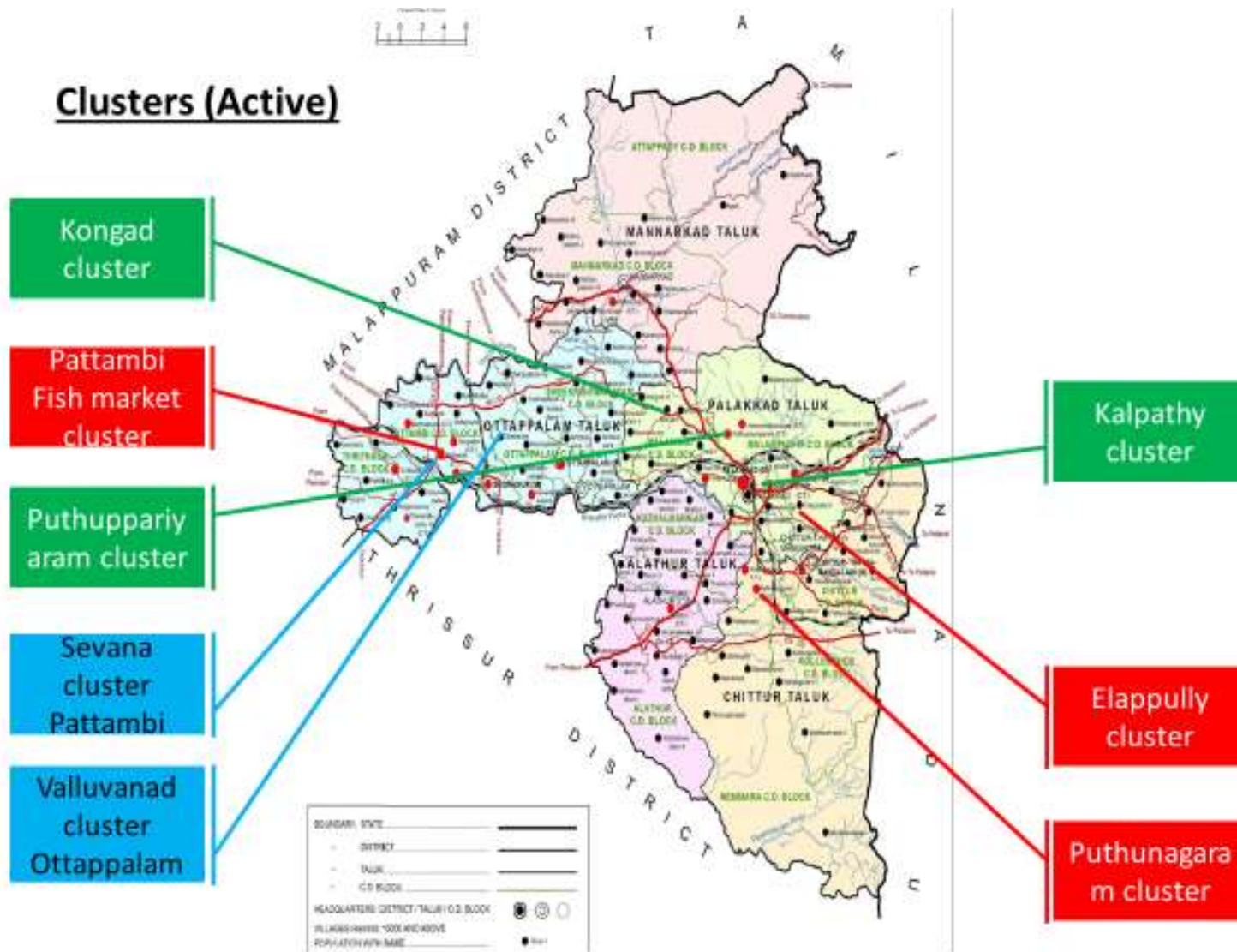
Statistics as on 23-10-2020



Palakkad daily trend of new cases – September 2020



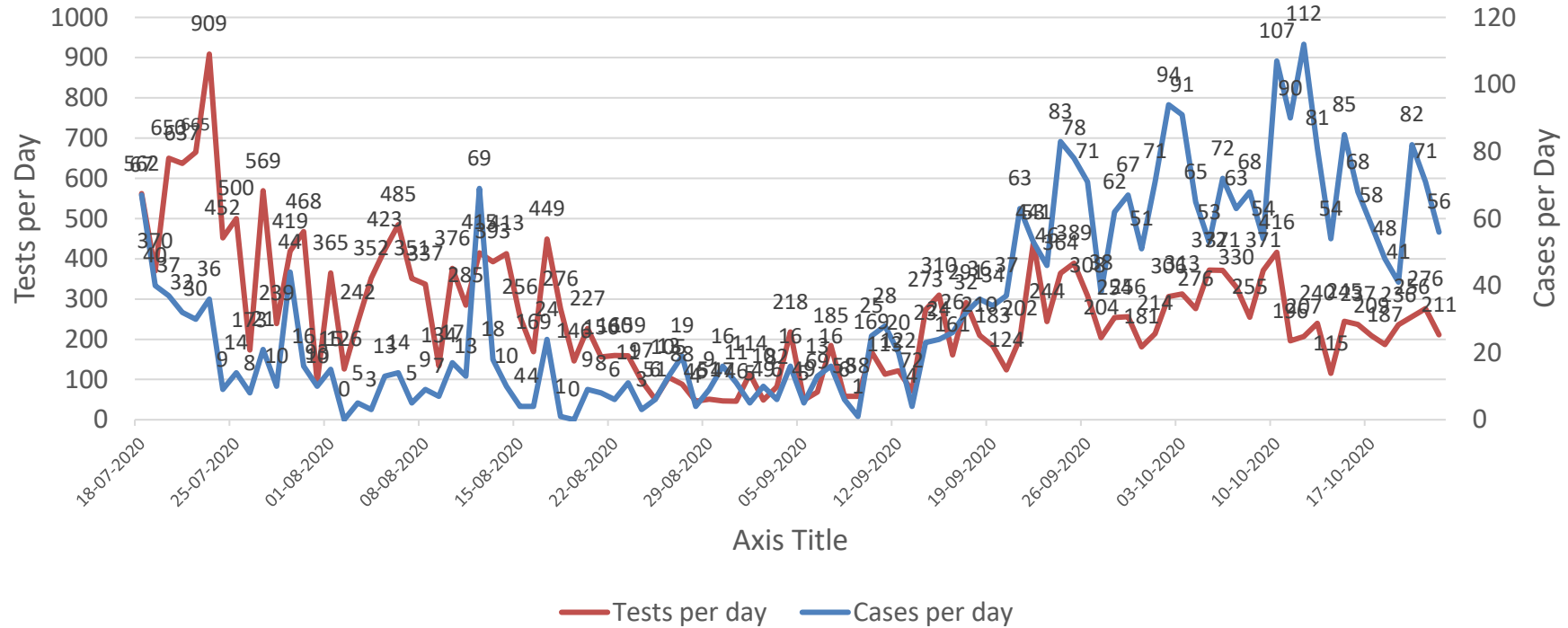
Map showing clusters in Palakkad



Summary of Clusters

Name of Cluster	Type of Cluster	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Number of tests done IN LAST 3 DAYS	Number of locally acquired cases reported in last 3 DAYS	Current Status of Cluster	Trend in Cluster based on Number of locally acquired cases
Pattambi fish market	Large	25524	3286	743	209	Active	Increasing
Pudunagaram Cluster	Large	3679	428	317	118	Active	Increasing
Palakkad Veg Market	Large	1768	240	83	1	Active	Increasing
Koduvayur Market	Large	4431	872	327	48	Active	Increasing
Precot Migrant cluster, Pudukkottai	Closed Community	782	58	782	58	Active	Decreasing

Trend in Pattambi Market Cluster

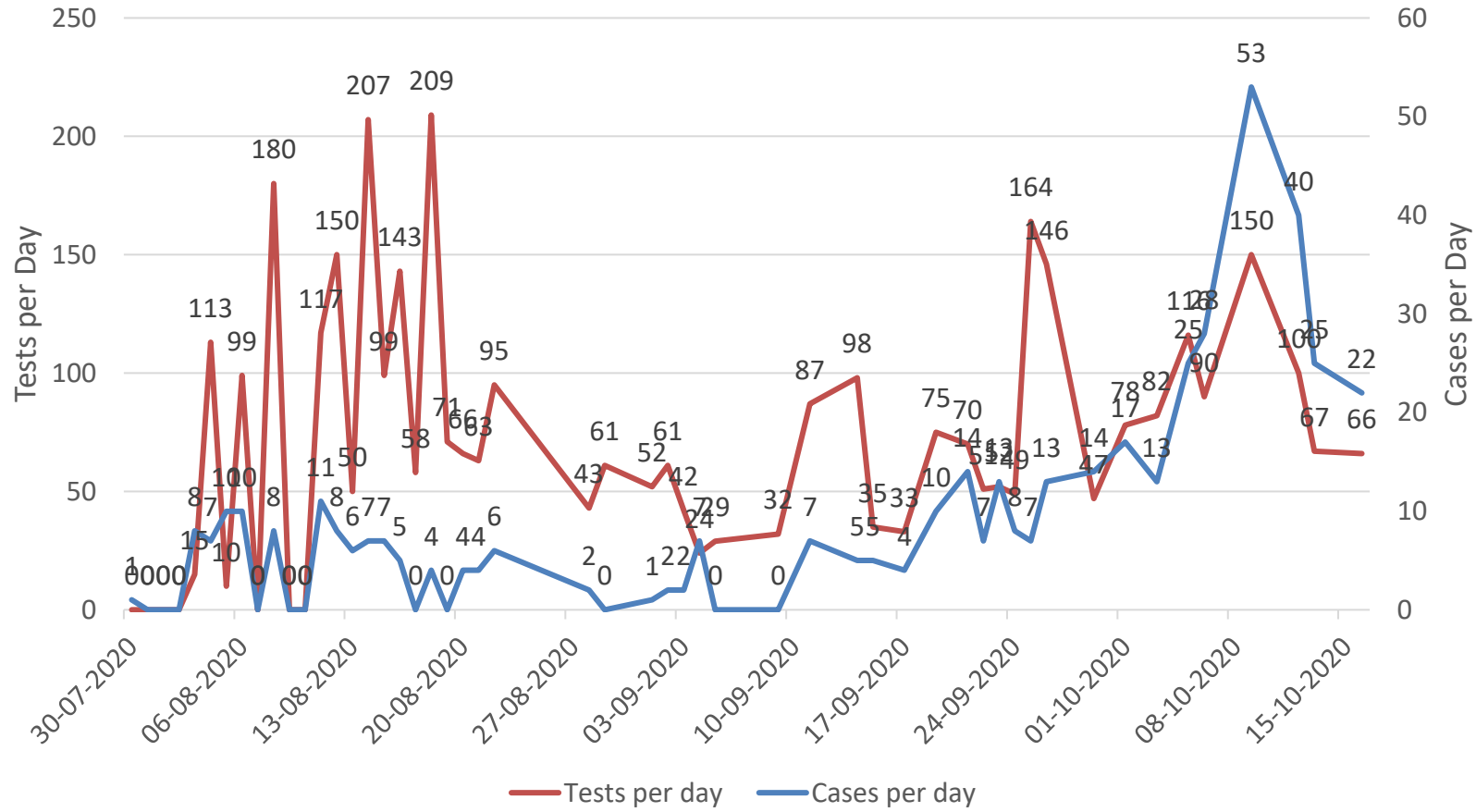


Pattambi Cluster

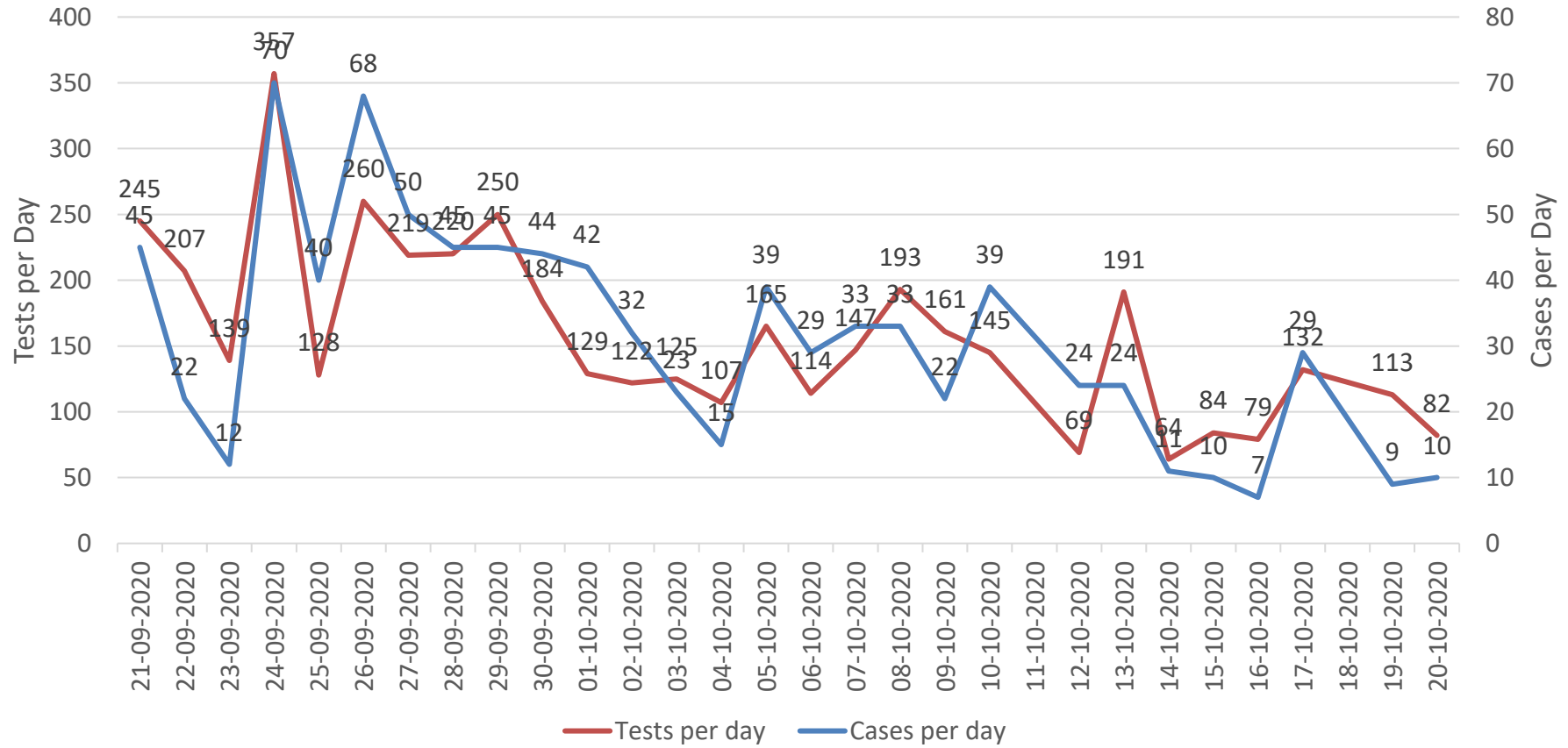
	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate
18/07/20 to 24/07/20	4245	253	6.0
25/07/20 to 31/07/2020	2461	123	5.0
01/08/2020 to 07/08/2020	2344	55	2.3

08/08/2020 to 14/08/2020	2353	136	5.8
15/08/2020 to 21/08/2020	1679	45	2.7
22/08/2020 – 28/08/2020	706	62	8.8
29/08/2020 – 04/09/2020	607	73	12.0
05/09/2020 – 11/09/2020	701	66	11.2
12/09/2020 – 18/09/2020	1439	165	11.5
19/09/2020 – 25/09/2020	1947	394	20.3
26/09/2020 – 02/10/2020	1723	454	26.3
03/10/2020 – 09/10/2020	2282	466	20.4
10/10/2020 – 16/10/2020	1656	597	36.0
17/10/2020 – 23/10/2020	1375	356	25.9
Total	25524	3286	12.9

Trend in Puthunagaram Cluster



Koduvayur Cluster



District Summary of Clusters as on 31.08.2020

	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	3	3	4	2	12
ACTIVE	3	3	2	0	8
CONTAINED	0	0	2	2	4
TOTAL LOCALLY ACQUIRED CASES	862	158	132	14	1148
TOTAL DEATHS	0	0	0	0	0
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS IN AUG OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	16.4%	4.5%	4.4%	0%	25.3%

District Summary- Palakkad- September

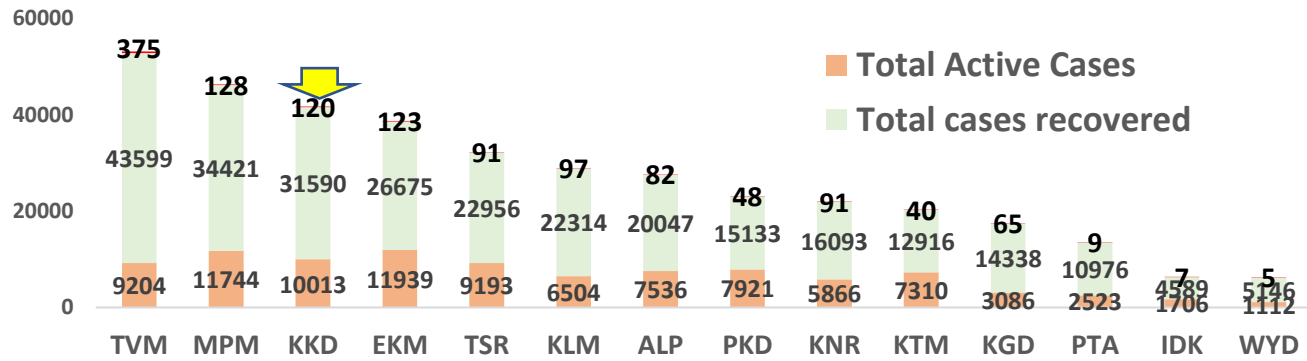
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	6	7	5	7	25
Active	4	0	0	1	5
Contained	2	7	5	6	20
Total Locally acquired Cases in September	1886	199	54	254	2393
Total Deaths	3	0	0	0	3

KOZHIKODE

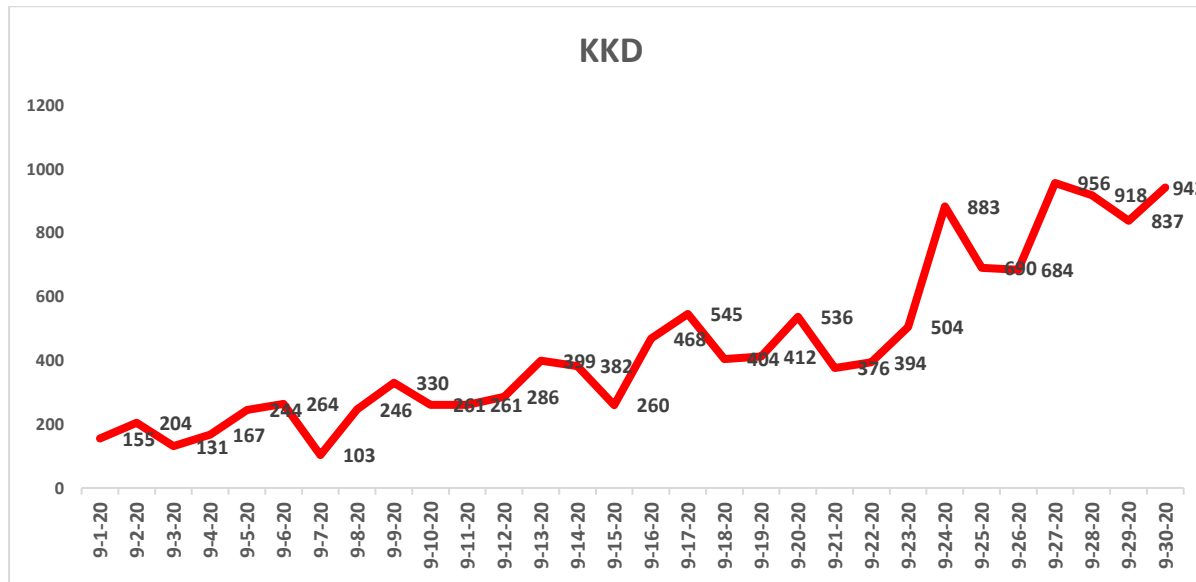
Kozhikode - COVID scenario

As on 23-10-2020	KERALA	Kozhikode	Percentage
Population 2011 census	33406061	30,86,293	9.24
Total Number of confirmed Cases	377834	41729	11.04
Total cases recovered	280793	31590	11.25
Deaths	1281	120	9.37
Total Active Cases	95657	10013	10.47
Cases per 1 lakh population	1131	1352	
Case fatality % (Deaths/Cases)	0.34	0.29	
Recovery rate %	74	76	

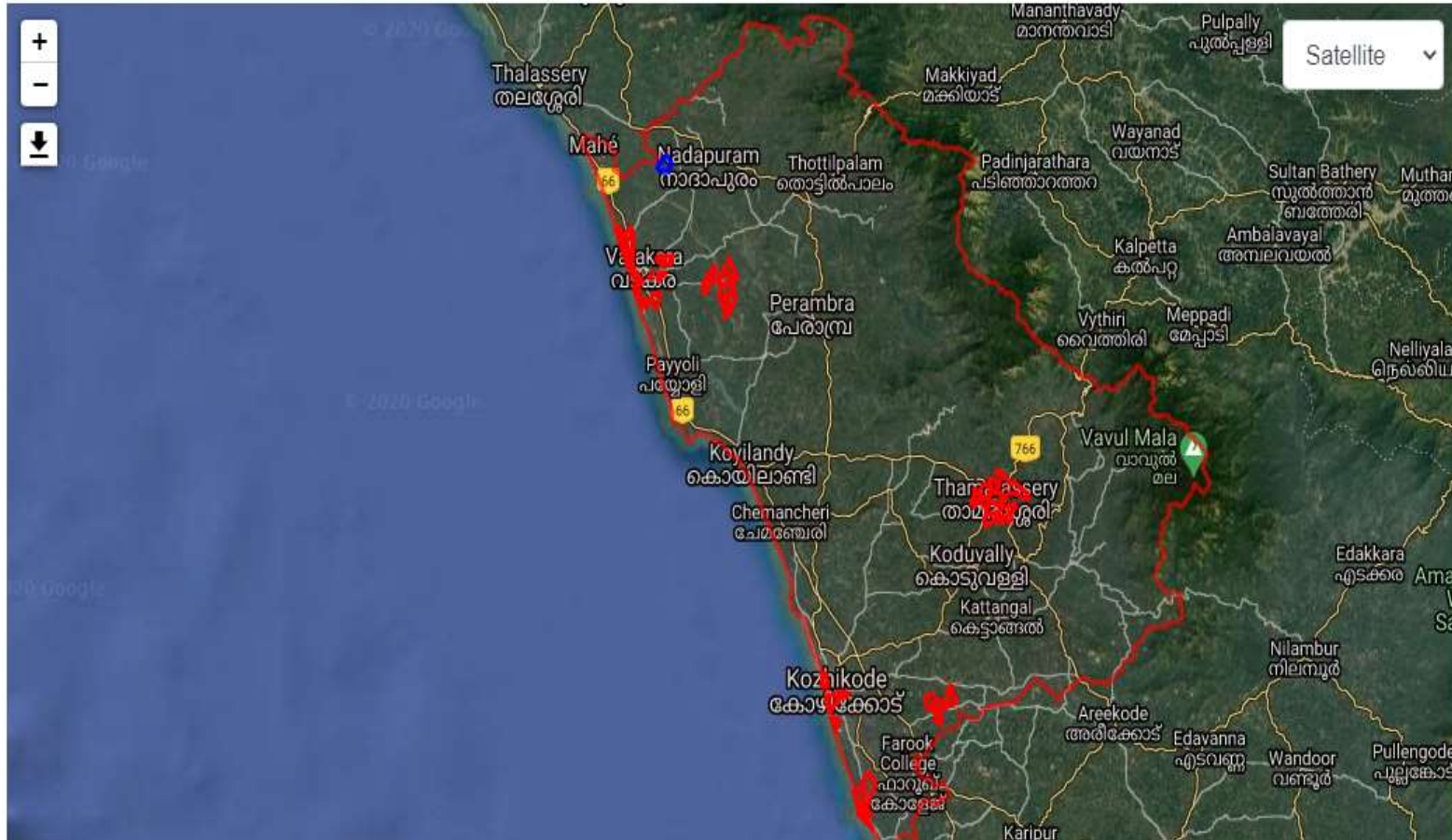
Statistics as on 23-10-2020



Kozhikode daily trend of new cases – September 2020



■ Limited community Cluster
 ■ Large Community Cluster
 ■ Institution Cluster
 ■ Closed Community Cluster



Summary of clusters

Name Of Clusters	Type Of Clusters(large, limited /institutional/ closed)	Total Tests Performed In The Clusters	Total No of Cases from The Clusters	Current Status Of Cluster (active/Contained-contained If No Locally Acquired Cases In Last 7days)	Trend In Clusterbased On Locally Accured Cases(increasing Decreasing Static)
VADAKARA (22,40,46,41,13)	Large	5884	784	Active	Inc
MUKADAR/PALLIKANDY	Large	2499	296	Active	Static
THAMARASSERY(6,7,8,10,11,12,14,15,16)	Large	2425	175	Active	Static
DAYA rehab Centre –THANAL, Edachery	Institutional	1351	199	Active	Inc
VELLAYIL	Large	5283	541	Active	Inc
CHORODE(1,17,18,19,20,21)	Large	3924	449	Active	Inc
THIRUVALLUR(5,6,10,11,12,14,15,19)	Large	2460	253	Active	Inc
BEYPORE(47,48)	Large	3482	334	Active	Inc
PERUMANNA(3,5,7,11)	Large	1490	240	Active	Inc
KAPPAKKAL	Large	3005	620	Active	Inc

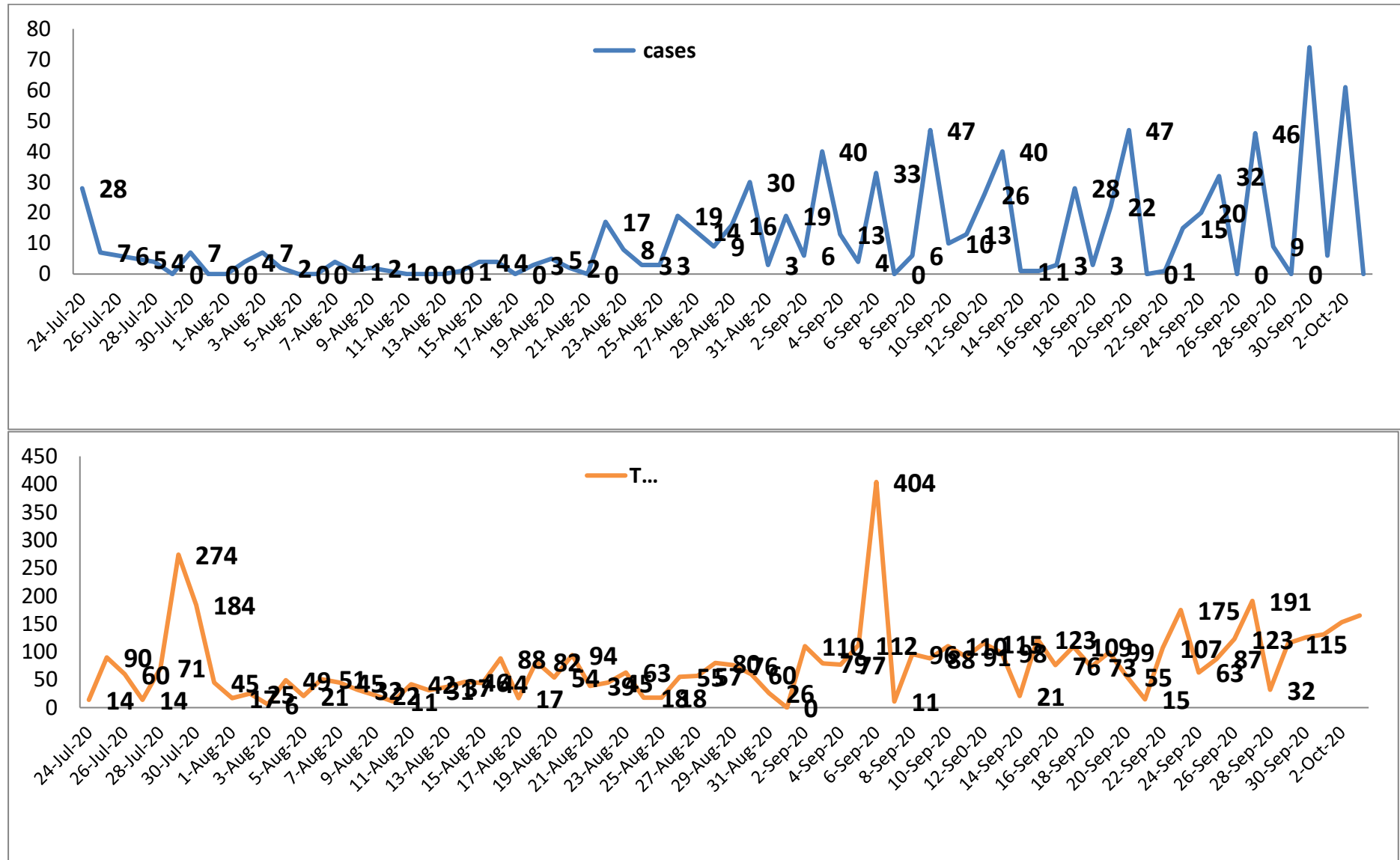
PUTHUPADI(moonnu cent colony,wd1)	Limited	74	46	Active	Inc
VALIYANGADI	Large	5282	129	Active	Inc
KADALUNDI(1.2.21,22)	Large	1214	242	Active	Inc
BSF CAMP CHEKKIAD	Closed community	664	262	Active	Inc
PALAYAM(market wd60)	Large	1768	298	Active	Inc
RAMANATTU KARA(1,2,3,4,8,11,17,10,30,18)	Large	2174	81	Active	Inc
OLAVANNA(2,22,21,16,14,18)	Large		205	Active	Inc

Trend in Cluster- Vadakara

	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date from 13/7 ---- to -19/7---)	489	10	2.0%
Week 2 (Date from...20/7... to 26/7 ...)	270	43	13.6%
Week 3 (Date from...27/7... to 2/8...)	630	20	3.17%
Week 4 (Date from...3/8... to 9/8...)-6 days	226	16	8.85%

Week 5 (Date from 10/8 to 16/8)	299	10	3.34%
Week 6 (Date from 17/8 to 23/8)	463	35	6.3%
Week 7 (Date from 24/08 to 30/08)	364	94	25.8%
Week 8 (Date from 31/08 to 6/09)	808	118	14.6%
Week 9 (Date from 7/09 to 13/09)	609	142	20.0%
Week 10 (Date from 14/09 to 20/09)	556	105	18.9%
Week 11 (Date from 21/09 to 27/09)	761	114	15.0%
Week 12 (Date from 28/09 to 4/10) 6 days	722	150	20.8%
Total	6202	845	13.6%

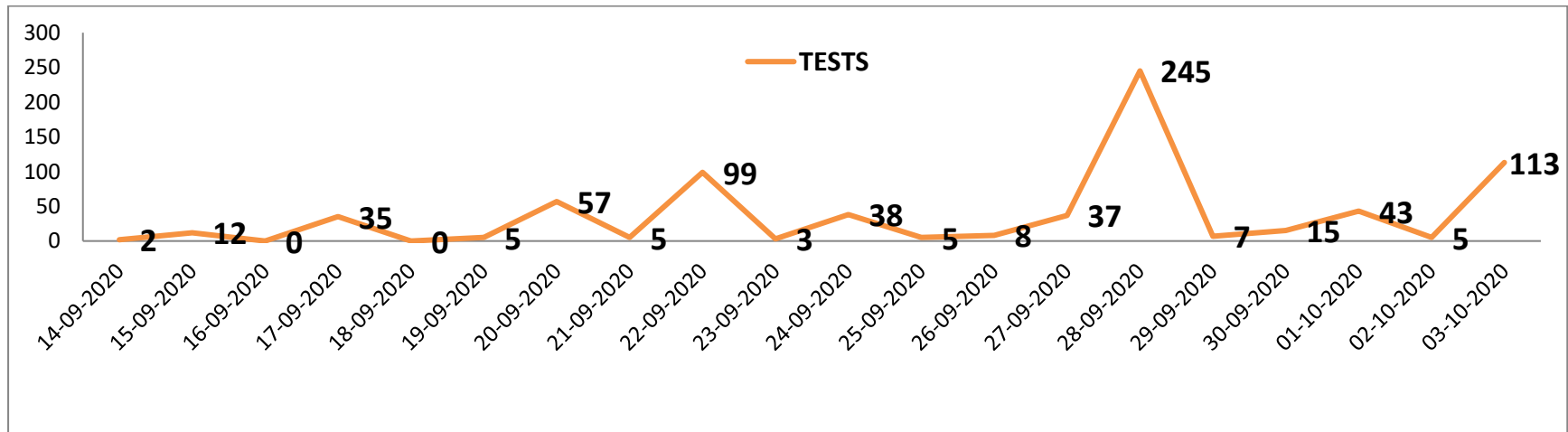
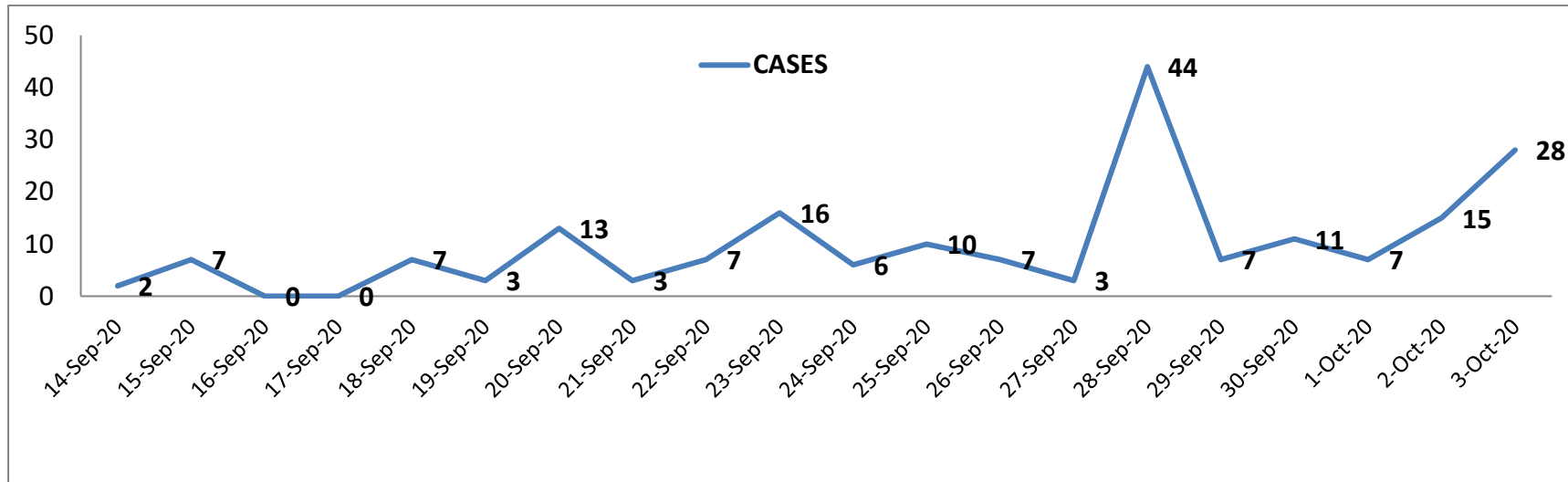
Trend in Vadakara Cluster



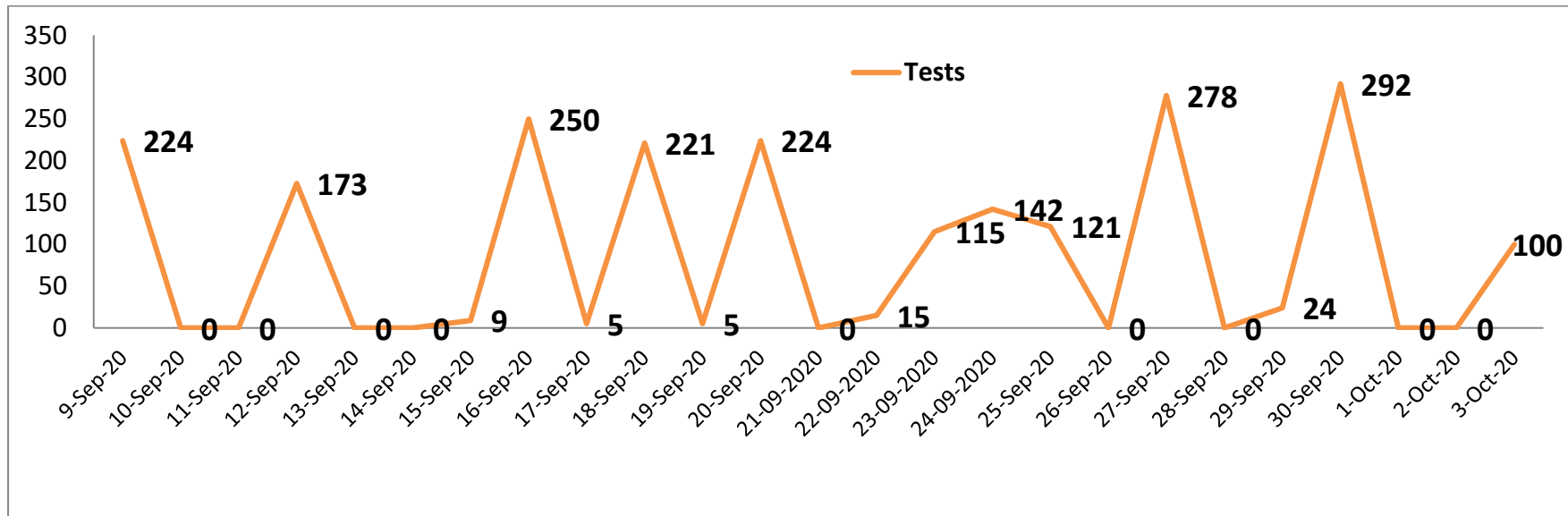
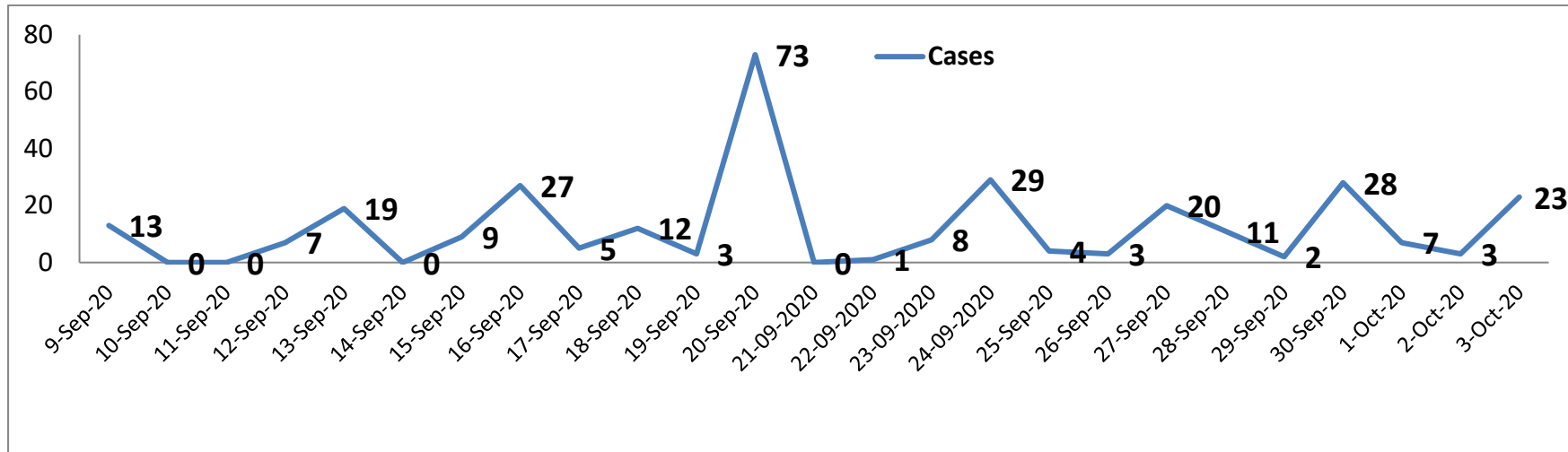
Summary of Clusters- Trend-Beyepore

	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate (B/A*100%)
Week 1 (Date Till 08/09)	1384	53	3.8%
Week 2 (Date from 9/09 to 15/09)	406	48	1.2%
Week 3 (Date from 16/09 to 22/09)	715	121	16.9%
Week 4 (Date from 23/09 to 29/09) 4 days	680	77	11.3%
Week 5 (Date from 30/09 to 6/09) 4 days	392	61	15.6%
Total	3582	360	10.1%

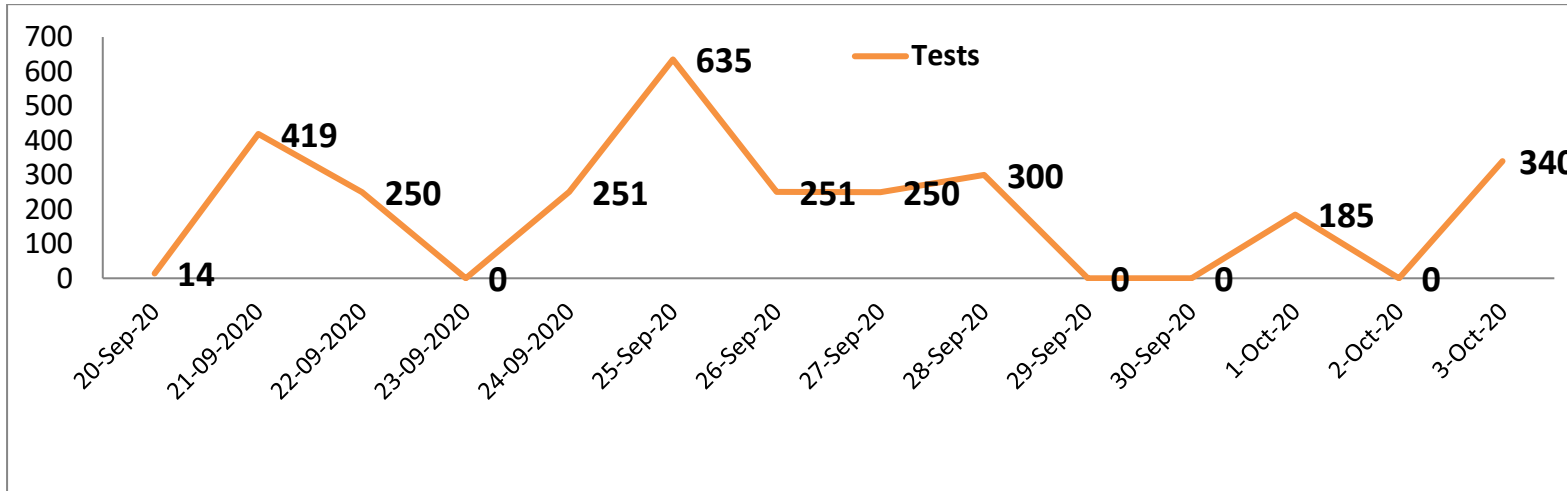
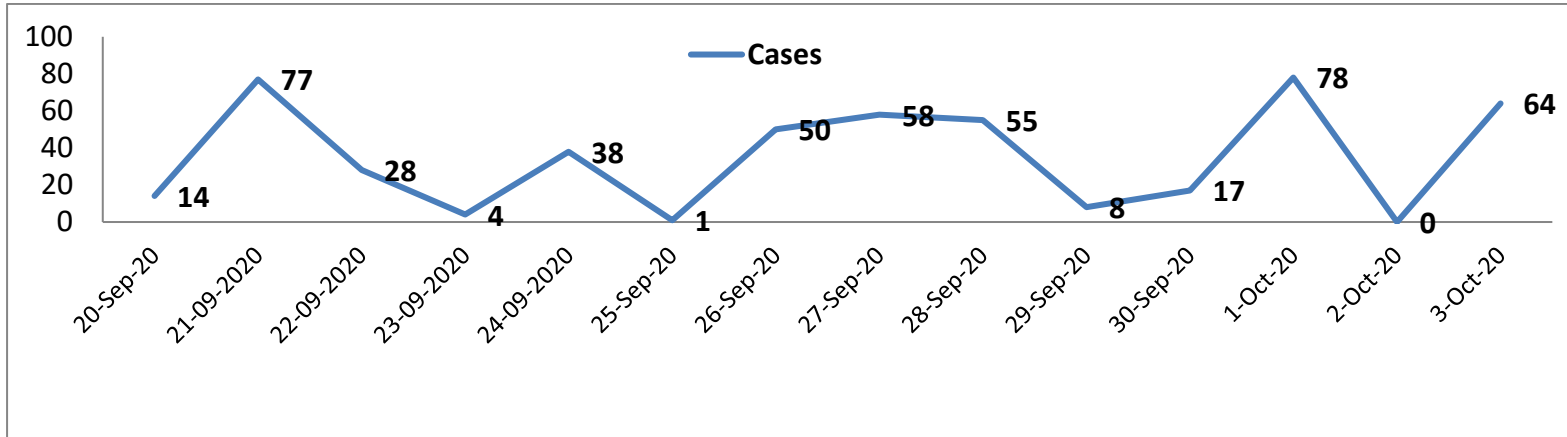
Trend Perumana Cluster



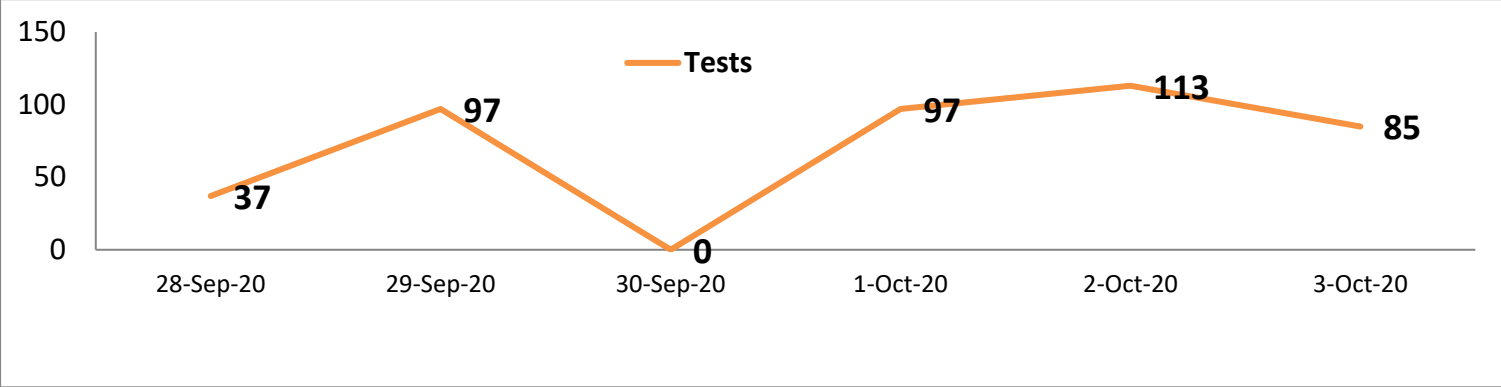
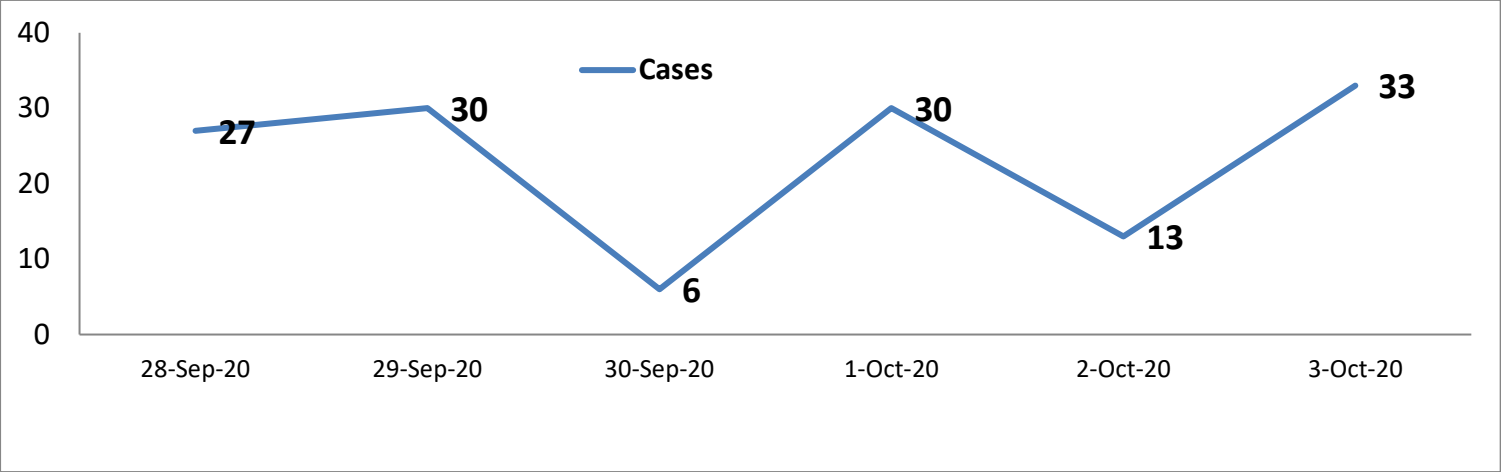
Trend Bypore Cluster



Trend Kappakal Cluster



Trend Olavanna Cluster



Summary of Clusters- Kozhikode

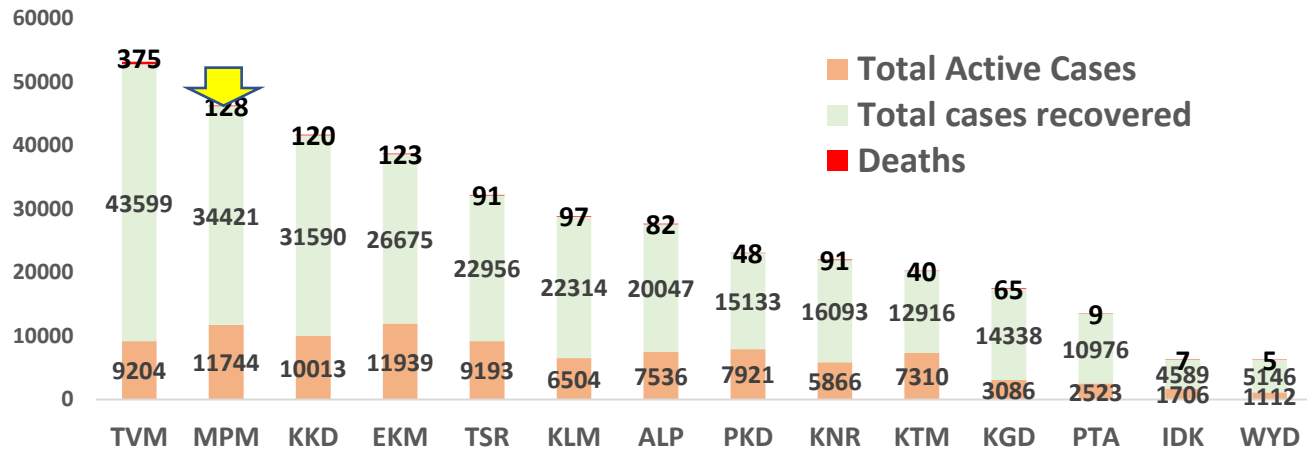
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	20	11	2	1	34
Active	14	1	2	1	18
Contained	5	10	1	0	16
Total Locally acquired Cases(Active +Contained)	4760+383	46+278	199+19	262+0	5267+680
Total Deaths	24	6	1	0	31

MALAPPURAM

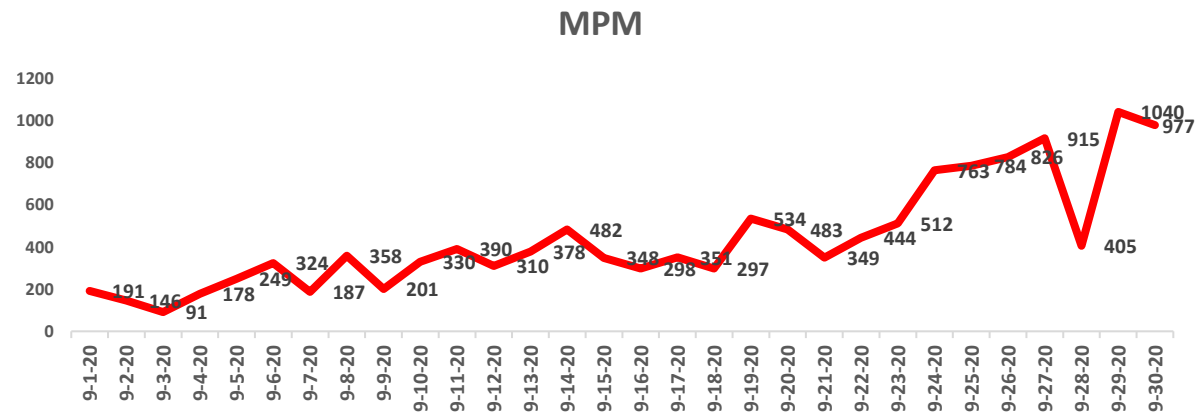
Malappuram- COVID scenario

As on 23-10-2020	KERALA	Malappuram	Percentage
Population 2011 census	33406061	41,12,920	12.31
Total Number of CONFIRMED Cases	377834	46301	12.25
Total cases recovered	280793	34421	12.26
Deaths	1281	128	9.99
Total Active Cases	95657	11744	12.28
Cases per 1 lakh population	1131	1126	
Case fatality % (Deaths/Cases)	0.34	0.28	
Recovery rate %	74	74	

Statistics as on 23-10-2020

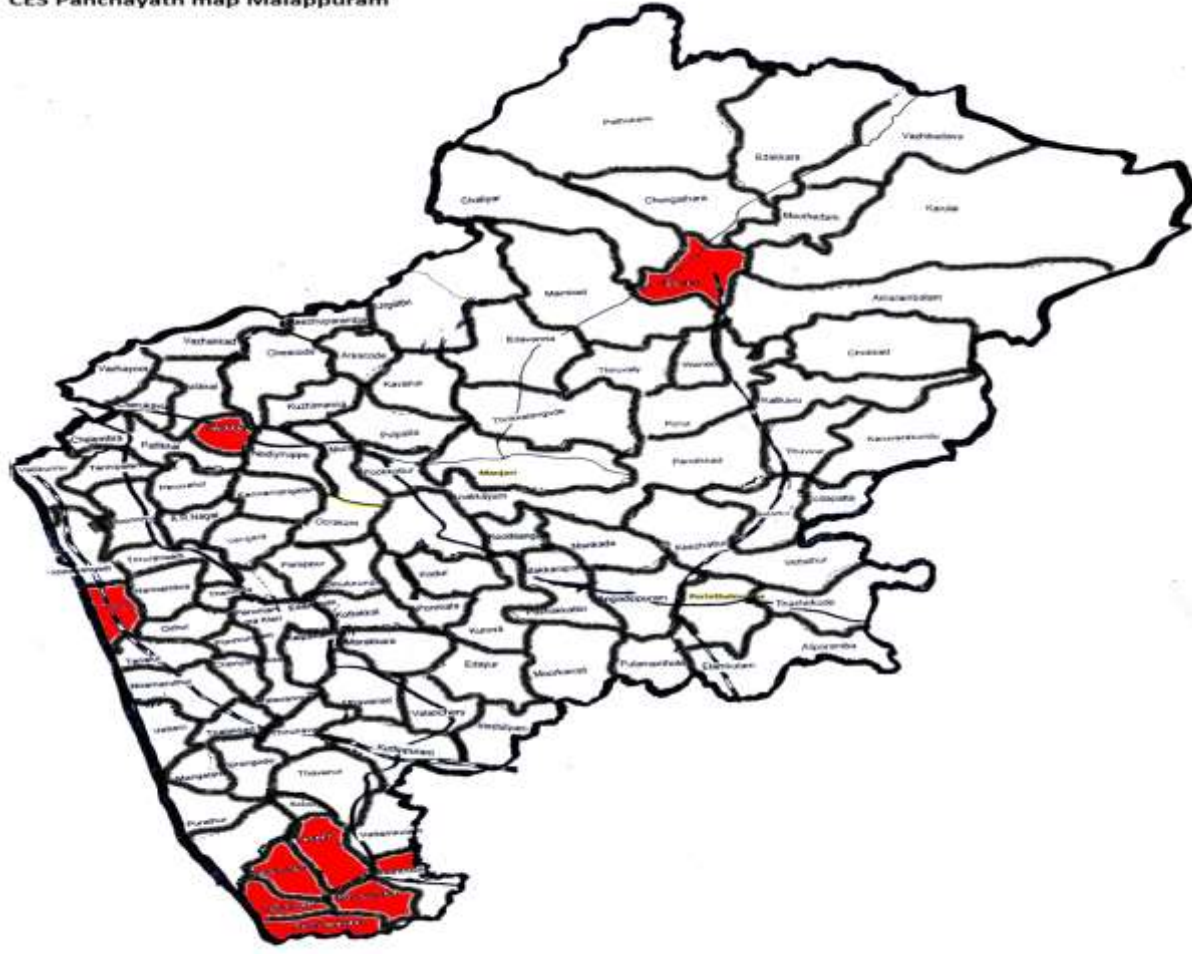


Malappuram daily trend of new cases – September 2020



Map of Malappuram showing Clusters

CES Panchayath map Malappuram



Summary of Active Clusters in Malappuram

NAME OF CLUSTER	TYPE OF CLUSTER (LARGE/LIMITED/INSTITUTIONAL/ CLOSED)	TOTAL TESTS PERFORMED IN THE CLUSTER	TOTAL NUMBER OF CASES FROM THE CLUSTER	TREND IN CLUSTER BASED ON NUMBER OF LOCALLY ACQUIRED CASES (INCREASING/DECREASING/ STATIC)
KOTTAKKAL	CLOSED	1391	192	INCREASING
VALLIKKUNNU	LIMITED	186	72	INCREASING

Trend in Kottakkal Cluster

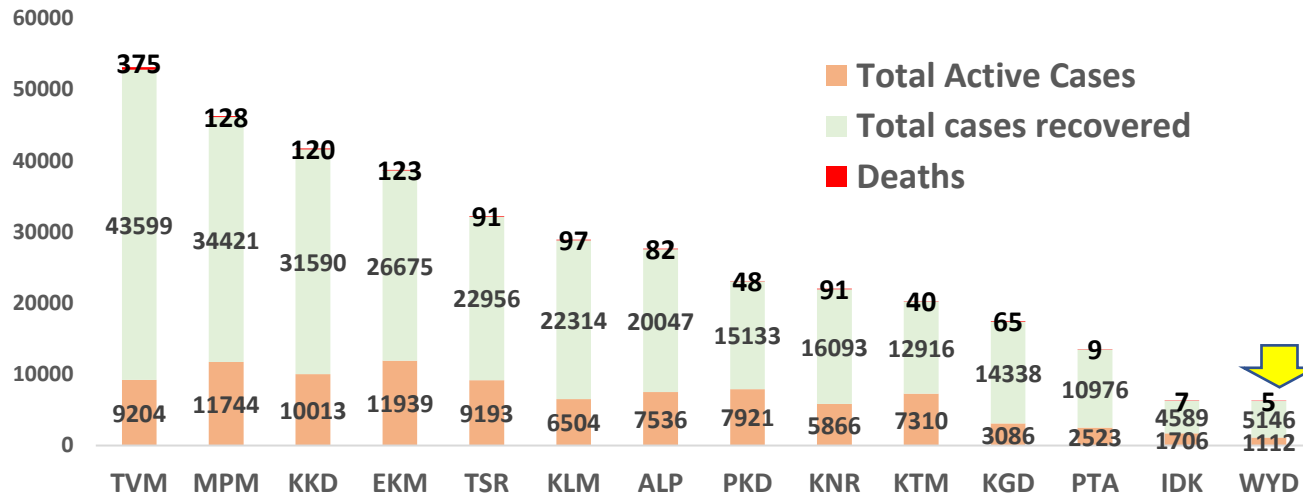
	A. Total Tests Performed	B. Total Locally acquired cases	C. Test Positivity Rate
Week 1 (06/08/20 to 11/08))	196	36	19%
Week 2 (12/08 to 16/08)	101	15	14%
Week 3(16/08 to 22/08)	432	37	8%
Week 4 (23/08 to 31/08)	31	1	3%

WAYANAD

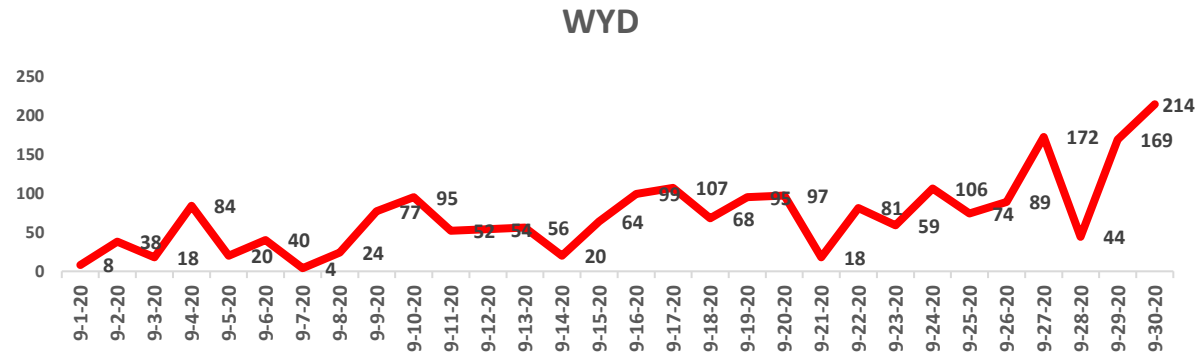
Wayanad - COVID scenario

As on 23-10-2020	KERALA	Wayanad	Percentage
Population 2011 census	33406061	8,17,420	2.45
Total Number of CONFIRMED Cases	377834	6263	1.66
Total cases recovered	280793	5146	1.83
Deaths	1281	5	0.39
Total Active Cases	95657	1112	1.16
Cases per 1 lakh population	1131	766	
Case fatality % (Deaths/Cases)	0.34	0.08	
Recovery rate %	74	82	

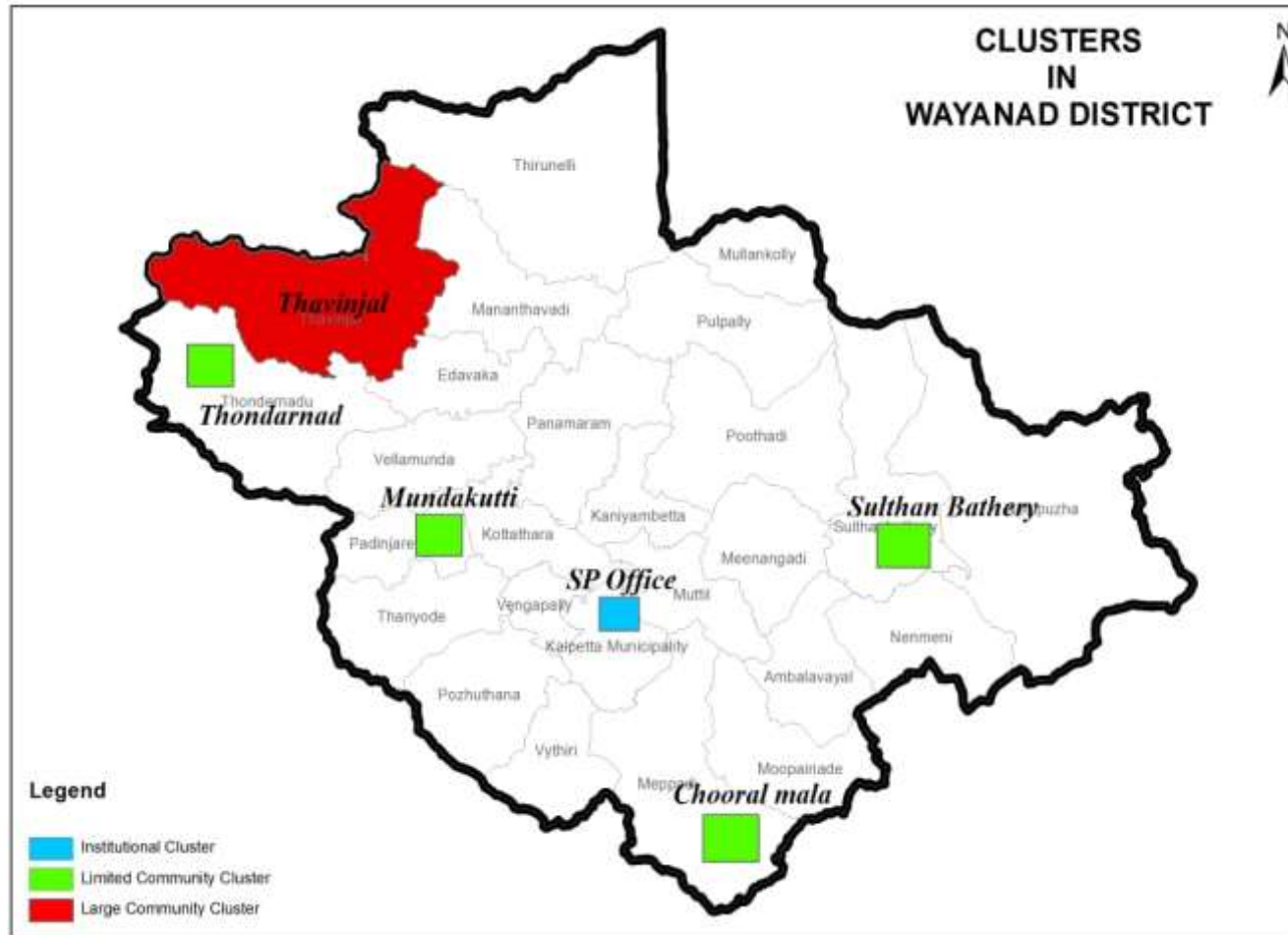
Statistics as on 23-10-2020



Wayanad daily trend of new cases – September 2020



Map of Wayanad showing clusters (August)



Map showing clusters in Wayanad (September)

DISTRICT MEDICAL OFFICE (HEALTH) WAYANAD

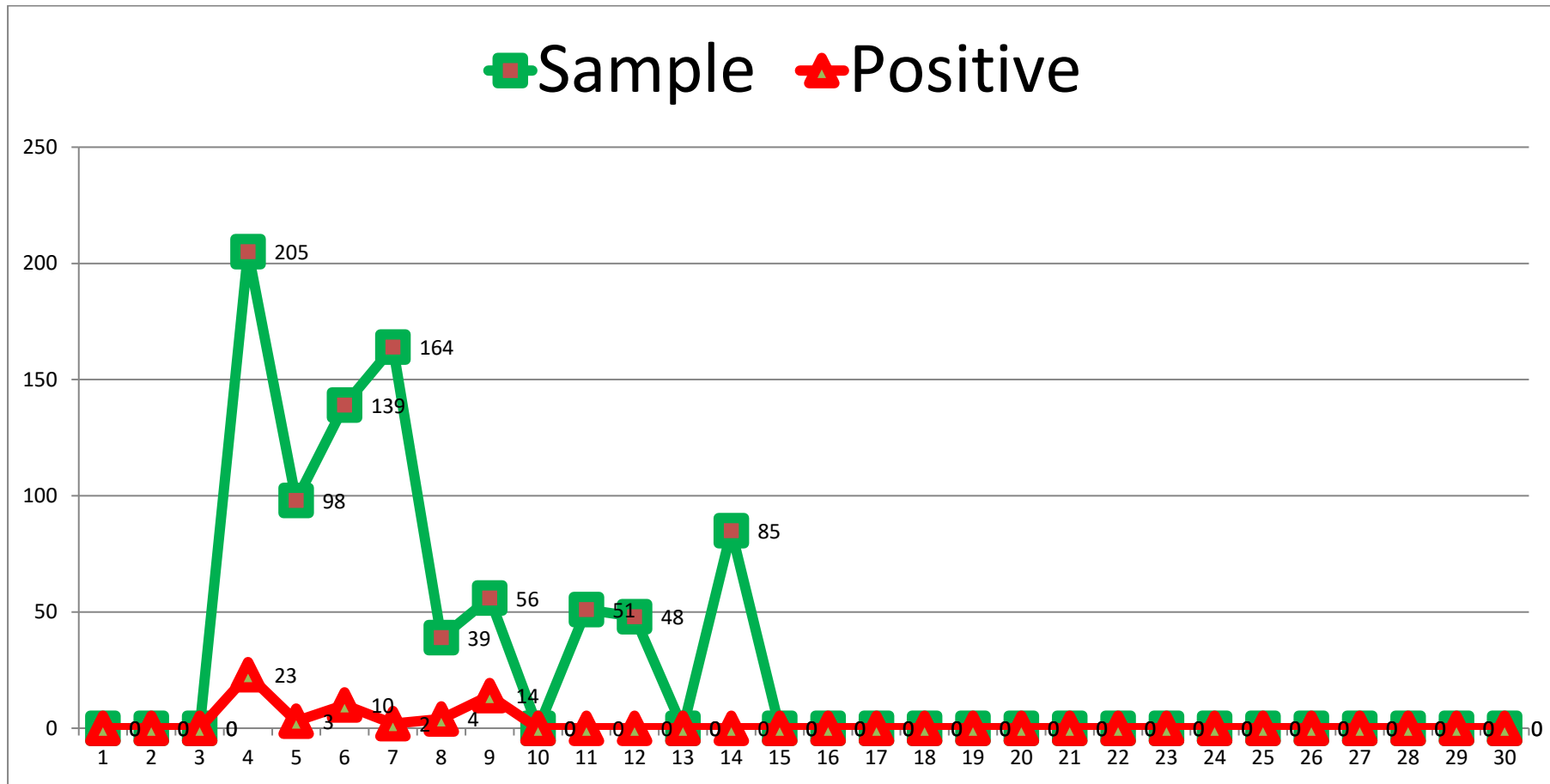
Panchayth & PHC Wise Map



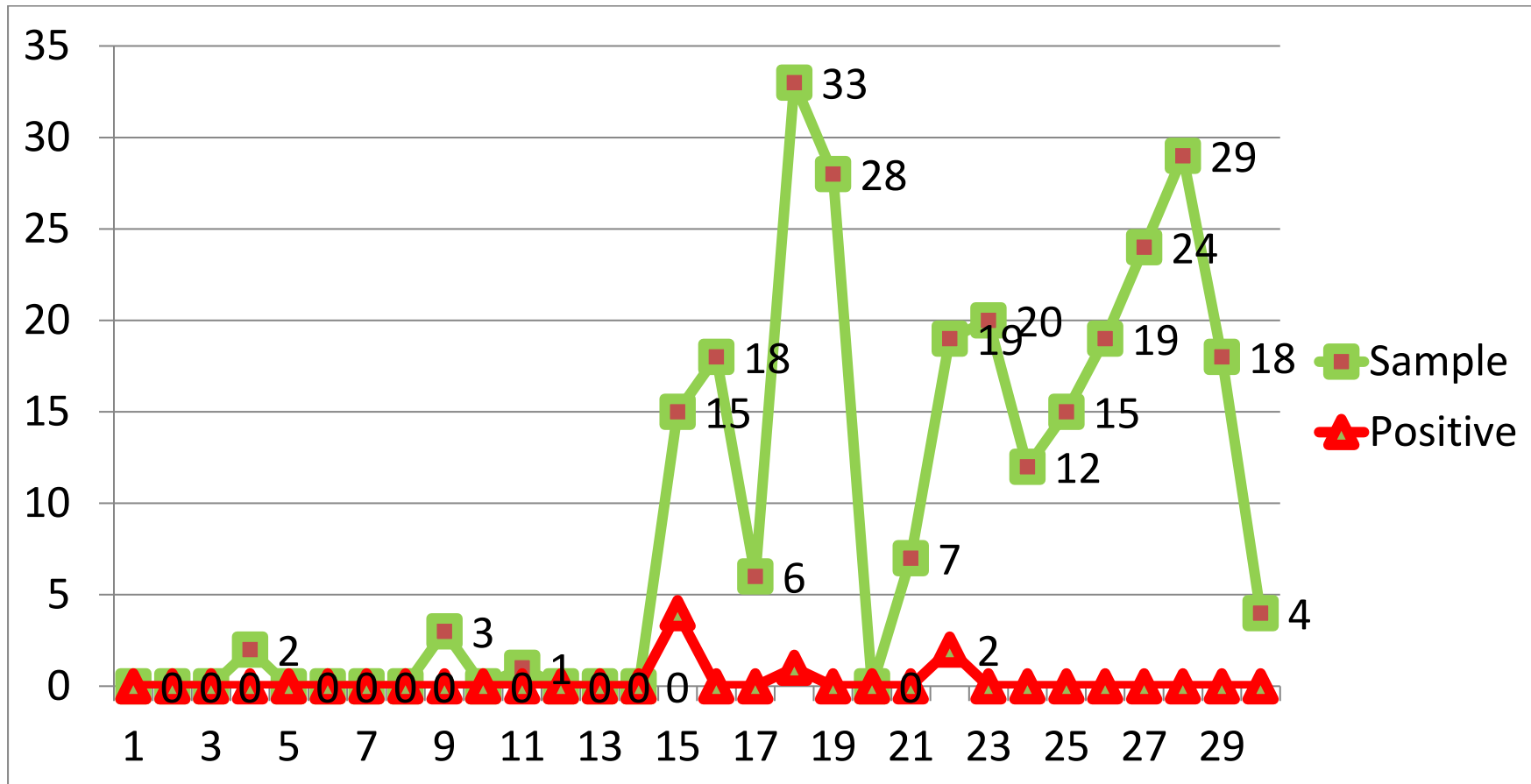
Summary of Clusters- Wayanad

Name of Cluster	Type of Cluster	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases
Sheebodi - Valad- Thavinjal	Large Community	5077	347	static
SP Office Kalpetta	Institutions	178	4	static
Meenagady	Large Community	1489	76	static
Padinjarathara-Cluster	Large Community	4881	128	static
Chooralmala- Meppady	Large Community	1232	78	static
Mundry School Building	Closed Community	149	45	static
Bamboo Mess, Bathery	Institutions	49	13	static
Poothadi Punchayath Office	Institutions	719	21	static
Sindur textiles-kalpetta	Institutions	233	36	static
Vanitha Police Station- Kalpetta	Institutions	37	7	static
Punjab National Bank Kalpetta	Institutions	9	6	static
Chembakamoola Begur	Limited Community	137	22	static

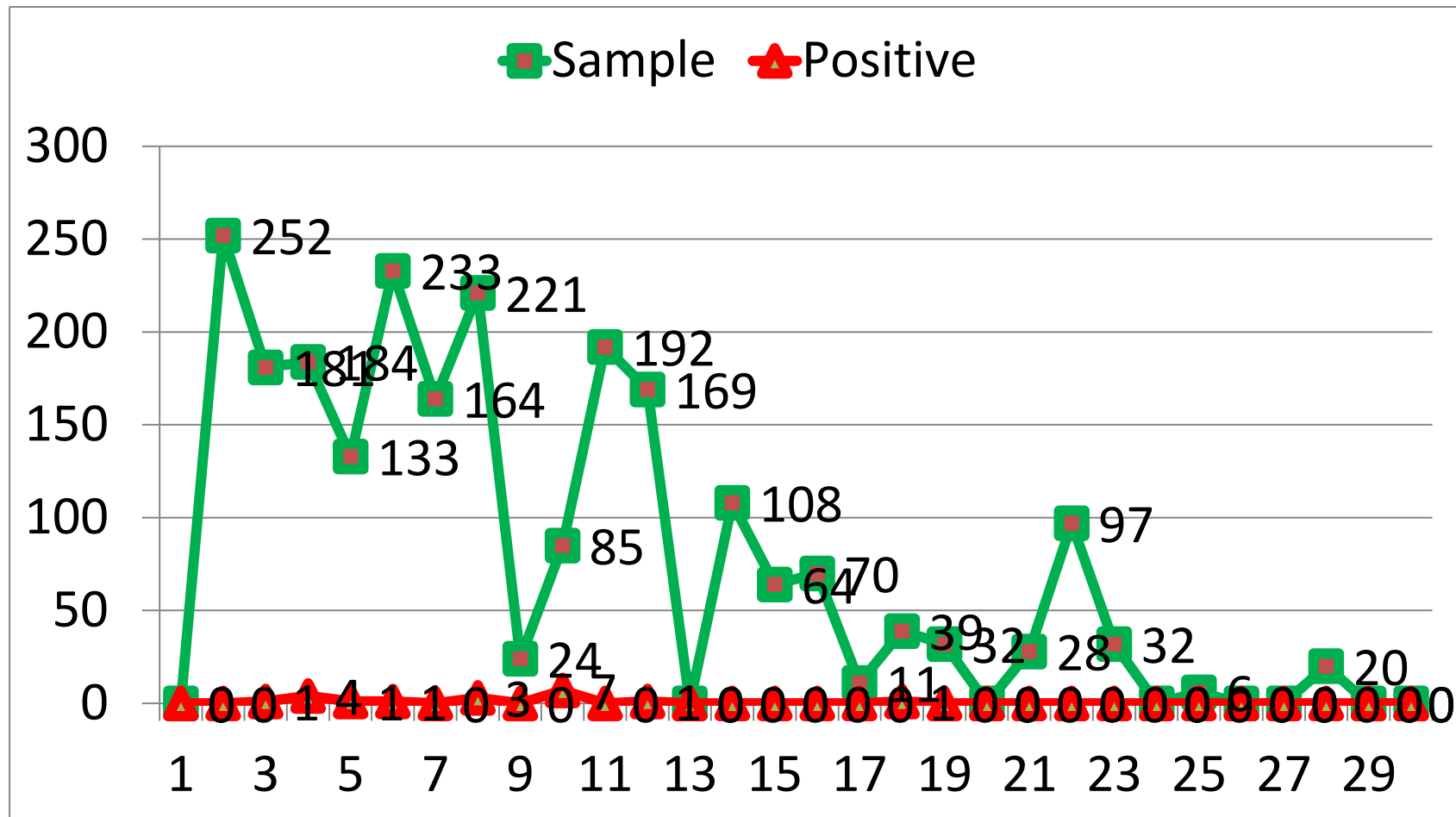
Trend in Meenangadi Cluster



Trend in Chooramala cluster



Trend in Padinjarathara cluster



District Summary of clusters (Wayanad) as on 31.08.2020

	LARGE COMMUNITY CLUSTERS	LIMITED COMMUNITY CLUSTERS	INSTITUTIONAL CLUSTERS	CLOSED COMMUNITY CLUSTERS	TOTAL
TOTAL NUMBER	1	4	1	0	6
ACTIVE	1	2	0	0	3
CONTAINED	0	2	1	0	3
TOTAL LOCALLY ACQUIRED CASES	347	197	4	0	548
TOTAL DEATHS	3	0	0	0	0
% OF TOTAL CASES REPORTED IN ACTIVE CLUSTERS IN AUG OUT OF TOTAL NEW CASES REPORTED IN THE DISTRICT IN AUG	17.83%	17.46%	0.47%	0	

District Summary as on 22.10.20

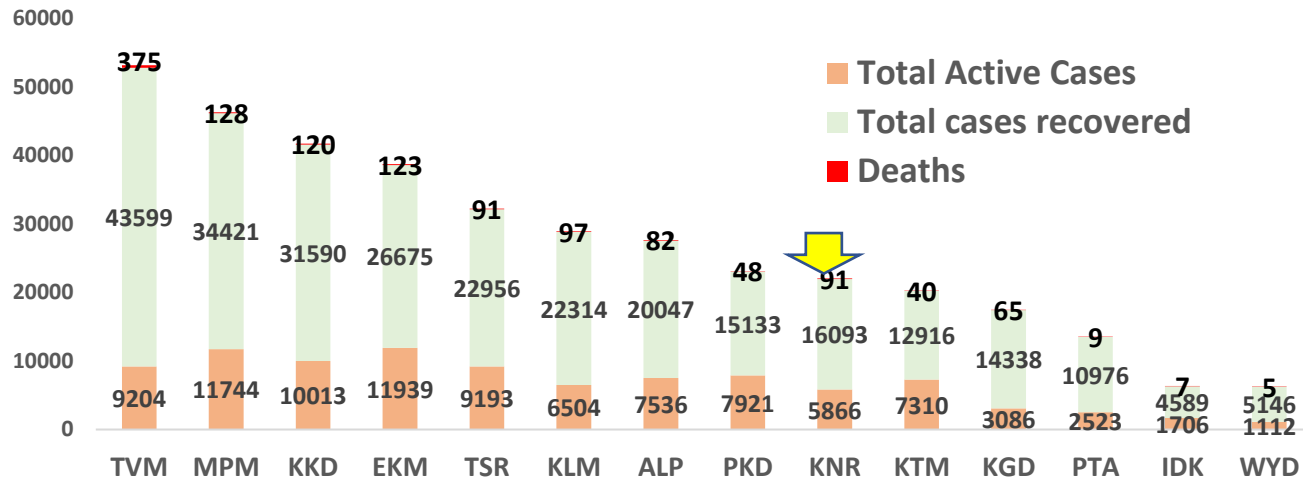
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	4	1	6	1	12
Active	1	1	5	1	8
Contained	3	0	1	0	4
Total Locally acquired Cases	82	22	101	45	250
Total Deaths	0	0	0	0	0
% of Total Cases reported in active clusters in Sept out of total new cases reported in the district in Sept	3.82	1.09	4.70	2.09	11.64

KANNUR

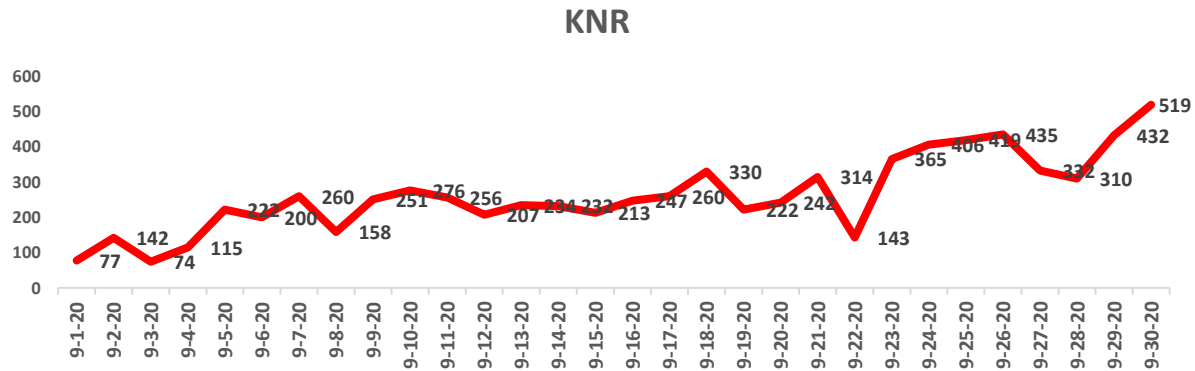
Kannur - COVID scenario

As on 23-10-2020	KERALA	Kannur	Percentage
Population 2011 census	33406061	25,23,003	7.55
Total Number of CONFIRMED Cases	377834	22054	5.84
Total cases recovered	280793	16093	5.73
Deaths	1281	91	7.10
Total Active Cases	95657	5866	6.13
Cases per 1 lakh population	1131	874	
Case fatality % (Deaths/Cases)	0.34	0.41	
Recovery rate %	74	73	

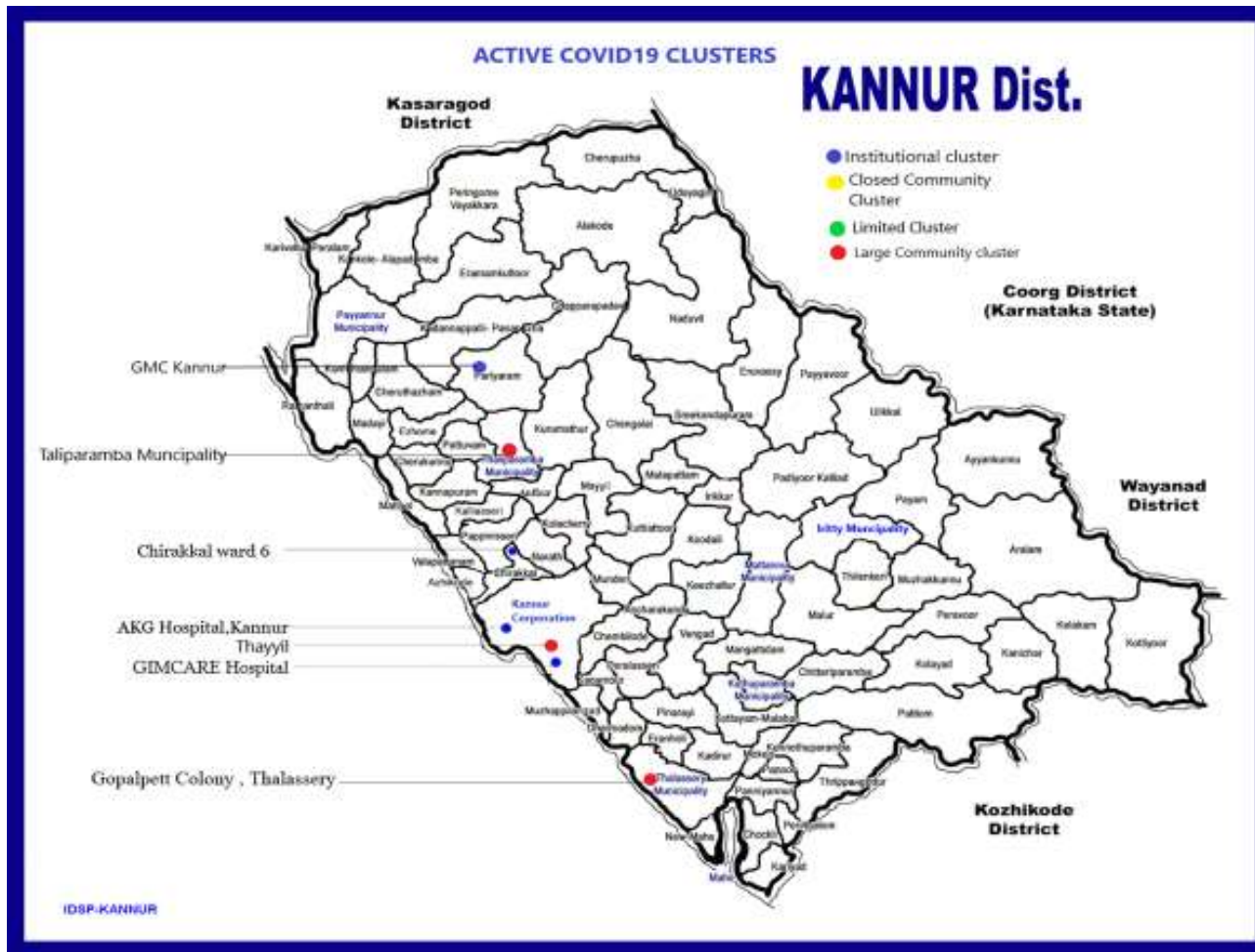
Statistics as on 23-10-2020



Kannur daily trend of new cases – September 2020



Map showing clusters - Kannur



Summary of clusters

Name of Cluster	Type of Cluster (Large/Limited/Institutional/ Closed)	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
GMC Kannur	Institutional	5184	239	Increasing
Taliparamba	Large	2861	333	Increasing
Gopalpet Chalil Ward 41 & 42	Large	602	139	Decreasing
Thayyil Division 40 & 42	Large	407	103	Increasing
GIM CARE Hospital	Institutional	954	142	Static
AKG Hospital	Institutional	548	71	Static

District Summary of Clusters

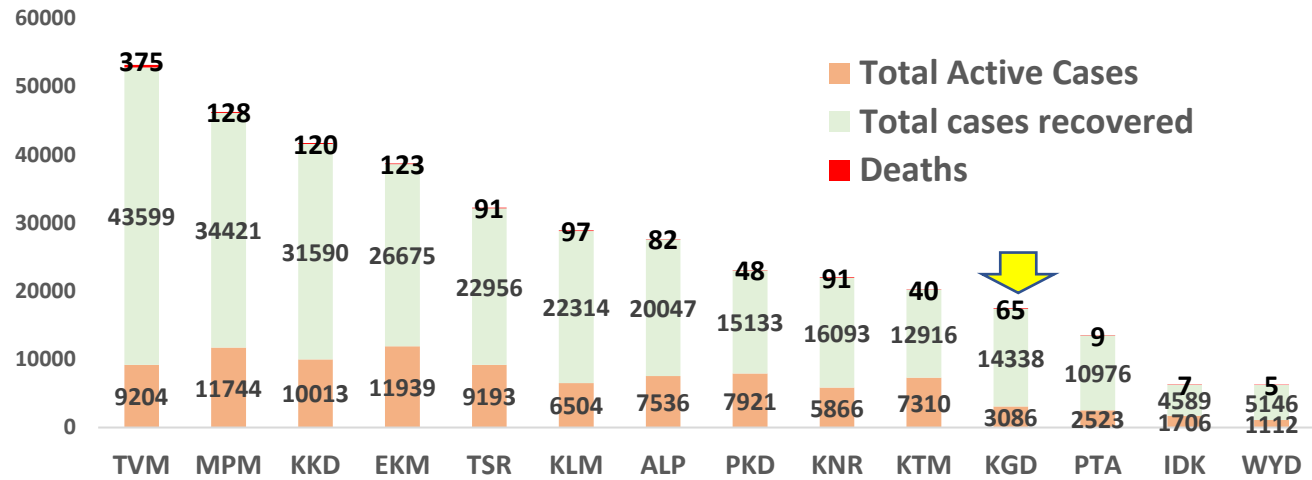
	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	4	3	10	2	19
Active	3	0	3	0	6
Contained	1	3	7	2	13
Total Locally acquired Cases	625	44	452	184	1474
Total Deaths	2	1	6	0	9
% of Total Cases reported in active clusters in September out of total new cases reported in the district in September	3.9	0	3.9	0	7.8

KASARAGOD

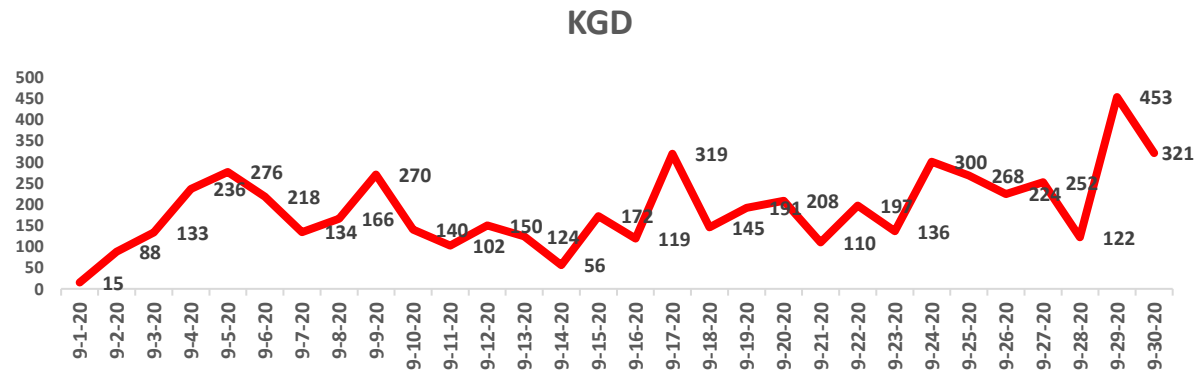
Kasaragod - COVID scenario

As on 23-10-2020	KERALA	Kasaragod	Percentage
Population 2011 census	33406061	13,07,375	3.91
Total Number of CONFIRMED Cases	377834	17493	4.63
Total cases recovered	280793	14338	5.11
Deaths	1281	65	5.07
Total Active Cases	95657	3086	3.23
Cases per 1 lakh population	1131	1338	
Case fatality % (Deaths/Cases)	0.34	0.37	
Recovery rate %	74	82	

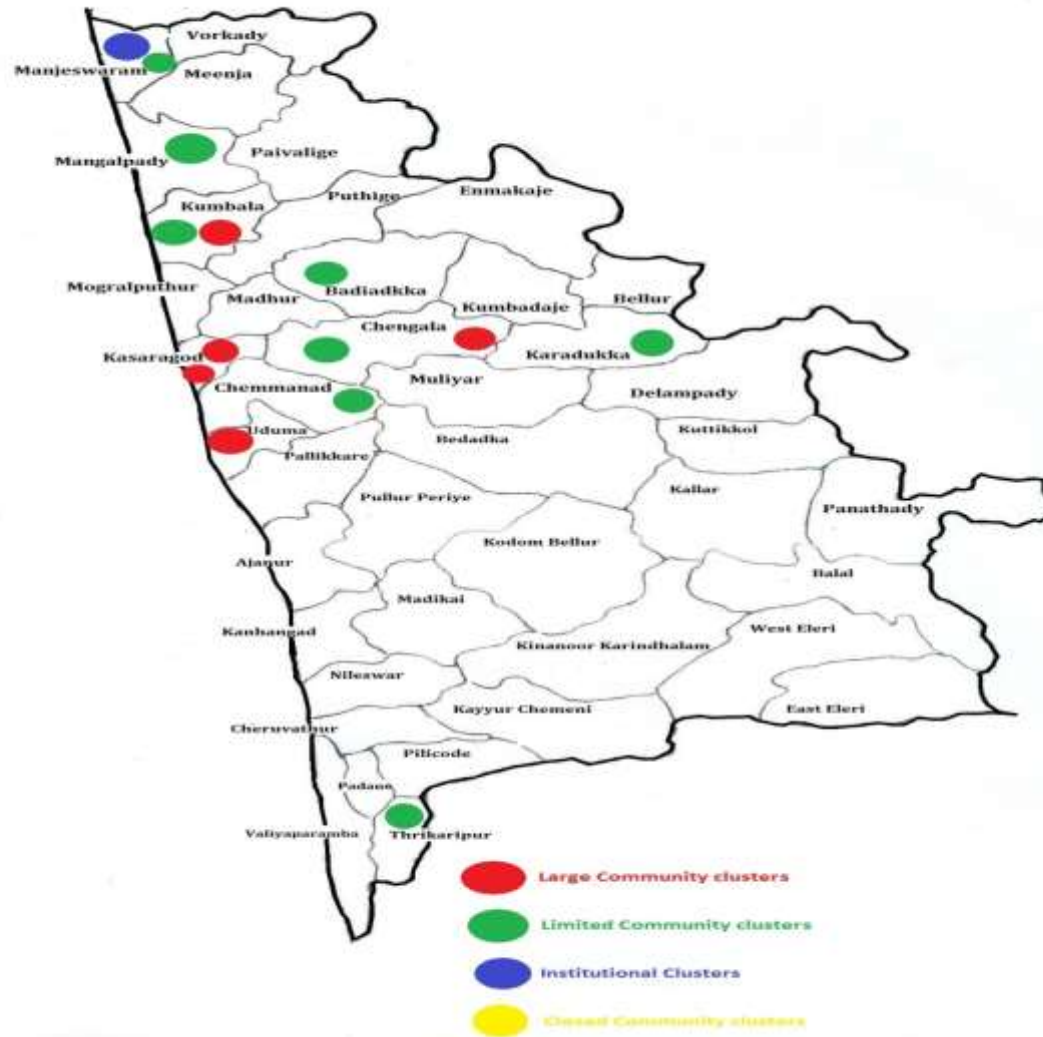
Statistics as on 23-10-2020



Kasaragod daily trend of new cases – September 2020



District Map Showing Clusters- Kasaragod



Summary of Clusters

Name of Cluster1	Type of Cluster (Large/Limited/Institutional/ Closed)	Total Tests performed in the cluster	Total Number of Cases from the Cluster	Trend in Cluster based on Number of locally acquired cases (Increasing/Decreasing/ Static)
Keezhur cluster- C15	Large	405	127	Decreasing
Thekkil cluster-C16	Large	260	78	Decreasing
Kulavayal Cluster – C15	Large	423	92	Decreasing
Anikkady Cluster – C16	Large	378	63	Decreasing
Cherukara cluster-C19	Large	287	78	Increasing

District Summary of Clusters

	Large Community Clusters	Limited Community Clusters	Institutional Clusters	Closed Community Clusters	Total
Total Number	10	8	1	0	19
Active	5	0	0	0	5
Contained	5	8	1	0	14
Total Locally acquired Cases	1103	222	9	0	1334
Total Deaths	8	3	0	0	11



COVID-19 Outbreak Control and Prevention State Cell
Health & Family Welfare Department
Government of Kerala

COVID-19 CLUSTER CONTAINMENT- MONITORING

NO: 31/F2/2020/Health- 14th July 2020

The department has put in Sentinel Surveillance mechanism and through the District Surveillance field units identified the clusters of cases. A detailed report and action plan was submitted. Accordingly the districts administration and health administration have been instructed to take up the interventions.

In order to ensure the activities in the district in the respective clusters, it is necessary to have the specific unit to monitor the Cluster containment activities.

Dr Sarita R L, Director Health Services shall have a designated officers unit and monitor the cluster containment activities on daily basis. The DHS shall report to Prl Secretary and Minister Health & Family Welfare any emergency activity immediately so as to take up policy decisions and implementation.

District Administration to map cases on a daily basis and identify newly evolving clusters and initiate timely containment action. Advisory for preparing spot map has been issued on 2nd July 2020/

Definition of a Cluster

Term	Definition
Large Cluster Community	-More than 50 locally transmitted cases in an identified geographical area [LSG area] AND -If more than 10% of wards/ divisions are eligible to be fit into the definition of limited community clusters.
Limited Cluster Community	More than or equal to 2 locally transmitted cases in a division/ward within the last 14 days but not in same households.
Closed Cluster Community	More than or equal to two cases of locally transmitted cases in 'closed community' like CISF camps/ Defence camps/ Labour camps etc. within the last 14 days
Institutional Cluster	More than or equal to two cases of locally transmitted cases in an institution like Hospital/ Office within the last 14 days

When to call a cluster is Contained?

A cluster can be called contained when there are no locally acquired cases from the cluster within past 7 days. Rest all clusters are called Active.

CLUSTER SPECIFIC ACTION PLAN

Cluster specific action plan to include the following activities

1. Contact Tracing

2. Active Case Finding
3. Intense Testing
4. Reverse Quarantine
5. Information Education Communication
6. Intersectoral coordination
7. Involvement of community leaders, NGOs, Community
8. Mobilisation of vehicles for transportation
9. Setting up of CFLTC
10. Ensure Psychosocial support to people in containment zone
11. Ensuring good quality quarantine
12. Addressing other medical needs of people in cluster zone

Daily Review of activities at District level

1. Daily COVID trend within the cluster
2. COVID Testing status within clusters (samples sent category wise, pending results, positivity, logistics etc)
3. Review of trend of fever, ARI/ILI, Pneumonia and unknown death
4. Review of number of persons in quarantine (travellers, contacts; primary/secondary, HCW) within the cluster
5. Review action taken reports from clusters regarding all 12 parameters and provide recommendations
6. Occupancy status of CFLTCs, COVID hospitals and critically ill patients' status
7. Review of Cluster specific IEC activities

Report to State level

District shall report details of activities daily to state along with the following format

District:

Name of Cluster (Specific- eg Ward 8, X Panchayat)	Status (Active/ Contained)	Type of cluster (As per the four terms- Large/Small/ Closed/ Institutional)	Total Tests Performed within the cluster	Total confirmed cases within the cluster	Total Deaths due to COVID within the cluster	Total Test performed within last 24 hours	Total confirmed cases within last 24 hours	Deaths within the cluster within last 24 hours

KEY SNAPSHOT INDICATORS FOR CLUSTER CONTAINMENT ZONES:

NAME OF CLSUTER :.....

DATE:...../...../.....

Sl.no	Description	Number	Remarks: (trend as compared to last 3 days; increasing, decreasing, steady)
1	No. of Confirmed COVID Deaths in last 24 hrs from cluster containment zone		
2	No. of samples collected (RT-PCR & Antigen) in last 24 hrs from cluster containment zone		
3	No. of new positive cases of COVID-19 in last 24 hrs from cluster containment zone		
4	Bed Occupancy (%) of CFLTCs at present in the cluster containment zone		
5	No of patients referred to COVID Hospitals in the last 24 hrs from cluster containment zone.		
6	Any Early Warning Signals Fever, Influenza Like Illness, Diarrhoeas, Pneumonia, Unknown Deaths		

Districts are directed to update any early warning signals to DHS real time.

Review of activities at State level

All activities and data of clusters will be directly monitored by Director of Health Services.

A daily report of status and activities at all active clusters need to be prepared at state level daily.

Principal Secretary

Discussion

The Department of H&FW has been taking prevention and control of COVID 19 pandemic with a specific strategy. All the analytical reports are put in the public domain. One should try to understand the same aspects/ themes worked out in other parts as well to get the proper perspective regarding the works done and the outputs. It is noticed that the focus of attention usually tends to be on 'what is the gap'. It does give the information to build the response. However, it is also essential to study the efforts put in by all health functionaries to understand the progression of epidemic, identifying the problem areas, planning containment measures and effectively implement them. It is a mammoth task. These activities are undertaken throughout the State as per the location specific requirements day on day for the last 10 months.

There may be small gaps here and there but a resolute fight going on continuously at the field need to be studied and encouraged.

The Number of clusters increased in September. However the number of clusters which are contained exceeded active clusters (238 contained, 190 active). Though Positivity within the clusters was high , Case Fatality within clusters was not high. We could see non-COVID deaths inside clusters were also monitored. This shows that early identification of clusters through robust surveillance and containment strategy followed is delivering the result.

We welcome the suggestions to improve the response against COVID19 further.

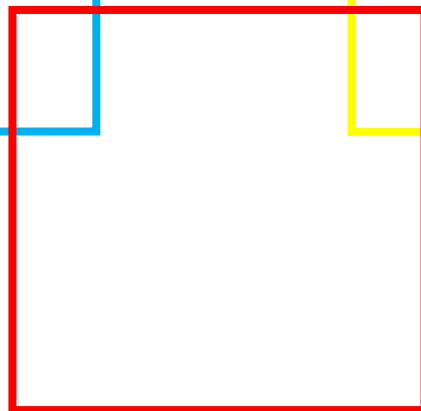
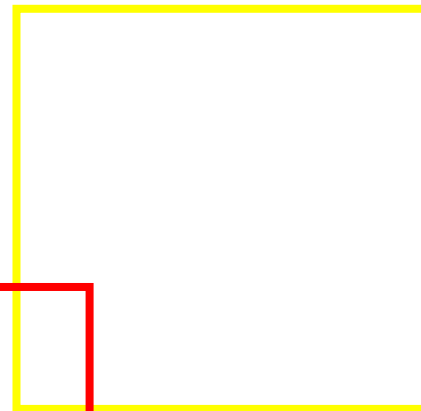
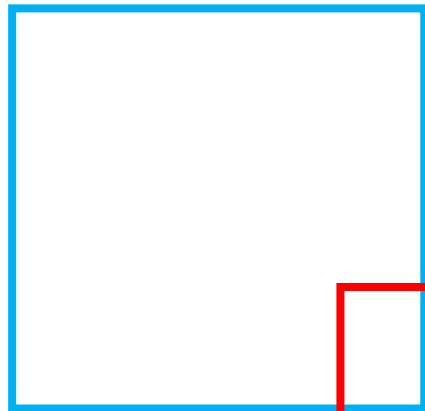
Acknowledgement

The Department of H&FW with coordinated actions involving all the stakeholders is taking all actions to control the COVID 19 pandemic. Out of various interventions, the specific intervention of identifying the cluster and taking containment measures is studied in this report.

This report is the output of the works done at all levels. It reflects the team work of all the functionaries at field, district and state level.

We appreciate the works of all who have been tirelessly contributing in this fight against COVID19.

Kerala Health



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Government of Kerala
Annexe II, Secretariat
Thiruvananthapuram
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