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GOVERNMENT OF KERALA

RESIDENTIAL VITAL RATES
2001

Directorate of Economics & Statistics
2004

Preface

The residential rates of births and deaths in the selected Municipalities and Corporations for the year 2001 are presented in this report. The rates are estimated from the registered births and deaths to the normal residents, after making adjustments for under registration and for events occurring outside the Municipal/Corporation areas, using the results of spot check survey conducted in these selected Municipalities and corporations. 29 Municipalities and 5 corporations are covered in the report. This report has been prepared by the vital statistics unit in the Directorate of Economics and statistics under the direction of Sri. Gangadhara Murugan, Additional Director Smt. Kumari Valsala, Deputy Director, V.P. Sherafudeen, A. D, Smt. Seleena R.O and Smt Manorama R.A. have contributed substantially in finalising the report

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INTRODUCTION

The Civil Registration system was introduced in India under the Births and Death Registration Act charted by parliament in 1969. The Act stipulated that every event should be registered in the respective registration units based on place where the events were occurred. As per the existing rule every event should be registered within 21 days from the date of its occurrence. Even though the Act stipulates both fine and punishment, under registration of events is existing to a certain extent.

One of the important classifications in population data is the urban and rural one. In Kerala the number of vital events happened in urban areas is always higher than that in the rural areas. It shows that the rate of urban registration of vital events is always higher than that of rural. This could possibly be due to the increased concentration of advanced medical facilities in the urban areas, which are commonly availed by the rural folk also.

Usually the under registration in rural areas is higher than that in urban area especially in the case of deaths. Most of the deaths in rural areas occur in their houses and the rural people are not interested to register their death events, unless there is a complication and could also be ignorant about the registration of events. There could also be hiding of information such as abortion, suicides etc.

Coverage of the Survey

The scheme, spot check survey aims at estimating the adjust residential vital rates in the selected Municipalities and city corporations and ascertaining the extend of under registration. The scheme is on the strengthening of vital statistics in the selected Municipalities and corporations implemented in 5 corporations and 29 Municipalities in the state. The fieldwork of the survey was carried out in all centres during the year under report. For conducting fieldwork of the survey 15 wards are randomly selected from the total wards of each unit except Alappuzha (m) and Guruvayoor Municipality. 18 wards are selected for fieldwork in Alappuzha (m) and in Guruvayoor Municipality all wards are selected for fieldwork. The Statistical staff posted in the Municipalities/ Corporations visit all houses of the selected wards and collect the required data in the prescribed schedules.

Objectives of the Survey

1. To estimate the extend of under registration of vital events in the selected Municipalities/ corporations.
2. To estimate the residential vital rates of these Municipalities/ Corporations
3. To find out the major diseases which lead to cause of death.

Limitations of the Survey

The most important limitation is the under coverage of the survey. The objective of the survey is to find out the under registration of events. However, the data derived from the survey is partial. For obtaining under registration in urban areas, it should be extended to the remaining urban areas of the state. A comparative study is not possible between rural and urban under this survey. If this survey is extended to rural areas a comparative study between urban and rural level of under registration could be made possible. Similarly a state

level under registration can be estimated only if this survey is further extended to rural areas of the State and the remaining Municipalities of the State.

Findings of the survey

Table 1

It presents the projected population of the selected Municipalities and Corporations. It is obvious from the table that the population of all Municipalities/ Corporations is showing an increasing trend except Kottayam and Aluva Municipalities. Out of 34 selected centres the maximum projected population was in Thiruvananthapuram Corporation and the minimum was in Thrissur Corporation. In the case of Municipalities maximum was in Alappuzha and the minimum number of projected population was in Guruvayoor Municipality.

Table 2.

This table shows the number of hospitals and other institutions both in public and private sector existing in these Municipalities /corporations. As regards, hospitals, it was highest in private sector than in government sector. All centres have at least one public hospital. Among all centres Thiruvananthapuram and Cochin corporations have the maximum number of public hospitals with 18 each. In the case of Municipalities it was highest in Alappuzha with 8 numbers. Considering the bedding capacity in public hospitals it was also maximum in Thiruvananthapuram Corporation with 7037 numbers followed by Kozhikode Corporation with 4056 numbers. The number of private hospitals were maximum in Cochin corporation with 63 followed by Thiruvananthapuram and Kozhikode corporations with 44 and 37 numbers respectively. Considering the bedding capacity in private hospitals it was maximum in Cochin Corporation with 3844 numbers followed by Kozhikode Corporation with 2059.

In the case of public dispensaries and other institutions it was maximum in Thiruvananthapuram Corporation with 21 numbers followed by Kozhikode Corporation with 16 numbers. As regards to private dispensaries and other institutions it was maximum in Alappuzha with 127 numbers followed by Kozhikode Corporation with 99 numbers.

Number of maternity and child health centres was highest in Kozhikode Corporation with 24 followed by Cochin Corporation with 14. Out of 34 centres 6 centres have 1 maternal and child health centre each.

The same was not reported from any private centres except Thiruvananthapuram Corporation.

Table 3

This table furnishes the details regarding the number of registration units, area and population of these selected centres. Based on the area wise classification, Thiruvananthapuram Corporation is the largest among them with 141.47-sq. km. followed by Kochi Corporation with 94.88 Sq. km. As regards Municipalities, it is Alappuzha with 46.77 sq. km. Considering the density of population it was highest in Thiruvananthapuram Corporation with 7144 numbers (per sq. km) followed by Kollam Corporation with 6388 numbers. While it was lowest in Pala Municipality with 1422.

Table 4

This table represents the number of burial grounds and cremation grounds serving in the selected centres. Burial grounds, in the cities were maximum in Cochin Corporation with 8 numbers followed by Palakkad and Thiruvananthapuram Corporation with 4 numbers each. Private burial grounds were also servicing in all centres while the number of private burial grounds were higher than the municipal grounds in all most all centres. Kochi corporation has the maximum number of private burial grounds with 40 followed kollam with 37. Neither public nor private cremation grounds are existing in 6 centres.

Regarding the Municipal cremation grounds it was maximum in Kochi Corporation with 5 numbers followed by Kozhikode with 4. Private cremation ground was maximum in Alappuzha with 19 numbers followed by Kochi Corporation and Thalserry (m) with 11 each.

Table 5

This table shows the total number of vital events registered in the respective Municipality/ Corporation and the number of vital events of the usual residents registered in the registration units. Live births were registered maximum in Kozhikode Corporation with 41861 numbers of which 19640 events were belonging to the normal, residents. Next it was in Thiruvananthapuram Corporation with 36499 numbers. In the case of Municipality it was maximum in Palakkad Municipality 13898 numbers of which 3271 events belongs to the normal residents and the lowest number of live births were registered in Chittoor Municipality with 217 of which the events to normal residents were only 5 numbers.

Regarding still birth it was registered maximum in Kozhikode Corporation with 817 numbers of which 336 events belonged to the events of normal residents. Next it was in Thiruvananthapuram Corporation with 189 numbers.

In the case of infant deaths the highest registration was in Kozhikode Corporation with 843 numbers of which male and female breakup were 446 and 397 numbers respectively. While the number of infant deaths in respect of normal residents was 323. Next it was in Thiruvananthapuram Corporation with 606 numbers. In respect of Municipalities, it was highest in Palakkad with 201 numbers and the events of normal residents were 65 numbers. Infant deaths were registered lowest in Neyyatinkara with 2 numbers infant death was not registered in Attingal, Kottayam, Guruvayoor & Chittoor municipalities during the year under report.

The number of death registered during the year under report was highest Thiruvanthapuram corporation with 10881 of which the events of normal residents were 1453 numbers. Next it was highest in Kozhikode Corporation with 8810 numbers In the case of Municipalities, it was highest in Alappuzha Municipality with 2597 numbers of which the number of deaths registered to normal residents were 804. followed by Thalasserry Municipality with 1981 numbers of which events to normal residents were 659. However the lowest number of deaths were registered in Guruvayoor Municipality with 161 numbers and Attingal with 164

Table No.6

The survey result recorded that the major cause of death were cardiac diseases & heart failure, cancer, TB Respiratory diseases, pulmonary diseases and others. The survey results showed that death were registered

higher in Thiruvananthapuram Corporation with 10881 per unit but cause of death was not reported from Thiruvananthapuram Corporation. However in Kozhikode Corporation out of 8810 deaths 1831 were due to Cardiac disease 736 death due to cancer and 538 due to TB No cause of death were reported from 11 municipalities Viz Kayamkulam, Punalur, Mavelikkara, Irinjalakuda, Kodungallur, Chittoor, Palakkad, Malappuram, Tirur, Thalassery & Vadakara.

Table 7

This table presents the results of the spot check survey of the selected units. The data showed that almost all – vital events were registered in the respective registration unit except in Palakkad with 3 followed by Muvattupuzha and Perumbavoor with one each as non registered events.

As regards the infant death it was registered in all most all municipalities corporation except in Changanassery and Tirur with 2 and 1 respectively.

In the case of death which occurred in the registration units all enumerated death had been registered only in 17 municipalities. In Kayamkulam Municipality out of 129 death enumerated 25 deaths, were reported non-registered. In Kozhikode Corporation out of 352 deaths enumerated 31 deaths were reported as non-registered.

Table 8

This table presents the percentage of under registration and the percentage of out side events in the selected units. Considering the percentage of under registration of births, it was highest in Perumbavoor Municipality with 0.85% and the same was lowest in Palakkad Municipality with 0.44%. As regards deaths, it was highest in Kayamkulam with 29.1% followed by Vadakara 15-12% where as it was seen lowest in Alappuzha and Palai Municipality with 1.6 % each.

Considering the percentage of outside events of births it was seen highest in Chittoor Municipality with 96.13%. At the same time it was lowest in Palakkad Municipality with 6.41%. In the case of deaths outside events occurred were highest in Kannur Municipality with 81.48% and the same was lowest in Kochin corporation with 0.48%

Table 9

This table displays the registered vital rates and adjusted residential vital rates in these Municipalities/Corporations.

Considering the registered birth rates, it was highest in Kozhikode Corporation with 44.93% followed by Thalassery Municipality with 37.84%. Next it was in Palakkad with 24.97%. At the same time, it was lowest in Chittoor Municipality with 0.16%. As regards to registered death rates it was highest in Kozhikode Corporation with 8.27% followed by Thalassery Municipality with 6.64% and the same was lowest in Chittur Thathamangalam (M) with 0.76%.

Adjusted residential vital rates of Births was reported highest in Kozhikode Corporation with 49.8% followed by Thalassery Municipality with 41.22%. The same was reported lowest in Thirur Municipality with

0.51%. As regards the adjusted residential vital rates of deaths, it was highest in Kannur Municipality with 15.93% followed by Kozhikode Corporation with 9.48%. The same was lowest in Chittoor Municipality with 1%

Conclusion

The survey has been successfully completed in four city corporations except Thrissur and in almost all the selected Municipalities except Punalur during 2001. The survey result reveals that under registration of birth events still exists in Muvattupuzha, Perumbavoor and Palakkad Municipalities. Under registration of death events exists in Many Municipalities and in Kozhikode Corporation. The highest percentage of under registration 29.07% was reported from Kayankulam Municipality, as against 20.9% of the previous year. This is quite unsatisfactory. Hence cent percentage civil registration was not achieved during the year under report. Spot check survey helps to find out the unregistered events and there by the concerned authorities can take necessary steps to minimise the rate of under registration

Table I

Estimated Midyear population of Municipalities and Corporations 1993 to 2001 AD as on 1st July

Sl. No	Municipality/ Corporation	1991 census Population	1993	1994	1995	1996	1997	1998	1999	2000	2001 census
1	2	3	4	5	6	7	8	9	10	11	12
1	Neyyattinkara	30419	31030	31296	31564	31834	32107	32282	32659	32939	71372
2	Trivandrum	524006	534047	538407	542803	547234	551702	556206	560747	565325	746906
3	Attingal	32634	33374	33696	34021	34349	34681	35016	35354	35695	35753
4	Kollam	139852	140301	140494	140687	140881	141075	141269	141463	141658	365880
5	Punalour	46279	47069	47412	47757	48105	48455	48808	49164	49522	47258
6	Kayámkulam	67151	68588	69213	69844	70481	71123	71771	72425	73085	65238
7	Mavellikkara	28299	28711	28890	29070	29251	29433	29616	29800	39985	28445
8	Alappuzha	174666	175788	176271	176755	17724	177728	178216	178706	179197	177160
9	Cherthala	43326	44016	44315	44616	44919	45224	45531	45840	46151	45162
10	Thiruvalla	54780	55506	55820	56316	56454	56773	57094	57417	57742	56898
11	Changanassery	52445	52559	52608	52657	52706	52755	52805	52855	52905	51944
12	Kottayam	63155	62861	62735	62610	62485	62360	62235	62111	61987	60646
13	Palai	21890	21952	21979	22006	22033	22060	22087	22114	22141	22665
14	Vaikom	21788	21931	22002	22073	22144	22215	22287	22359	22431	22666
15	Moovattupuzha	27595	28157	28401	28647	28895	29145	29398	29653	29910	29286
16	Cochi Corp.	564589	577295	582825	588408	594045	599736	605481	611281	617137	597566
17	Aluva	24744	24657	24607	24557	24508	24459	24410	24361	24312	24086

1	2	3	4	5	6	7	8	9	10	11	12
18	N. Paravoor	27906	28298	28468	28639	28811	28984	29158	29333	29509	30233
19	Perumbavoor	24667	25057	25226	25396	25567	25739	25913	26088	26264	26615
20	Irijalakkuda	27491	27828	27973	28119	28266	28414	28562	28711	28861	28920
21	Kodungalloor	31249	31972	32287	32605	32926	33250	33577	33907	34241	33622
22	Chalakkudy	45069	45844	46180	46519	46860	47204	47550	47899	48250	38150
23	Thrissur	74604	73850	73529	73210	72892	72575	72260	71946	71634	318531
24	Guruvayour	20216	20809	21069	21332	21598	21868	22141	22417	22697	21220
25	Kunnamkulam	19657	19708	14930	19752	19774	19796	19818	19840	19862	53271
26	Palakkad	123289	126283	127588	128906	130238	131584	132944	134318	135706	130992
27	Chittoor	32048	32448	32619	32791	32964	33138	33313	33489	33665	31879
28	Thiroor	49453	51724	52728	53752	54795	55859	56943	58048	59175	53796
29	Malappuram	49692	52341	53518	54721	55951	57209	58495	59810	61155	58809
30	Kozhikode Cor.	419831	429587	428652	431334	434033	436748	439480	442229	444996	437095
31	Vadakara	72434	74511	75418	76337	77267	78208	79161	80125	81101	75853
32	Talassery	103579	78559	78807	79056	79356	79556	79808	80060	80313	99249
33	Kannur	65238	66293	66750	67210	67674	68141	68611	69084	69561	63747
34	Kasaragod	50126	51915	52700	53497	54306	55128	55962	56809	57688	52770

Table 2
Number of Hospitals and other Institutions 2001

Name of Municipalities/ Corporations	Hospitals						Dispensaries and other institutions						Maternity and Child Health Centre					
	Public		Private		Total		Public		Private		Total		Public		Private		Total	
	No	Bed	No	Bed	No	Bed	No	Bed	No	Bed	No	Bed	No	Bed	No	Bed	No	Bed
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Neyyattinkara	3	320	6	42	9	362	1	-	11	-	12	-	2	-	-	-	2	-
Trivandrum	18	7037	44	2000	62		21	-	57	-	78	-	4	-	4	-	8	-
Attingal	2	84	8	420	10	504	3	-	23	-	26	-	3	-	-	-	3	-
Kollam	9	1485	28	1824	37	3209	11	-	92	-	103	-	13	-	-	-	13	-
Punalour	Not record																	
Kayamkulam	3	180	9	275	12	455	1	-	25	-	26	-	-	-	-	-	-	-
Mavellikara	2	267	7	315	9	582	1	-	10	-	11	-	-	-	-	-	-	-
Alappuzha	8	1548	5	120	13	1668	3	-	127	-	130	-	6	-	-	-	6	-
Cherhala	3	286	5	425	8	711			34	-	34	-	4	-	-	-	4	-
Thiruvalla	3	200	6	1050	9	1250	15	-	-	-	15	-	-	-	-	-	-	-
Changanassery	2	214	13	205	15	419	-	-	38	-	38	-	4	-	-	-	4	-
Kottayam	4	503	12	599	16	1102	-	-	-	-	-	-	-	-	-	-	-	-
Vaikom	2	298	1	10	3	308	1	10	25	-	26	10	1	-	-	-	1	-
Palai	3	194	10	545	13	739	1	-	28	-	29	-	1	-	-	-	1	-
Moovattupuzha	3	298	10	437	13	735	1	-	36	-	37	-	2	-	-	-	2	-
Cochi Corp.	18	2012	63	3844	81	5856	6	-	78	-	84	-	14	-	-	-	14	-
Aluva	2	237	10	675	12	912	-	-	34	-	34	-	-	-	-	-	-	-

Table 2 Contd...

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
N. Paravoor	3	200	8	453	11	653	2	-	33	-	35	-	2	-	-	-	2	-
Perumbavoor	2	231	6	463	8	694	1	-	24	-	25	-	6	-	-	-	6	-
Irijalakkuda	2	236	5	124	7	360	3	-	5	-	8	-	-	-	-	-	-	-
Kodumgallour	2	201	6	446	8	647	-	-	28	-	28	-	-	-	-	-	-	-
Chalakkudy	1	144	9	571	10	715	2	-	25	-	27	-	2	-	-	-	2	-
Thrissur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guruvayour	1	30	5	184	6	214	-	-	-	-	-	-	1	-	-	-	1	-
Kunnamkulam	1	124	5	565	6	689	6	-	-	-	6	-	1	-	-	-	1	-
Palakkad	4	739	21	613	25	1352	4	-	12	-	16	-	4	-	-	-	4	-
Chittoor	2	128	1	10	3	138	1	-	1	-	2	-	-	-	-	-	-	-
Thiroor	6	199	-	-	-	-	6	-	-	-	6	-	-	-	-	-	-	-
Malappuram	4	187	4	447	8	634	1	-	28	-	29	-	-	-	-	-	-	-
Kozhikode Cor.	9	4056	34	2059	43	6115	16	-	99	-	115	-	24	-	-	-	24	-
Vadakara	2	240	14	440	16	680	1	-	97	-	98	-	1	-	-	-	1	-
Talassery	2	556	23	839	25	1393	3	-	14	-	17	-	-	-	-	-	-	-
Kannur	2	125	29	580	31	705	1	16	-	-	1	16	1	5	-	-	1	5
Kasaragod	2	230	10	516	12	746	1	-	21	-	22	-	-	-	-	-	-	-

Table 3
Registration units with Area of population 2001

Municipality/ Corporation	No. of Reg. units	Area in Sq.km	Area per Reg. units	Midyear population	Population per Reg. units	Density per sq.Km
1	2	3	4	5	6	7
Neyyatinkara	1	9.99	9.99	71372	71372	7144
Trivandrum	20	141.47	7.07	746906	37345	5280
Attingal	1	14.775	14.78	35753	35753	2419
Kollam	1	57.28	57.28	365880	365880	6388
Punalour						
Kayamkulam	1	21.78	21.78	65238	65238	2995
Mavelikkara	1	12.65	12.65	28445	28445	2249
Alappuzha	2	46.77	23.39	177160	88580	3788
Cherthala	1	16.18	16.18	45162	45162	2791
Thiruvalla	1	27.52	27.52	56898	56898	2068
Changanassery	1	13.50	13.50	51944	51944	3848
Kottayam	2	16.45	8.22	60646	30323	3689
Palai	1	15.935	15.94	22665	22665	1422
Vaikom	1	8.73	8.73	22666	22666	2596
Moovattupuzha	1	13.18	13.18	29286	29286	2222
Cochi Corp.	2	94.88	47.44	597566	298783	6298
Aluva	1	7.18	7.18	24086	24086	3355
N. Paravoor	1	9.02	9.02	30233	30233	3352
Perumbavoor	1	13.60	13.60	26615	26615	1956
Irinjalakkuda	1	11.24	11.24	28920	28920	2573

Table 3 Contd...

	2	3	4	5	6	7
Kodumgallour	1	17.40	17.40	33622	33622	1932
Chalakkudy	1	25.23	25.23	38150	38150	1512
Thrissur						
Guruvayour	1	7.476	7.48	21220	21230	2837
Kunnamkulam	1	34.18	34.18	53271	53271	1559
Palakkad	1	26.60	26.60	130992	130992	4925
Chittoor	1	14.71	14.71	31879	31879	2167
Thiroor	1	16.55	16.55	53796	53796	3251
Malappuram	1	33.69	33.69	58809	58809	1746
Kozhikode Cor.	14	84.23	6.01	437095	31221	5189
Vadakara	1	21.34	21.34	75853	75853	3554
Talassery	3	23.98	7.99	99249	33083	4139
Kannur	1	11.03	11.03	63747	63747	5779
Kasaragod	1	16.69	16.69	52770	52770	3162

Table 4
Number of Burial grounds, Cremation grounds and Civil Registration

Municipality/Corporation	Burial Grounds			Cremation grounds			Total No. of Reg. Units	
	Municipality	Private	Total	Municipality	Private	Total	No. of wards	No of Units
1	2	3	4	5	6	7	8	9
Neyyattinkara	1	4	5	-	3	3	37	1
Thiruvananthapuram	4	30	34	1	-	1	81	20
Attingal	1	1	2	-	5	5	24	1
Kollam	2	37	39	2	1	3	50	1
Punalour								
Kayamkulam	1	14	15	1	2	3	38	1
Mavellikara	1	9	10	-	1	1	23	1
Alappuzha	3	2	5	-	19	19	50	2
Cherthala		5	5	1	4	5	28	1
Thiruvalla	2		2	1	-	1	32	1
Changanassery	1	12	13	-	1	1	32	1
Kottayam	1	15	16	1	2	3	37	2
Palai	1	6	7	1	-	1	20	1
Vaikom	1	1	2	-	-	-	20	1
Moovattupuzha	1	8	9	-	-	-	20	1
Cochin Corporation.	8	40	48	5	11	16	66	2

Table 4 Contd.....

1	2	3	4	5	6	7	8	9
Aluva	-	1	7	-	3	3	21	1
N. Paravur	1	7	8	1	7	8	23	1
Perumbavoor	1	8	9	-	1	1	21	1
Irinjalakkuda	1	5	6	-	1	1	22	1
Kodungalloor	-	2	2	1	1	2	24	1
Chalakkudy	2	8	10	-	1	1	28	-
Thrissur	-	-	-	-	-	-	-	-
Guruvayoor	1	4	5	1	1	2	20	1
Kunnamkulam	2	11	13	-	-	-	31	1
Palakkad	4	7	11	3	1	4	50	1
Chittoor	-	1	1	3	-	3	24	1
Thirur	2	-	2	-	-	-	28	1
Malappuram	1	10	11	-	1	1	24	1
Kozhikode Corporation	2	9	11	4	2	6	39	14
Vadakara	1	8	9	-	-	-	40	1
Thalassery	1	15	16	1	11	12	50	3
Kannur	1	13	14	1	-	1	38	1
Kasaragod	-	12	12	2	1	3	32	1

Table 5
Vital events registered during the year 2001

Municipality/Corporation	Total events			Events to normal residents			Total events			Events to normal residents		
	M	F	T	M	F	T	M	F	T	M	F	T
1	2	3	4	5	6	7	8	9	10	11	12	13
Neyyattinkara	761	762	1523	210	188	398	-	-	-	-	-	-
Thiruvananthapuram	18562	17937	36499	-	-	-	96	93	189	-	-	-
Attungal	513	526	1039	57	61	118	-	-	-	-	-	-
Kollam	8056	7740	15796	3111	2960	6071	31	28	59	16	12	28
Punalur	NR											-
Kayamkulam	2308	2219	4527	363	356	719	4	3	7			-
Mavellikkara	2189	2041	4230	176	171	347	8	10	18	1	1	2
Alappuzha	6328	6170	12498	1375	1369	2744	94	77	171	12	9	21
Cherthala	1773	1965	3738	150	196	346	9	7	16	-	-	-
Thiruvalla	1925	1866	3791	247	226	473	10	10	20	3	2	5
Changanassery	987	943	1930	320	308	628	2	-	2	-	-	-
Kottayam	2034	1811	3845	408	332	740	14	15	29	1	3	4
Palai	1431	1126	2557	77	96	173	6	4	10	2	1	3
Vaikom	290	225	515	71	67	138	-	-	-	-	-	-
Moovattupuzha	2256	1743	3999	192	167	359	3	4	7	1	-	1
Cochin Corporation	10446	9531	19977	5043	4828	9871	84	78	162	31	28	59

Table 5 Contd.....

I	2	3	4	5	6	7	8	9	10	11	12	13
Aluva	2238	2172	4410	92	69	162	10	17	27	-	-	-
N. Paravoor	2078	1840	3918	116	88	204	9	4	13	-	-	-
Perumbavoor	1182	1123	2305	98	119	217	6	2	8	-	-	-
Irijalakkuda	889	840	1729	60	52	112	5	4	9	-	-	-
Kodumgallour	2797	2559	5356	103	87	190	4	4	8	-	-	-
Chalakkudy	2143	2012	4155	226	219	445	4	4	13	2	-	2
Thrissur	NR											
Guruvayour	168	181	349	13	10	23						
Kunnamkulam	2529	2376	4905	272	273	545	14	10	24	1	1	2
Palakkad	7049	6849	13898	1659	1612	3271	64	48	112	16	8	24
Chittoor	113	104	217	1	4	5	-	-	-	-	-	-
Thiroom	4459	4207	8666	9	10	19	34	14	48	-	-	-
Malappuram	3783	3550	7333	215	251	466	48	29	77	-	-	-
Kozhikode Corporation	21452	20409	41861	10324	9316	19640	449	368	817	175	161	336
Vadakara	2085	1955	4040	325	320	645	14	10	24	5	3	8
Thalassery	5675	5425	11100	1964	1792	3756	44	36	80	8	4	12
Kannur	3027	3116	6143	283	276	559	20	12	32	1	2	3
Kasaragod	3856	4084	7940	380	356	736	46	36	82	4	4	8

Table 5 contd.....

Municipality/Corporation	Total Events						Infant death						Events to normal residents						Total events						Maternal Death					
	Total Events			Infant death			Events to normal residents			Total events			Maternal Death			Events to normal residents			Total events			Maternal Death								
	M	F	T	M	T	F	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T						
I	14	15	16	17	18	19	20	21	22	23	24	25																		
Neyyattinkara	1	1	2	1	1	2																								
Trivandrum	308	298	606																											
Attingal																														
Kollam	57	60	117	1		1																								
Punalur	N.R																													
Kayamkulam	2	1	3																											
Mavellikkara	12	9	21	3	2	5																								
Alappuzha	98	79	177	12	11	23																								
Cherthala	3	5	8																											
Thiruvalla	21	15	36	5	2	7																								
Changanassery	3	3	6																											
Kottayam																														
Palai	5	4	9	2	2	4																								
Vaikom	3		3	1		1																								
Moovattupuzha	13	10	23	3	2	5																								
Cochin Corporation	194	180	374	65	58	123																								
Aluva	4	6	10	2	4	6																								
N. Paravoor	10	6	16																											

Table 5 contd....

	14	15	16	17	18	19	20	21	22	23	24	25
Perumbavoor	3	2	5	-	-	-	-	-	-	-	-	-
Jrijalakkuda	5	2	7	-	1	1	-	-	-	-	-	-
Kodumgallour	7	2	9	-	-	-	-	-	-	-	-	-
Chalakkudy	17	12	29	3	1	4	-	-	-	-	-	-
Thrissur	NR			-	-	-	-	-	-	-	-	-
Guruvayour				-	-	-	-	-	-	-	-	-
Kunnankulam	11	9	20	2	1	3	-	-	-	-	-	-
Palakkad	116	85	201	41	24	65	-	-	-	-	-	-
Chittoor	-	-	-	-	-	-	-	-	-	-	-	-
Thiroor	25	17	42	-	-	-	-	-	-	-	-	-
Malappuram	20	14	34	3	2	5	-	-	-	-	-	-
Kozhikode Corporation	446	397	843	196	127	323	-	-	-	-	-	-
Vadakara	15	7	22	6	4	10	-	-	-	-	-	-
Talassery	53	45	98	8	8	16	-	-	-	-	-	-
Kannur	67	43	110	8	3	11	-	-	-	-	-	-
Kasaragod	8	10	18	1	1	2	-	-	-	-	-	-

Table 5 contd....

Municipality/Corporation	Other death						Total Death					
	Total Events			Events to normal residents			Total events			Events to normal residents		
	M	F	T	M	F	T	M	F	T	M	F	T
I	26	27	28	29	30	31	32	33	34	35	36	37
Neyyattinkara	314	232	546	90	102	192	315	233	548	91	103	194
Trivandrum	5216	5037	10253	636	817	1453	5524	5357	10881	636	817	1453
Attingal	93	71	164	50	41	91	93	71	164	50	41	91
Kollam	1729	983	2712	960	600	1560	1786	1043	2829	961	600	1561
Punalur	N.R											
Kayamkulam	223	133	356	158	96	254	225	134	359	158	96	254
Mavellikara	342	216	588	94	87	181	354	225	579	97	89	186
Alappuzha	1451	969	2420	412	369	781	1549	1048	2597	424	380	804
Cherthala	344	237	581	194	103	297	347	242	589	194	103	297
Thiruvalla	495	327	822	137	110	247	516	342	858	142	112	254
Changanassery	177	110	287	114	84	198	180	113	293	114	84	198
Kottayam	376	333	709	126	132	258	376	333	709	126	132	258
Palai	174	150	324	32	33	65	179	154	333	34	35	69
Vaikom	166	116	282	69	58	127	169	117	286	70	58	128
Moovattupuzha	197	161	358	61	51	112	210	171	381	64	53	117
Cochi Corp.	3307	3193	6500	1867	1657	3524	3501	3373	6874	1932	1715	3647
Aluva	271	148	419	36	17	53	275	154	429	38	21	59

Table 5 contd....

	26	27	28	29	30	31	32	33	34	35	36	37
N. Paravoor	284	247	531	36	21	57	294	253	547	36	21	57
Perumbavoor	200	109	309	47	40	87	203	111	314	47	40	87
Irijalakkuda	175	105	280	89	71	160	180	107	287	89	72	161
Kodumgallour	281	200	481	48	42	90	288	202	490	48	42	90
Chalakkudy	276	174	450	135	111	246	293	186	479	138	112	250
Thrissur	NR											
Guruvayoor	104	57	161	38	31	69	104	57	161	38	31	69
Kunnamkulam	292	226	518	175	157	332	303	235	538	177	158	335
Palakkad	1107	639	1746	361	309	670	1223	724	1947	402	333	735
2Chittoor	118	103	221	19	6	25	118	103	221	19	6	25
Thiroor	299	223	522	85	81	166	324	200	564	85	81	166
Malappuram	314	186	500	160	121	281	334	200	534	163	123	286
Kozhikode Cor.	5036	2931	7967	2191	1101	3292	5482	3328	8810	2387	1228	3615
Vadakara	450	280	730	196	135	331	465	287	752	202	139	341
Talassery	1152	731	1883	340	303	643	1205	776	1981	348	311	659
Kannur	367	396	763	96	87	177	434	439	873	96	81	177
Kasaragod	333	172	505	105	75	180	342	181	523	106	76	182

Table 6
Death According to cases

Municipality/ Corporation	TB	plague	Cholera	Chicken pox	Dysentery & diarrhea	Respiratory diseases	Entire Fever	Rabies	Diphtheria	Cancer	Gastro enteritis
1	2	3	4	5	6	7	8	9	10	11	12
Neyyattinkara						40				22	
Trivandrum		Not Available								8	
Attingal										126	
Kollam	31			2							
Punalur											
Kayamkulam											
Mavellikara											
Alappuzha		2	4	6	8		5	8	4	7	
Cherhala							9			8	1
Thiruvalla										18	
Changanassery	3					38	20			32	
Kottayam				10						11	8
Palai						68	13			21	
Vaikom	18			4						7	
Moovattupuzha.											

Table 6 Contd...

1	2	3	4	5	6	7	8	9	10	11	12
Cochi Corp.	148										
Aluva								2			
N. Paravoor										51	
Perumbavoor										75	
Irijalakkuda										45	
Kodungallour											
Chalakkudy											
Thrissur					3	124	1			15	
Guruvayour											
Kunnamkulam						82	4			2	
Palakkad										18	
Chittoor											
Thiroor											
Malappuram											
Kozhikode Cor.	538	11									
Vadakara					26		91		1	736	
Talassery											
Kannur											
Kasaragod	34				11					34	
					7					74	

Table 6 Contd...

Municipality/ Corporation	Cardiac diseases & Heart failure	Pulmo- nary diseases	Diabetics	Asthma	Rheu- matism	Hydro phobia	Lever diseases	Malaria	Septice- mia	Tetanus	HIV	Others	Total
1	13	14	15	16	17	18	19	20	21	22	23	24	25
Neyyattinkara												486	548
Trivandrum		Not available											10881
Attingal	82		6	7	12							49	164
Kollam	1024		261				44		22			1319	2829
Punalur													359
Kayamkulam													579
Mavelikkara													2597
Alappuzha		40					2			4		2507	2597
Cherthala	208	64										299	589
Thiruvalla	239		27									574	858
Changanassery		19										181	293
Kottayam		25										655	709
Palai		23										208	333
Vaikom	10		6					4				237	286
Moovattupuzha	192											189	381

Table 6 Contd...

I	13	14	15	16	17	18	19	20	21	22	23	24	25
Cochi Corp.	2437												
Aluva	104	60	9	8				3				4284	6874
N. Paravur	307											197	420
Perumbavoor	129	12										165	547
Irijalakkuda												128	314
Kodumgallour													287
Chalakkudy	72	29		24									490
Thrissur												211	479
Guruvayour	16			11	2			2				42	161
Kunnankulam	115			8								387	528
Palakkad													1947
2Chittoor													221
Thiroor													564
Malappuram													534
Kozhikode Cor.	1831		176			13		1	212	11	6	5157	8810
Vadakara													752
Talassery													1981
Kannur	167												873
Kasaragod		19			27			7				661	873
												355	523

Table 7
Result of spot check 2001

No. of events occurred to normal residents

Municipality/ Corporation	Total No of wards selected	Total No. of hhs	No. of households insisted	Live birth			Infant death				Other death				
				Enumerated	Registered	Not registered	occurred Outside	Enumerated	Registered	Not registered	occurred Outside	Enumerated	Registered	Not registered	occurred Outside
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Neyyattinkara	15	6868	7637	367	92	-	275	2	-	-	2	110	84	-	26
Trivandrum	15			624	581	-	43					253	246	2	5
Attingal	15	5755	5755	191	52	-	139	1	-	-	1	60	35	-	25
Kollam	15	23076	17672	1141	1024	-	117	1	-	-	1	374	319	-	55
Punalur	15					-									
Kayamkulam	15	5703	5703	388	271	-	117		-	-	-	129	61	25	43
Mavellikkara	15	4291	4291	238	136	-	102	1	-	-	1	107	85	8	14
Alappuzha	18	15990	15990	1053	927	-	126	1	1	-	-	413	371	6	36
Cherthala	15	6728	5656	134	98	-	36	-	-	-	-	82	82	-	-
Thiruvalla	15	6151	6151	156	101	-	55	-	-	-	-	85	67	-	18
Changanassery	15	6827	5691	258	92	-	166	2	1	-	1	129	88	2	39
Kottayam	15	5060	5060	160	80	0	80	0	0	0	0	74	52	0	22
Palai	15	4969	3318	178	87	-	91	2	-	-	2	90	63	1	26
Vaikom	15	6315	3923	21	21	-	121	-	-	-	-	60	60	-	16
Moovattupuzha	15	4054	4054	246	132	1	113	1	1	-	-	96	69	5	22

Table 7 Contd....

I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cochi Corp.	15	28209	25045	927	823	-	104	-	-	-	-	420	418	-	2	
Aluva	15	4329	4329	164	67	-	97	-	-	-	-	64	60	6	20	
N. Paravour	15	4550	4550	204	98	-	106	-	-	-	-	47	50	7	7	
Perumbavoor	15	4310	4310	300	117	1	182	1	-	-	1	73	62	2	9	
Irijalakkuda	15	7788	4414	199	56	-	143	-	-	-	-	110	75	-	35	
Kodungalloor	15	4769	4769	190	142	-	48	-	-	-	-	90	69	-	21	
Chalakkudy	15	5955	5935	226	130	-	96	1	-	-	1	116	92	5	19	
Thrissur	15	NR				-										
Guruvayour	15	3225	3225	158	17	-	141	1	-	-	1	93	52	7	34	
Kunnankulam	15	7742	5806	312	166	-	146	1	1	-	-	176	136	-	40	
Palakkad	15	7389	7275	733	683	3	47	11	9	2	2	215	184	10	26	
Chittoor	15	4483	4483	155	6	-	149	1	1	-	-	110	86	-	24	
Thiroor	15	4630	4630	589	410	-	179	1	-	1	-	111	79	4	28	
Malappuram	15	6363	6115	466	384	-	82	-	-	-	-	281	277	-	4	
Kozhikode Cor.	15	35973	19808	1083	977	-	106	-	-	-	-	352	307	31	14	
Vadakara		4743	4743	184	158	-	184	1	1	-	-	116	72	13	31	
Talassery		5316	1449	317	291	-	26	-	-	-	-	129	117	-	12	
Kannur		4040	3630	149	86	-	63	-	-	-	-	27	5	-	22	
Kasaragod		4718	4521	164	144	-	20	2	2	-	-	50	47	-	3	

Table 8
Under Registration and occurrence of outside events during the year 2001

Sl. No	Municipality/ Corporation	% of under registration		% of outside registration	
		Births	Deaths	Births	Deaths
1	Neyyattinkara			74.93	25
2	Thiruvananthapuram			6.89	1.98
3	Attingal			72.77	42.62
4	Kollam			10.25	14.93
5	Punalur	Not Received			
6	Kayamkulam		29.1	30.15	33.33
7	Mavelikkara		8.7	42.86	13.89
8	Alappuzha		1.6	11.97	8.88
9	Cherthala			26.8	
10	Thiruvalla			35.25	21.18
11	Changanassery		2.20	64.34	30.53
12	Kottayam			50	29.73
13	Palai		1.6	51.12	30.43
14	Vaikom			85.20	21.05
15	Muvattupuzha	0.75	6.67	45.93	22.68
16	Kochi Corporation			11.21	0.48
17	Aluva		9.09	59.14	23.26
18	N. Paravur			51.96	12.28
19	Perumbavour	0.847	3.125	60.66	13.51
20	Irrinjalakkuda			71.86	31.82
21	Kodungallour			25.26	23.33
22	Chalakudy		5.15	42.48	17.09
23	Thrissur	Not Received			
24	Guruvayour		11.86	89.24	37.23
25	Kunnamkulam			46.79	22.60
26	Palakkad	0.437	4.93	6.41	11.4
27	Chittour			96.13	21.62
28	Thirur		5.95	30.39	25
29	Malappuram		1.42	17.60	1.42
30	Kozhikode		9.17	9.79	3.98
31	Vadakara		15.12	53.80	26.50
32	Thalassery			8.20	9.30
33	Kannur			42.28	81.48
34	Kasaragod			12.20	5.77

Table 9
Registered vital rates and Adjusted Residential vital rates 2001

Sl No	Municipality/ Corporation	Registered vital rates		Adjusted Residential vital rates	
		Birth	Death	Birth	Death
1	Neyyattinkara	5.58	2.7	22.26	3.63
2	Thiruvananthapuram				
3	Attingal	3.30	2.55	12.12	4.44
4	Kollam	16.59	4.27	18.49	5.02
5	Punalur	Not Received			
6	Kayamkulam	11.02	3.89	15.78	8.23
7	Mavelikkara	12.2	6.54	21.35	8.31
8	Alappuzha	15.49	4.5	17.59	5.01
9	Cherthala	7.66	6.58	10.48	6.58
10	Thiruvalla	8.31	4.46	12.83	5.65
11	Changanassery	12.09	3.81	33.90	5.59
12	Kottayam	12.20	4.25	24.40	6.05
13	Palai	7.63	3.04	15.62	4.44
14	Vaikom	6.09	5.65	41.15	7.15
15	Muvattupuzha	12.26	4.0	22.84	5.55
16	Kochi Corporation	16.52	6.10	18.60	6.13
17	Aluva	6.73	2.45	16.47	3.5
18	N. Paravur	6.75	1.89	14.05	2.15
19	Perumbavour	8.15	3.27	20.89	3.91
20	Irinjalakkuda	3.87	5.57	13.75	8.17
21	Kodungallour	5.65	2.68	7.56	3.49
22	Chalakydy	11.67	6.55	20.29	8.33
23	Thrissur	Not Received			
24	Guruvayour	1.08	3.25	10.04	5.88
25	Kunnamkulam	10.23	6.29	19.22	8.12
26	Palakkad	24.97	5.61	26.80	6.66
27	Chittour	0.16	0.78	4.13	1.0
28	Thirur	0.35	3.09	0.51	4.39
29	Malappuram	7.92	4.86	9.61	5
30	Kozhikode	44.93	8.27	49.81	9.48
31	Vadakara	8.50	4.50	18.40	7.21
32	Thalassery	37.84	6.64	41.22	7.32
33	Kannur	8.77	2.95	15.19	15.93
34	Kasaragod	13.95	3.45	15.88	3.65

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