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GOVERNMENT OF KERALA

RESIDENTIAL VITAL RATES 2008

**Directorate of Economics & Statistics
Thiruvananthapuram
2009**

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PREFACE

This report presents the adjusted vital rates of births and deaths of the selected Municipalities and Corporations for the year 2008. The rates have been estimated from the registered births and deaths of the normal residents after making adjustments for under registration and for the same occurring outside the Municipal/Corporation areas, using the results of spot check survey conducted in the above places. Details of twenty-nine Municipalities and five Corporations are included in this report. Due to some technical reasons the data pertaining to Vaikom Municipality has not been included in the report. The vital statistics unit of the Department of Economics and Statistics has prepared the report under the supervision of Smt.E.Baby, Additional Director (General), Smt.S.Leelamony (formerly Deputy Director (VS), Smt. K.Shailamma, (formerly Assistant Director) and Sri. M. N. Raju, Research Assistant have contributed substantially in bringing out the report.

Thiruvananthapuram
Date: 30.08.2010

Sd/-
V. RAMACHANDRAN
DIRECTOR

CONTENTS

Sl.No	Topics	Page No.
I	Introduction	1
II	Objectives of the Survey	2
III	Coverage of the Survey	2-3
IV	Limitation of the Survey	4
V	Analysis and Findings of the Survey	4-8

Tables

1	Estimated Mid-year population of municipalities/Corporations-2008 (as on 1 st July)	9-10
2	Number of Educational Institutions - 2008	11-12
3	Number of Hospitals and other Institutions - 2008	13-14
4	Registration units with Area and Population - 2008	15
5	Number of Burial grounds, cremation grounds and civil Registration Units	16
6	Vital Events registered during the year - 2008	17-22
7	Deaths according to causes - 2008	23-26
8	Results of Spot-check Survey - 2008	27-28
9	Under Registration and Occurrence of outside events	29
10	Registered Vital rates and Adjusted Residential Vital rates - 2008	30

Appendix

1	Method of calculation of Adjusted Residential vital rates	31
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ANNUAL RESIDENTIAL VITAL RATES 2008

Introduction

The Civil Registration System was introduced in India under the Births and Deaths Registration Act passed by parliament in 1969. The Act stipulates that every event should be registered in the respective registration units (local self Government) based on the place of occurrence. 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, non-registration of events exists to a certain extent. In order to ward off such inaccuracies, a corrective measure is devised viz the spot-check survey. More over, the Act stipulates that registration is to be done out in the place of occurrence of the event. This may not be possible in all cases and as such it does not provide a true picture. The present set up of spot check survey is to tide over that.

One of the important classifications in population data is the rural-urban breakup. In Kerala, the number of vital events happening in urban areas is always higher than that in the rural areas. It shows that the rate of registration of vital events in urban areas is always higher than that in the rural area. Modern health facilities are generally available in the urban areas. Rural people, because of their knowledge on health activities and access to Modern health facilities usually resort to urban areas to avail such facilities. Usually, the under registration in rural areas is higher than that in urban areas especially in the case of deaths. This is because, most of the deaths in rural areas happened in the house and the people are not interested to register deaths due to the ignorance of the importance of registration. Another important fact is that both rural and urban population tends to hide incidence of suicide and illicit termination of pregnancy. Similarly, there exists gross under registration of vital events such as Infant deaths and Still births in the State.

Objectives of the survey

The main objectives of the survey are furnished below:

1. To estimate the extent of under registration of vital events in the selected Municipalities/Corporations and to work out the actual vital rates in these areas.
2. To estimate the residential vital rates of these Municipalities/Corporations
3. To find out the major diseases that lead to deaths in the selected urban areas of the State

Coverage of the survey

The scheme is designed to strengthen Vital Statistics in the selected Municipalities and corporations. It is implemented in five Corporations and twenty-nine Municipalities in the State. The list of Municipalities / Corporations and the statistical staff working in these centres are given below:

Sl.No.	Name of Municipalities / Corporation	Statistical Staff		
		Statistical Assistant Gr.I	Research Assistant	Total
1	Neyyattinkara (M)	1	0	1
2	Thiruvananthapuram (C)	2	1	3
3	Attingal (M)	1	0	1
4	Kollam (C)	2	1	3
5	Punalur (M)	1	0	1
6	Kayamkulam (M)	1	0	1
7	Mavelikara (M)	1	0	1
8	Alappuzha (M)	2	1	3
9	Cherthala (M)	1	0	1
10	Thiruvalla (M)	1	0	1
11	Changanassery (M)	1	0	1
12	Kottayam (M)	1	0	1

13	Pala (M)	1	0	1
14	Vaikom (M)	1	0	1
15	Muvattupuzha (M)	1	0	1
16	Kochi (C)	2	1	3
17	Aluva (M)	1	0	1
18	North Paroor (M)	1	0	1
19	Perumbavur (M)	1	0	1
20	Irinjalakuda (M)	1	0	1
21	Kodungallur (M)	1	0	1
22	Chalakudy (M)	1	0	1
23	Thrissur (C)	1	0	1
24	Guruvayur (M)	1	0	1
25	Kunnamkulam (M)	1	0	1
26	Palakkad (M)	1	0	1
27	Chittoor -Thathamangalam	1	0	1
28	Thirur (M)	1	0	1
29	Malappuram (M)	1	0	1
30	Kozhikode (C)	2	1	3
31	Vadakara (M)	1	0	1
32	Thalassery (M)	1	0	1
33	Kannur (M)	1	0	1
34	Kasaragod (M)	1	0	1

The field work pertaining to the survey was carried out in all centers. For conducting fieldwork of the survey fifteen wards have been randomly selected from each unit except Alappuzha Municipality. 25 wards have been selected from Alappuzha Municipality. The statistical staff posted in the Municipalities/Corporations have visited all houses of the selected wards and collected the required data in the prescribed schedules.

Limitations of the survey

Since the survey is implemented only in the urban areas, extent of under registration in the rural areas cannot be estimated. This is a striking limitation of the survey. One of the main objectives of the survey is to find out the under registration of vital events. However, the data derived from the survey is partial. In order to obtain a total picture of the rate of under –registration in urban areas, the remaining urban areas of the state should also be brought under the purview of the survey. If this survey is extended to rural areas, a comparative study between urban and rural level of under registration could also be made possible. Similarly the State level under registration can be estimated only if this survey is further extended to rural areas and the remaining Municipalities of the State.

Findings of the Survey

Table1 provides the estimated midyear population of the selected Municipalities and Corporations. It is obvious from the table that the population of all Municipalities/Corporations shows an increasing trend. Out of 34 selected centers, the highest midyear population is recorded in Thiruvananthapuram Corporation and the lowest in Guruvayur municipality. Among municipalities, the highest is in Alappuzha.

The number of Educational Institutions both in Government and private sector existing in the selected municipalities/corporations are presented in table 2. Among all centers, Kochi Corporation has the maximum number of institutions. The

total number of institutions in Kochi Corporation is 251. It is followed by Thiruvananthapuram Corporation with 191 numbers. In the case of municipalities, the highest number of institution, 78 is recorded from Thalassery municipality. Guruvayur Municipality have only 11 Educational Institutions, Cochin Corporation stood first pertaining to the number of Technical Institutions in Private Sector. More number of technical institutions are situated in Kochi Corporation.

Details of Medical Institutions in the public and private sector existing in the selected Municipalities/Corporations are presented in table 3. Number of hospitals in the private sector is higher than that in the Government sector. Among all centers, Thiruvananthapuram Corporation has the highest number of government hospitals 19, followed by Cochin Corporation with 18. In the case of Municipalities Tirur has the highest number of government hospitals. Considering the bed strength in government hospitals Thiruvananthapuram Corporation stood first with 7019 numbers followed by Kozhikkode Corporation with 4081. In the case of private hospitals the maximum number of hospitals is recorded in Cochin Corporation with 70 followed by Thiruvananthapuram with 53.

In the case of government dispensaries and other institutions it is the highest in Thiruvananthapuram Corporation with 21 followed by Kozhikkode Corporation with 17. Considering the strength of private dispensaries and other institutions, Alappuzha municipality stood first with 127 followed by Kozhikkode Corporation and Vadakara municipality with 107 and 97 respectively.

The number of maternity and child health centers in public sector was highest in Kochi Corporation with 13 followed by 12 in Kozhikkode Corporation and 12 in Kollam Corporations. In the private sector such facilities do not exist anywhere else in the entire state except in Thiruvananthapuram, Kollam, and Attingal Municipality.

In table 4 the details regarding the number of registration units, area and population of the selected centers are furnished. Thiruvananthapuram Corporation has the largest area 141.74 sq. km. When municipalities are taken into consideration, Alappuzha covers the largest area 46.77 sq. km followed by Punalur municipality with 34.60 sq. km. Considering the density of population, the highest is recorded in Kollam Corporation, i.e. 6654 sq. km. followed by Kochi Corporation

with 6528 sq.km. In the case of Municipality, it is the highest in Kannur with 6097/ sq. km. and lowest is in Punalur Municipality with 1386 sq.km.

The details regarding number of Burial Grounds and Cremation Grounds are presented in table 5. This table reveals Cochin Corporation stood first with 8 municipal burial grounds. Cochin Corporation has the highest number of private burial grounds i.e. 40 followed by Kollam Corporation with 37. Chittoor Thathamangalam Municipality have no burial grounds both in Government sector and in private sector. More number of burial grounds and cremation grounds are in the private sector than in the Government sector.

Table 6 furnishes total number of vital events and the number of vital events of the usual residents registered in the respective centers. Kozhikode Corporation stood first with 37877 live births. In the case of municipalities the highest number 14818 was recorded in Palakkad municipality and the lowest 69 in Chittoor Thathamangalam municipality.

The maximum number of still births 475 was registered in Kozhikode Corporation. Thiruvananthapuram Corporation stood in the second place with 418 No still births were reported in Mavelikara, Guruvayur and Kodungalloor municipalities.

In the case of infant deaths, the highest number 962 was recorded in Kozhikkode Corporation out of which 540 are male and 422 are female and infant death corresponds to normal residents were 120. Thiruvananthapuram Corporation stood at the second place with 778 numbers. In the case of Municipalities the highest number of infant deaths 67 was registered in Thalassery municipality. The table reveals that no infant death was registered in Neyyattinkara, Kayamkulam, Guruvayoor and Chittur-Thattamangalam municipalities during the year under report

The number of deaths registered in Thiruvananthapuram Corporation was 12733 Which is seen to be the highest in the state followed by Kozhikkode

Corporation with 10202. In the case of municipality it was the highest in Palakkad municipality with 2320 numbers and the lowest 128 in Guruvayoor municipality.

Death according to major causes are furnished in table 7. This table reveals that the major causes of death were respiratory disease, cancer, heart failure Diabetics, and others. During the year under report 20 AIDS cases are reported of which 11 cases from Thiruvananthapuram Corporation, 9 cases from Kozhikode Corporation.

The results of spot check survey of the selected registration units presented in table 8. The data reveals that all live births except one case in Kottayam municipality were registered in the respective registration units.

In the case of deaths, about 80% of enumerated deaths were registered in the respective registration units. Only 20% of deaths were occurred outside the units. i.e., most of the cases were occurred within the station. Non registration of deaths done in Kochi, Kozhikkode and Thiruvananthapuram Corporations, Neyyattinkara, Punalur, Kayamkulam, Mavelikkara, Kottayam, Changanassery, Muvattupuzha, Chalakkudy, Malappuram and Kannur Municipalities.

Table 9 gives the percentage of under registration and the percentage of outside registration of events in the selected units. With regard to the registration of births, cent percent registration was recorded in all most all centers except in Kottayam municipality. In the case of deaths, cent percent registration was reported from 19 centers and under registration was from the remaining centers. The highest percentage of under registration of death 10.71% was reported from Changanassery and the lowest 0.48% in Thiruvananthapuram Corporation.

From the table, it can be seen that in Chittoor Thathamangalam Municipality percentage of outside registration birth is 100. Lowest percentage of outside registration is reported from Kozhikode Corporation with 8.06%. In the case of deaths, the highest percentage 49.6% was recorded in Attingal municipality followed by Guruvayoor municipality with 47.27% and lowest 0.00% in Thiruvananthapuram Corporation and Kasargode Municipality.

The registered vital rates and Adjusted Residential vital rates in the selected Municipalities and Corporations are presented in table 10.

From the data It can be seen that highest birth rate 40.72 is recorded in Palakkad municipality followed by Thalassery Municipality with 27.4 and the lowest in Chittoor Thathamangalam with 0.12. In terms of registered death rate, it is highest in Kochi Corporation (8.40) followed by Vadakara municipality with 7.10 and the lowest in Cherthala Municipality.,

The table reveals that, in the case of the adjusted residential vital rates of Births, highest rate 48.25 was reported from Palakkad municipality followed by Thalassery and Neyyattinkara Municipalities with 32.43 and 24.04 respectively. The lowest rate 6.4 was reported from Kodungallur municipality. As regards death, the adjusted residential vital rates was highest (9.47) in Vadakara Municipality followed by Irinjalakuda Municipality with 10.39 and the lowest 0.76 was in North Paravur Municipality.

Conclusion

The survey result reveals that under registration of vital events still exists in the urban areas of the State. Hence cent percentage registration could not be achieved during the year under report also. Lack of awareness about the need and importance of registration of events may be the reasons for the same. Spot-check Survey helps to find out the unregistered events and thereby the concerned authorities can take necessary steps to minimize the extent of under registration.

Table 1 - Estimated Mid-year Population of Municipalities and Corporations from 2001 to 2008 (as on 1st July)

Sl. No.	Municipality/ Corporation	2001 Census Population	2002	2003	2004	2005	2006	2007	2008
1	Neyyattinkara	69467	70362	71041	71726	72418	73117	73822	74534
2	Thiruvananthapuram Corporation	744983	754576	761852	769198	776615	784103	791663	799296
3	Attingal	35693	36122	36447	36775	37106	37440	37777	38117
4	Kollam Corporation	361560	365047	367684	370340	373016	375711	378425	381159
5	Punalur	47235	47364	47461	47558	47655	47753	47851	47949
6	Kayamkulam	68585	68778	68923	69068	69214	69360	69506	69653
7	Mavelikkara	28439	28458	28472	28486	28500	28514	28528	28542
8	Alappuzha	177029	177346	177584	177822	178061	178300	178539	178779
9	Cherthala	45105	45348	45531	45715	45900	46085	46271	46458
10	Thiruvalla	56837	57117	57328	57540	57752	57965	58179	58394
11	Changanacherry	51967	52468	52847	53229	53613	54000	54390	54783
12	Kottayam	60728	61311	61752	62196	62643	63093	63547	64004
13	Palai	22640	22858	23023	23189	23356	23524	23694	23865
14	Vaikom	22641	22859	23024	23190	23357	23525	23695	23866
15	Muvattupuzha	29246	29473	29644	29816	29989	30163	30338	30514
16	Kochi Corporation	595575	599835	603050	606282	609532	612733	616083	619385
17	Aluva	24110	24420	24655	24892	25132	25374	25618	25865

Table 1 Contd.

Sl. No.	Municipality/ Corporation	2001 Census Population	2002	2003	2004	2005	2006	2007	2008
18	North Parur	30059	30358	30584	30812	31042	31273	31506	31741
19	Perumbavoor	26547	26808	27005	27204	27404	27606	27809	28014
20	Irinjalakkuda	28873	29063	29206	29350	29495	29640	29786	29933
21	Kodungallur	33539	33857	34097	34339	34583	34829	35076	35325
22	Chalakkudy	48380	48840	49188	49538	49891	50246	50604	50964
23	Thrissur corpn.	317526	321101	323809	326539	329292	332069	334869	337693
24	Guruvayoor	21186	21319	21419	21520	21621	21723	21825	21928
25	Kunnamkulam	51592	52173	52613	53057	53504	53955	54410	54869
26	Palakkad	130767	131798	132577	133360	134148	134940	135737	136539
27	Chittoor- Thathamangalam	31886	32296	32607	32921	33238	33558	33881	34207
28	Thirur	53654	54241	54685	55133	55585	56040	56499	56962
29	Malappuram	58491	59777	60760	61759	62775	63807	64856	65923
30	Kozhikkode Corpn.	436556	438838	440557	442283	444016	445756	447502	449255
31	Vadakara	75847	76314	76666	77020	77375	77732	78091	78451
32	Thalasserry	99387	100989	102207	103440	104688	105951	107229	108523
33	Kannur	63797	64412	64877	65345	65817	66292	66771	67253
34	Kasaragod	52634	52978	53237	53498	53760	54023	54288	54554

Table-2, Number Of Educational Institutions-2008

Sl. No	Municipality/ Corporation	Lower Primary School			Upper Primary Schools			High School/			HSS/VHSC			Colleges			Technical Institutions			Grand Total
		Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Neyyattinkara	5	9	14	4	3	7	4	8	12	-	-	-	1	-	1	1	2	3	37
2	Thiruvanthapuram Corpn.	35	15	50	24	9	33	14	4	18	27	16	43	5	4	9	11	27	38	191
3	Attingal	4	16	20	2	9	11	1	-	1	3	3	6	1	-	1	4	2	6	45
4	Kollam Corpn.	7	34	41	4	12	16	10	13	23	11	15	26	-	3	3	9	45	54	163
5	Punalur	7	6	13	2	1	3	-	2	2	1	6	7	-	1	1	1	2	3	29
6	Kayamkulam	7	9	16	3	5	8	2	6	8	3	6	9	-	1	1	1	4	5	47
7	Mavelikkara	2	11	13	2	4	6	2	7	9	3	4	7	2	1	3	1	3	4	43
8	Alappuzha	8	14	22	3	3	6	4	11	15	5	6	11	-	2	2	1	3	4	60
9	Cherthala	3	1	4	1	1	2	2	2	4	2	2	4	1	2	3	1	-	1	18
10	Thiruvalla	4	15	19	4	4	8	2	9	11	-	6	6	-	2	2	1	1	2	48
11	Changanassery	7	12	19	3	7	10	2	7	9	2	6	8	-	5	5	-	1	1	52
12	Kottayam	2	14	16	3	2	5	2	11	13	2	11	13	-	4	4	-	-	-	51
13	Palai	2	3	5	-	3	3	-	-	-	1	4	5	-	2	2	1	2	3	18
14	Vaikom																			
15	Muvattupuzha	2	5	7	3	-	3	3	9	12	3	5	8	1	1	2	1	-	1	33
16	Kochi Corppn	15	57	72	6	24	30	16	34	50	-	-	-	2	8	10	2	87	89	251
17	Aluva	1	8	9	-	7	7	1	7	8	2	6	8	-	2	2	-	-	-	34

Table-2 Contd

Sl. No	Municipality/ Corporation	Primary School			Upper Primary Schools			High School/			HSS/VHSC			Colleges			Other Institutions			Grand Total
		Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
18	North Parur	5	6	11	1	1	2	2	9	11	2	6	8	1	-	1	-	-	-	33
19	Perubavur	4	7	11	-	1	1	3	3	6	3	3	6	-	1	1	-	1	1	26
20	Irinjalakuda	2	14	16	2	11	13	2	8	10	4	7	11	-	10	10	1	3	4	64
21	Kodugallur	3	4	7	-	1	1	2	-	2	2	2	4	-	2	2	-	-	-	16
22	Chalakkudy	3	2	5	-	1	1	3	3	6	1	1	2	1	1	2	3	2	5	21
23	Thrissur Corpn.	4	37	44	4	9	13	2	14	16	7	18	25	1	5	6	9	22	31	135
24	Guruvayoor	-	2	2	1	1	2	1	2	3	1	2	3	-	1	1	-	-	-	11
25	Kunnamkulam	1	11	12	1	3	4	2	6	8	3	2	5	-	1	1	1	2	3	33
26	Palakkad	12	9	21	6	7	13	4	9	13	4	5	9	2	1	3	3	3	6	65
27	Chittur-Thathamangalam	3	2	5	3	2	5	3	2	5	5	1	6	1	-	1	1	-	1	23
28	Thirur	3	17	20	1	8	9	-	1	1	2	4	6	1	-	1	-	3	3	40
29	Malappuram	5	9	14	1	3	4	2	7	9	2	1	3	1	-	1	2	7	9	40
30	Kozhikode-Corpn.	23	32	55	15	23	38	1	4	5	21	24	45	2	4	6	11	17	28	177
31	Vadakara	-	27	27	-	11	11	-	2	2	3	2	5	-	1	1	1	-	1	47
32	Thalassery	4	31	35	3	12	15	-	3	3	6	2	8	-	13	13	-	4	4	78
33	Kannur	4	2	6	6	5	11	4	3	7	4	3	7	-	6	6	3	13	16	53
34	Kasaragod	6	6	12	4	4	8	3	1	4	1	-	1	1	-	1	1	1	2	28

Table 3 - Number of Hospitals and other Institutions 2008

Sl. No	Municipality/ Corporation	Hospitals						Dispensaries & other Institutions						Maternity & Child Health Center					
		Govt		Private		Total		Govt		Private		Total		Govt		Private		Total	
		No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Neyyattinkara	3	436	10	590	13	1026	1	-	12	-	13	-	2	-	-	-	2	-
2	Thiruvananthapuram corpn.	19	7019	53	3141	72	10160	21	-	57	-	78	-	3	-	4	-	7	-
3	Attingal	2	100	8	325	10	425	2	-	25	-	27	-	1	10	3	120	4	130
4	Kollam corpn.	9	1665	32	2826	41	4481	11	-	90	-	101	-	12	-	5	27	17	27
5	Punalur	2	169	12	441	14	610	2	-	22	-	24	-	6	-	-	-	6	-
6	Kayamkulam	4	280	18	625	22	905	-	-	37	-	37	-	-	-	-	-	-	-
7	Mavelikkara	2	267	7	523	9	790	-	-	10	-	10	-	-	-	-	-	-	-
8	Alappuzha	8	1780	8	140	16	1920	3	-	127	-	130	-	6	-	-	-	6	-
9	Cherthala	3	302	3	493	6	795	-	-	39	10	39	10	-	-	-	-	-	-
10	Thiruvalla	3	200	6	1500	9	1700	1	-	22	-	23	-	-	-	-	-	-	-
11	Changanacherry	2	293	11	345	13	638	-	-	39	-	39	-	-	-	-	-	-	-
12	Kottayam	4	503	11	818	15	1321	-	-	-	-	-	-	-	-	-	-	-	-
13	Palai	3	341	5	545	8	886	-	-	38	-	38	-	1	-	-	-	1	-
14	Vaikom																		
15	Muvattupuzha	3	310	11	535	14	845	1	-	38	-	39	-	2	-	-	-	2	-
16	Kochi Corppn	18	2024	70	6313	88	8337	6	-	98	-	104	-	13	-	-	-	13	-
17	Aluva	2	237	12	840	14	1077	-	-	6	-	6	-	-	-	-	-	-	-

Table 3 (Contd....)

Sl. No.	Municipality/ Corporation	Hospitals						Dispensaries & other Institutions						Maternity & Child Health Centre					
		Govt		Private		Total		Govt		Private		Total		Govt		Private		Total	
		No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
18	North Parur	3	230	8	577	11	807	4	-	24	-	28	-	2	-	-	-	2	-
19	Perumbavoor	2	246	7	602	9	848	1	-	44	-	45	-	6	-	-	-	6	-
20	Irinjalakuda	2	246	6	137	8	383	2	-	15	-	17	-	1	-	-	-	1	-
21	Kodungallur	2	176	6	417	8	593	-	-	32	-	32	-	-	-	-	-	-	-
22	Chalakudy	1	144	8	545	9	689	2	-	27	-	29	-	3	-	-	-	3	-
23	Thrissur corpn.	6	1244	21	3210	27	4454	8	-	25	-	33	-	4	-	-	-	4	-
24	Guruvayur	1	35	3	115	4	150	1	-	1	-	2	-	1	-	-	-	1	-
25	Kunnamkulam	1	124	5	675	6	799	3	-	-	-	-	-	5	-	-	-	5	-
26	Palakkad	4	800	23	1150	27	1950	4	0	21	-	25	-	4	-	-	-	4	-
27	Chittoor- Thathamangalam	2	134	1	18	3	152	1	-	1	-	2	-	-	-	-	-	-	-
28	Thirur	9	199	12	380	21	579	2	-	-	-	2	-	-	-	-	-	-	-
29	Malappuram	4	187	5	486	9	673	1	-	27	-	28	-	-	-	-	-	-	-
30	Kozhikode Corpn.	9	4081	39	2417	48	6498	17	-	107	-	124	-	12	-	-	-	12	-
31	Vadakara	2	240	14	520	16	760	1	-	97	-	98	-	1	-	-	-	1	-
32	Thalasserry	1	541	16	1018	17	1559	3	-	14	-	17	-	-	-	-	-	-	-
33	Kannur	2	129	29	773	31	902	1	-	-	-	1	-	-	-	-	-	-	-
34	Kasaragod	2	286	11	546	13	832	1	-	22	-	23	-	-	-	-	-	-	-

Table 4- Registration units with Area and Population 2008

SL no	Municipality \Corporation	No of Reg units	Area in sq\km	Area Per Reg units	Mid year population	Population per Reg units	Densitry per Sq km
1	2	5	6	7	8	9	10
1	Neyyattinkara	1	20.05	20.05	74534	74534	3717
2	Thiruvananthapuram Corpn.	1	141.74	141.74	799296	799296	5639
3	Attingal	1	16.87	16.87	38117	38117	2259
4	Kollam Corporation	1	57.28	57.28	381159	381159	6654
5	Punalur	1	34.60	34.60	47949	47949	1386
6	Kayamkulam	1	21.79	21.79	69653	69653	3197
7	Mavelikara	1	12.65	12.65	28542	28542	2256
8	Alappuzha	1	46.77	46.77	178779	178779	3823
9	Cherthala	1	16.18	16.18	46458	46458	2871
10	Thiruvalla	1	27.52	27.52	58394	58394	2122
11	Changanacherry	1	13.5	13.5	54783	54783	4058
12	Kottayam	1	16.45	16.45	64004	64004	3892
13	Palai	1	16.06	16.06	23865	23865	1486
14	Vaikom	1	-	-	-	-	-
15	Muvattupuzha	1	13.18	13.18	30514	30514	2315
16	Kochi Corporation	1	94.88	94.88	619385	619385	6528
17	Aluva	1	7.18	7.18	25865	25865	3602
18	North Parur	1	9.02	9.02	31741	31741	3519
19	Perumbavoor	1	13.61	13.61	28014	28014	2058
20	Irrinjalakuda	1	11.24	11.24	29933	29933	2663
21	Kodungallur	1	17.4	17.4	35325	35325	2030
22	Chalakudy	1	25.23	25.23	50964	50964	2020
23	Thrissur Corpn	1	101.42	101.42	337693	337693	3329
24	Guruvayoor	1	7.48	7.48	21928	21928	2933
25	Kunnamkulam	1	34.18	34.18	54869	54869	1605
26	Palakkad	1	26.60	26.60	136539	136539	5133
27	Chittoor-Thathamangalam	1	14.71	14.71	34207	34207	2325
28	Thirur	1	16.55	16.55	56962	56962	3442
29	Malappuram	1	33.69	33.69	65923	65923	1957
30	Kozhikode Corpn.	1	84.2	84.2	449255	449255	5336
31	Vadakara	1	21.34	21.34	78451	78451	3676
32	Thalasserry	1	23.98	23.98	108523	108523	4526
33	Kannur	1	11.03	11.03	67253	67253	6097
34	Kasaragod	1	16.69	16.69	54554	54554	3269

Table 5 - Number of Burial Grounds, Cremation Grounds and Civil Registration Units

Sl. No	Municipality/ Corporation	Burial Grounds			Cremation Grounds			Total no. of Registration units	
		Mun/ Corp	Private	Total	Mun/ Corp.	Private	Total	No. of wards	No. of units
1	2	3	4	5	6	7	8	9	10
1	Neyyattinkara	1	4	5	-	3	3	41	1
2	Thiruvananthapuram Corpn	4	30	34	1	3	4	86	1
3	Attingal	-	5	5	1	-	1	24	1
4	Kollam Corpn	2	37	39	2	-	2	52	1
5	Punalur	1	20	21	1	-	1	32	1
6	Kayamkulam	1	14	15	1	2	3	41	1
7	Mavelikara	1	9	10	-	1	1	25	1
8	Alappuzha	3	2	5	-	19	19	50	1
9	Cherthala	-	6	6	1	4	5	28	1
10	Thiruvalla	1	1	2	-	1	1	32	1
11	Changanacherry	1	12	13	-	1	1	34	1
12	Kottayam	1	15	16	1	2	3	38	1
13	Palai	1	7	8	1	1	2	23	1
14	Vaikom	-	-	-	-	-	-	-	-
15	Muvattupuzha	-	8	8	1	-	1	25	1
16	Kochi Corporation	8	40	48	5	11	16	71	2
17	Aluva	1	7	8	-	3	3	21	1
18	North Parur	1	5	6	1	1	2	26	1
19	Perumbavoor	1	8	9	-	1	1	21	1
20	Irinjalakuda	1	5	6	-	-	-	25	1
21	Kodungallur	-	2	2	1	1	2	24	1
22	Chalakydy	1	13	14	-	-	-	33	1
23	Thrissur Corpn	5	2	7	1	-	1	52	6
24	Guruvayoor	1	4	5	2	1	3	15	1
25	Kunnamkulam	2	11	13	1	-	1	31	1
26	Palakkad	4	7	11	3	1	4	50	1
27	Chittoor-Thathamangalam	-	-	-	3	-	3	24	1
28	Thirur	2	-	2	-	-	-	28	1
29	Malappuram	1	10	11	1	1	2	24	1
30	Kozhikode Corpn.	2	9	11	5	1	6	39	1
31	Vadakara	1	8	9	1	-	1	44	1
32	Thalasserry	1	15	16	1	11	12	50	1
33	Kannur	1	13	14	2	-	2	39	1
34	Kasaragod	-	12	12	2	1	3	32	1

Table 6 - Vital events registered during the year 2008

Sl. No	Municipality/ Corporation	Live Births									Still Births					
		Total Events			Events to normal residents						Total Events			Events to normal residents		
		Male	Female	Total	Male	%	Female	%	Total	%	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Neyyattinkara	449	448	897	154	34.29	169	37.72	323	36	2	2	4	1	2	3
2	Thiruvananthapuram Corpn.	17652	16877	34529	3291	18.64	3038	18.00	6329	18.32	228	190	418	-	-	-
3	Attingal	829	820	1649	147	17.73	106	12.92	253	15.34	4	-	4	-	-	-
4	Kollam Corpn	6753	6435	13188	1684	24.93	1569	24.38	3253	24.67	14	14	28	7	6	13
5	Punalur	1410	1327	2737	218	15.46	206	15.52	424	15.49	6	-	6	2	1	3
6	Kayamkulam	2220	2093	4313	415	18.69	387	18.49	802	18.59	1	1	2	1	1	2
7	Mavelikara	1164	1196	2360	72	6.18	77	6.43	149	6.31	-	-	-	-	-	-
8	Alappuzha	4583	4296	8879	1235	26.94	992	23.09	2227	25.08	55	64	119	19	21	40
9	Cherthala	1939	1768	3707	148	7.63	161	9.10	309	8.33	2	1	3	1	-	1
10	Thiruvalla	1923	1913	3836	133	6.91	189	9.87	322	8.39	18	12	30	2	1	3
11	Changanacherry	1174	1144	2318	202	17.20	196	17.13	398	17.16	1	1	2	-	-	-
12	Kottayam	1520	1552	3072	148	9.73	154	9.92	302	9.83	8	5	13	1	-	-
13	Palai	1171	1106	2277	53	4.5	45	4.06	98	4.30	3	3	6	-	-	-
14	Vaikom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Muvattupuzha	1822	1679	3501	120	6.59	166	9.89	286	8.17	2	2	4	-	-	-
16	Kochi Corporation	8722	8398	17120	5494	62.99	5123	61.00	10617	62.01	70	57	127	32	27	59
17	Aluva	2852	2833	5685	116	4.67	108	3.81	224	3.94	4	7	11	-	-	-

Table 6 - Contd....

Sl. No	Municipality/ Corporation	Live Births									Still Births					
		Total Events			Events to normal residents						Total Events			Events to normal residents		
		Male	Female	Total	Male	%	Female	%	Total	%	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
18	North Parur	1477	1464	2941	98	6.63	83	5.67	181	6.15	3	4	7	-	1	1
19	Perumbavoor	1243	1163	2406	96	7.72	72	6.19	168	6.98	2	1	3	-	-	-
20	Irrinjalakuda	581	543	1124	40	6.88	31	5.71	71	6.32	3	6	9	-	-	-
21	Kodungallur	2971	2971	5730	89	2.99	79	2.66	168	2.93	-	-	-	-	-	-
22	Guruvayour	106	62	168	7	6.60	8	12.90	15	8.93	-	-	-	-	-	-
23	Thrissur Corpn	9317	9994	19311	1112	11.93	1205	12.05	2317	11.99	98	25	123	9	6	15
24	Chalakkudy	1966	1908	3874	231	11.75	226	11.84	457	11.80	7	5	12	1	1	2
25	Kunnamkulam	2017	2010	4027	181	8.97	202	10.04	383	9.51	14	12	26	-	-	-
26	Palakkad	7528	7290	14818	2947	39.14	2613	35.84	5560	37.52	25	25	50	13	11	24
27	Chittoor-Thathamangalam	30	39	69	1	3.33	3	7.69	4	5.79	1	-	1	-	-	-
28	Thirur	3715	3696	7411	282	7.59	266	7.19	548	7.39	18	9	27	1	1	2
29	Malappuram	3883	3700	7583	328	8.44	311	8.40	639	8.43	26	16	42	-	-	-
30	Kozhikode Corporation	19257	18620	37877	2278	11.83	2560	13.75	4838	12.77	258	217	475	28	23	51
31	Vadakara	1099	1209	2308	246	22.38	237	19.60	483	20.93	6	1	7	1	3	4
32	Thalasserry	6690	6316	13006	1517	22.68	1456	23.05	2973	22.85	49	39	88	3	6	9
33	Kannur	3336	3200	6536	318	9.53	368	11.5	686	10.49	17	17	34	2	1	3
34	Kasaragod	5013	4728	9741	482	9.62	425	8.99	907	9.31	30	40	70	7	9	16

Table 6 - Contd.....

Sl. No	Municipality/ Corporation	Infant Death						Other Deaths					
		Total Events			Events to normal residents			Total Events			Events to normal residents		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Neyyattinkara	-	-	-	-	-	-	370	252	622	215	189	404
2	Thiruvananthapuram Corpn.	445	333	778	-	-	-	7130	4359	11489	1598	1044	2642
3	Attingal	-	1	1	-	-	-	139	106	245	64	47	111
4	Kollam Corpn	32	34	66	-	-	-	1825	1284	3109	571	430	1001
5	Punalur	5	1	6	-	1	1	331	249	580	164	149	313
6	Kayamkulam	-	-	-	-	-	-	252	156	408	183	105	288
7	Mavelikara	3	5	8	1	-	1	392	262	654	89	72	161
8	Alappuzha	31	25	56	6	4	10	801	601	1402	405	374	779
9	Cherthala	3	2	5	-	-	-	387	284	674	51	58	109
10	Thiruvalla	24	13	37	-	2	2	947	534	1481	218	151	369
11	Changanacherry	1	1	2	-	-	-	200	150	350	103	94	197
12	Kottayam	21	12	33	1	1	2	250	393	643	103	175	278
13	Palai	2	1	3	1	-	1	238	156	394	64	44	108
14	Vaikom	-	-	-	-	-	-	-	-	-	-	-	-
15	Muvattupuzha	1	2	3	1	-	1	271	234	505	71	62	133
16	Kochi Corporation	193	107	300	66	38	104	5129	3097	8226	3334	1765	5099
17	Aluva	9	6	15	-	-	-	366	242	608	98	62	160

Table 6 - Contd.

Sl. No	Municipality/ Corporation	Infant Death						Other Deaths					
		Total Events			Events to normal residents			Total Events			Events to normal residents		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
18	North Parur	2	1	3	-	-	-	263	186	449	98	73	171
19	Perumbavoor	3	1	4	-	-	-	276	172	448	82	63	145
20	Irinjalakuda	1	-	1	-	-	-	167	118	285	89	82	171
21	Kodungallur	10	8	18	1	1	2	305	218	523	46	38	84
22	Chalakydy	3	9	12	1	-	1	399	262	661	155	116	271
23	Thrissur Corpn	-	12	12	-	-	-	2312	2939	5251	615	859	1474
24	Guruvayoor	-	-	-	-	-	-	66	62	128	55	51	106
25	Kunnamkulam	4	3	7	-	-	-	337	272	609	168	159	327
26	Palakkad	25	25	50	16	14	30	1367	900	2267	528	241	769
27	Chittoor-Thathamangalam	-	-	-	-	-	-	174	112	286	140	92	232
28	Thirur	9	7	16	-	-	-	327	219	546	83	65	148
29	Malappuram	10	15	25	2	-	2	255	178	433	86	72	158
30	Kozhikode Corporation	540	422	962	56	64	120	5785	3404	9189	998	899	1897
31	Vadakkara	5	3	8	3	2	5	450	610	1060	249	301	550
32	Thalasserry	37	30	67	3	3	6	1146	820	1966	359	304	663
33	Kannur	23	26	49	2	1	3	410	322	732	155	147	302
34	Kasaragod	16	18	34	4	3	7	486	355	841	154	98	252

Table 6 -Contd

Sl.No	Municipality/ Corporation	Total Death								
		Total Events			Events to normal residents					
		Male	Female	Total	Male	%	Female	%	Total	%
1	2	3	4	5	6	7	8	9	10	11
1	Neyyattinkara	372	254	626	216	58.06	191	75.20	407	65.02
2	Thiruvananthapuram Corpn.	7803	4930	12733	1598	20.47	1044	21.18	2642	20.75
3	Attingal	139	109	248	64	46.04	47	43.12	111	44.76
4	Kollam Corpn	1857	1328	3185	571	30.75	431	32.45	1002	31.46
5	Punalur	336	250	586	164	48.80	150	60.00	314	53.58
6	Kayamkulam	252	156	408	183	72.62	105	67.31	288	70.59
7	Mavelikara	395	270	665	90	22.78	72	26.67	162	24.36
8	Alappuzha	832	626	1458	411	49.40	378	60.38	789	54.12
9	Cherthala	392	289	681	51	13.01	58	20.07	109	16.01
10	Thiruvalla	971	551	1522	218	22.45	154	27.95	372	24.44
11	Changanacherry	201	153	354	103	51.24	94	61.43	197	55.65
12	Kottayam	271	406	677	104	38.38	176	43.35	280	41.36
13	Palai	240	157	397	65	27.08	44	28.03	109	27.46
14	Vaikom	-	-	-	-	-	-	-	-	-
15	Muvattupuzha	272	236	509	71	26.10	62	26.27	133	26.13
16	Kochi Corporation	5322	3226	8548	3400	63.89	1803	55.89	5203	66.87
17	Aluva	375	249	624	98	26.13	62	22.90	160	25.64

Sl.No	Municipality/ Corporation	Total Death								
		Total Events			Events to normal residents					
		Male	Female	Total	Male	%	Female	%	Total	%
1	2	3	4	5	6	7	8	9	10	11
18	North Parur	265	187	452	98	39.98	73	39.04	171	37.83
19	Perumbavoor	279	173	452	82	29.39	63	36.41	145	32.07
20	Irrinjalakuda	168	118	286	89	31.90	82	69.49	171	59.79
21	Kodungallur	315	226	541	47	14.92	39	17.26	86	15.90
22	Chalakydy	402	271	673	156	38.80	116	42.80	272	40.41
23	Thrissur Corpn	2312	2939	5251	615	26.60	859	29.23	1474	28.07
24	Guruvayoor	66	62	128	55	83.33	51	82.25	106	82.81
25	Kunnamkulam	341	275	616	168	49.27	159	57.82	327	53.08
26	Palakkad	1392	928	2320	544	39.08	257	27.69	801	34.52
27	Chittoor- thathamangalam	174	112	286	140	80.46	92	82.14	232	81.12
28	Thirur	336	233	569	83	24.70	65	27.90	148	26.01
29	Malappuram	265	193	458	88	33.20	72	37.31	160	34.93
30	Kozhikode Corporation.	6325	3877	10202	1054	16.66	971	25.04	2025	19.84
31	Vadakara	455	618	1073	252	55.38	305	49.35	557	51.91
32	Thalasserry	1183	855	2038	362	30.60	307	35.91	669	32.83
33	Kannur	433	353	786	157	36.26	148	41.93	305	38.80
34	Kasaragod	505	377	882	158	31.29	101	26.80	259	29.37

Table 7 - Deaths according to causes 2008

Sl No	Municipality/ Corporation	Suicide	Accident	Pneumonia	B.P	T.B	Aids	Diabetics	Hydrophobia / Rabies	Pulmonary Disease	Other Internal case	Dysentery & Diarrhea	Respiratory Diseases	Others
1	Neyyattinkkara	6	2	-	8	3	-	9	-	-	-	-	17	44
2	Thiruvananthapuram	25	260	377	262	168	11	521	11	-	1466	1	629	2036
3	Attingal	15	7	4	-	-	-	2	-	7	-	-	-	94
4	Kollam Corpn	63	105	11	82	-	-	39	-	-	533	-	214	44
5	Punalur	30	18	1	23	2	-	12	-	-	17	-	14	27
6	Kayamkulam	5	7	2	10	-	-	14	-	-	-	-	23	48
7	Mavelikara	17	8	6	2	2	-	4	-	-	1	-	8	85
8	Alappuzha	-	-	-	-	-	-	-	7	124	-	-	-	1136
9	Cherthala	3	4	2	3	4	-	1	3	2	-	2	-	44
10	Thiruvalla	7	45	12	53	-	-	83	-	-	-	-	50	901
11	Changanacherry	6	11	-	-	-	-	4	-	136	-	-	16	81
12	Kottayam	-	-	-	-	-	-	42	-	2	-	-	-	601
13	Palai	-	5	-	1	1	-	18	-	-	-	-	3	266
14	Vaikom	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Muvattupuzha	-	-	-	-	-	-	-	-	-	-	-	-	431
16	Kochi Corpora.	-	313	-	-	102	-	598	-	-	-	342	734	160
17	Aluva	-	-	4	7	2	-	10	-	-	-	-	9	185

Table 7 Continued.....

Sl.No	Municipality/ Corporation	Suicide	Accident	Pneumonia	B.P	T.B	Aids	Diabetics	Hydrophobia / Rabies	Pulmonary Disease	Other Internal ccase	Dysentery & Diarrhea	Respiratory Diseases	Others
18	North Parur	11	3	-	-	-	-	-	-	-	-	-	80	85
19	Perumbavoor	-	-	-	-	-	-	-	-	73	-	-	-	223
20	Irrinjalakuda	-	-	-	-	-	-	-	-	-	20	-	-	136
21	Kodungallur	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Chalakydy	29	24	4	-	-	-	-	-	19	-	11	48	390
23	Thrissur Corpn	-	-	-	-	-	-	-	-	-	-	-	-	-
24	Guruvayoor	2	1	-	3	-	-	5	-	-	3	-	6	-
25	Kunnamkulam	-	20	-	-	2	-	8	-	-	20	-	90	110
26	Palakkad	-	-	-	-	-	-	-	-	-	-	4	-	1774
27	Chittoor- Thathamangalam	9	4	-	10	4	-	-	-	33	5	-	29	134
28	Thirur	-	10	-	16	1	-	10	-	87	-	-	-	115
29	Malappuram	-	-	3	16	-	-	2	-	-	9	-	13	256
30	Kozhikode Corpn	101	329	52	86	6	9	108	-	-	11	1	617	6124
31	Vadakara	-	-	-	-	-	-	-	-	-	-	-	-	301
32	Thalasserry	-	-	-	-	-	-	-	-	-	-	-	-	908
33	Kannur	-	-	-	-	-	-	-	-	-	-	-	-	354
34	Kasaragod	-	-	-	-	29	-	-	-	58	-	19	-	52

Table 7 Continued.....

Sl.No	Municipality/ Corporation	Liver Desease	Kidney Diseases	Cancer	Malaria	Heart Failure	Senility	Fever	Jaundice	Paralysis	Neuro	Total
1	Neyyattinkkara	3	5	9	-	32	-	6	2	-	4	160
2	Thiruvananthapuram	418	542	1284	-	2777	1007	-	30	169	-	11994
3	Attingal	-	-	6	-	109	-	-	2	-	-	246
4	Kollam Corpn	79	42	131	-	1245	487	-	5	38	-	3118
5	Punalur	9	5	21	-	267	137	-	-	2	-	585
6	Kayamkulam	8	2	24	-	206	56	-	-	2	-	407
7	Mavelikara	6	2	27	-	421	68	-	-	5	-	662
8	Alappuzha	-	-	191	-	-	-	-	-	-	-	1458
9	Cherthala	-	-	14	-	25	-	5	-	-	-	109
10	Thiruvalla	17	-	22	-	282	-	-	-	-	-	1472
11	Changanacherry	-	-	16	-	-	84	-	-	-	-	354
12	Kottayam	-	-	30	-	-	-	-	1	-	-	676
13	Palai	2	-	3	-	94	-	3	-	-	-	396
14	Vaikom	-	-	-	-	-	-	-	-	-	-	-
15	Muvattupuzha	-	-	-	-	-	-	-	-	-	-	509
16	Kochi Corpora.	468	230	687	-	1967	-	-	-	35	-	5636
17	Aluva	7	-	160	-	192	45	-	1	1	-	623

Table 7 Continued.....

Sl No	Municipality/ Corporation	Liver Desease	Kidney Diseases	Cancer	Malaria	Heart Failure	Senility	Fever	Jaundice	Paralysis	Neuro	Total
18	North Parur	9	5	25	-	226	-	-	-	-	-	444
19	Perumbavoor	-	-	16	-	140	-	-	-	-	-	452
20	Irrinjalakuda	-	-	12	-	118	-	-	-	-	-	286
21	Kodungallur	-	-	-	-	-	-	-	-	-	-	0
22	Chalakydy	-	-	20	-	128	-	-	-	-	-	623
23	Thrissur Corpn	-	-	-	-	640	-	-	-	-	-	640
24	Guruvayoor	2	-	8	-	8	-	-	-	10	-	48
25	Kunnamkulam	15	17	24	-	192	-	-	1	-	-	499
26	Palakkad	-	-	114	-	428	-	-	-	-	-	2320
27	Chittoor- Thathamangalam	-	-	11	-	25	-	1	1	-	-	266
28	Thirur	3	10	69	-	192	-	-	-	56	-	569
29	Malappuram	2	1	28	-	85	21	-	-	12	-	448
30	Kozhikode Corpn.	112	125	631	-	932	352	-	12	-	-	9608
31	Vadakara	-	-	28	-	744	-	-	-	-	-	1073
32	Thalasserry	-	-	92	-	1038	-	-	-	-	-	2038
33	Kannur	-	-	47	-	385	-	-	-	-	-	786
34	Kasaragod	-	-	59	-	-	-	46	-	-	-	263

Table 8 - Results of Spot Check Survey - 2008

Sl. No	Municipality/ Corporation	No. of wards selected	Total no. of House holds	No. of House holds visited	No. of events detected to normal residents											
					Live Births				Infant Deaths				Other deaths			
					Enumerated	Registered	N.R	occurred outside	Enumerated	Registered	N.R	occurred outside	Enumerated	Registered	N.R	occurred outside
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Neyyattinkara	15	7522	6941	244	44	-	200	-	-	-	-	150	114	1	35
2.	Thiruvananthapuram	15	47902	22705	638	596	-	42	-	-	-	-	207	206	1-	-
3.	Attingal	15	7501	7501	214	116	-	98	-	-	-	-	131	66	-	65
4.	Kollam Corpn	15	25200	20099	770	629	-	141	-	-	-	-	305	242	-	63
5.	Punalur	15	6022	6022	236	172	-	64	2	-	-	2	164	128	7	29
6.	Kayamkulam	15	5902	5902	302	211	-	91	-	-	-	-	112	71	7	34
7.	Mavelikkara	15	4171	4171	97	44	-	53	-	-	-	-	75	51	2	22
8.	Alappuzha	25	19676	19676	821	697	-	124	-	-	-	-	413	339	-	74
9.	Cherthala	15	11058	11058	68	68	-	27	-	-	-	-	48	48	-	9
10.	Thiruvalla	15	6221	6221	104	80	-	24	-	-	-	-	96	77	-	19
11.	Changanassery	15	7630	7240	198	90	-	108	-	-	-	-	143	75	9	59
12.	Kottayam	15	5113	5113	221	94	1	126	-	-	-	-	138	101	1	36
13.	Palai	15	5581	3111	101	55	-	46	-	-	-	-	110	92	-	18
14.	Vaikom	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.	Muvattupuzha	15	6134	6134	130	130	-	66	1	1	-	1	52	51	1	18
16.	Kochi Corporation	15	22732	22732	922	806	-	116	4	3	-	1	373	359	6	8
17.	Aluva	15	4951	4951	224	224	-	97	-	-	-	-	160	160	-	70

Table 8 (Contd....)

Sl. No.	Municipality/ Corporation	No. of wards selected	Total no. of House holds	No. of House holds visited	No. of events detected to normal residents											
					Live Births				Infant Deaths				Other deaths			
					Enume rated	Registered	N.R	Occurred outside	Enume rated	Registered	N.R	occurred outside	Enume rated	Registered	N.R	occurred outside
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
18.	North Parur	15	4646	4464	162	96	-	66	-	-	-	-	90	64	-	26
19.	Perumbavoor	15	4644	4644	209	128	-	81	-	-	-	-	128	88	-	40
20.	Irrinjalakuda	15	6602	4294	177	19	-	158	-	-	-	-	102	56	-	46
21.	Kodungallur	15	5237	5237	168	125	-	43	-	-	-	-	86	69	-	17
22.	Chalakydy	15	6110	5680	343	215	-	128	1	-	-	1	97	79	2	16
23.	Thrissur Corpn*	15	9297	8903	269	269	-	34	-	-	-	-	170	170	-	11
24.	Guruvayoor	15	3537	3537	102	5	-	97	-	-	-	-	55	29	-	26
25.	Kunnamkulam	15	10162	6153	280	167	-	113	-	-	-	-	202	151	-	51
26.	Palakkad	15	9709	9709	141	119	-	22	2	-	-	-	62	55	-	7
27.	Chittoor- Thathamangalam	15	4372	4372	157		-	157	-	-	-	-	137	106	-	31
28.	Thirur	15	5962	5962	423	271	-	152	1	-	-	1	116	89	-	27
29.	Malappuram	15	8793	8896	639	568	-	71	2	2	-	-	158	135	1	22
30.	Kozhikode Corpn.	15	42963	23268	856	787	-	69	5	-	-	-	397	362	19	16
31.	Vadakara	15	5015	5015	271	79	-	192	1	-	-	1	112	84	-	28
32.	Thalasserry	15	5767	3560	258	218	-	40	-	-	-	-	114	98	-	16
33.	Kannur	15	4313	4313	317	192	-	125	2	-	-	1	151	98	-	50
34.	Kasaragod	15	7137	484	89	72	-	17	-	-	-	-	42	42	-	-

* Include results of six wards only

Table 9 - Under Registration and Occurrence of outside events

Sl. No	Municipality/ Corporation	% Of under registration		% of outside registration	
		Births	Deaths	Births	Deaths
1	2	3	4	5	6
1	Neyyattinkara	-	0.87	81.97	23.33
2	Thiruvananthapuram	--	0.48	6.58	-
3	Attingal	-	-	45.79	49.6
4	Kollam Corpn	-	-	18.31	20.66
5	Punalur	-	5.19	27.12	17.68
6	Kayamkulam	-	8.97	30.13	30.36
7	Mavelikara	-	3.77	54.64	29.33
8	Alappuzha	-	-	15.10	17.92
9	Cherthala	-	-	39.71	18.75
10	Thiruvalla	-	-	23.08	19.79
11	Changanacherry	-	10.71	54.55	41.25
12	Kottayam	1.05	0.98	57.01	26.09
13	Palai	-	-	45.54	16.36
14	Vaikom	-	-	-	-
15	Muvattupuzha	-	1.92	50.77	35.29
16	Kochi Corporation	-	1.64	12.58	2.23
17	Aluva	-	-	43.3	43.75
18	North Parur	-	-	40.74	28.89
19	Perumbavoor	-	-	38.8	1.3
20	Irinjalakuda	-	-	89.26	45.09
21	Kodungallur	-	-	25.6	19.77
22	Chalakydy	-	2.46	37.32	16.49
23	Thrissur Corpn	-	-	12.6	6.4
24	Guruvayoor	-	-	95.09	47.27
25	Kunnamkulam	-	-	40.35	25.24
26	Palakkad	-	-	15.60	11.29
27	Chittoor- Thathamangalam	-	-	100	22.62
28	Thirur	-	-	35.93	23.73
29	Malappuram	-	0.735	11.11	13.92
30	Kozhikode Corpn.	-	4.99	8.06	4.03
31	Vadakara	-	-	70.85	25.00
32	Thalasserry	-	-	15.5	14.04
33	Kannur	-	2.97	39.43	33.11
34	Kasaragod	-	-	19.10	-

Table 10 - Registered Vital Rates and Adjusted Residential Vital rates 2008

Sl. No.	Municipality/ Corporation	Registered vital rates		Adjusted residential vital rates	
		Births	Deaths	Births	Deaths
1	2	3	4	5	6
1	Neyyattinkara	4.334	5.46	24.04	7.185
2	Thiruvananthapuram	7.91	3.31	8.47	3.32
3	Attingal	6.64	2.91	12.24	5.77
4	Kollam Corpn.	8.53	2.62	10.44	3.30
5	Punalur	8.84	6.55	12.13	8.39
6	Kayamkulam	11.51	4.13	16.47	6.52
7	Mavelikara	5.22	5.68	11.51	8.35
8	Alappuzha	12.46	4.41	14.67	5.37
9	Cherthala	6.65	2.34	11.03	2.89
10	Thiruvalla	5.51	6.37	7.16	7.94
11	Changanacherry	7.27	3.60	16.00	6.86
12	Kottayam	4.72	4.38	11.09	5.98
13	Pulci	4.11	4.57	7.55	5.46
14	Vallom	-	-	-	-
15	Muvattupuzha	9.37	4.36	19.03	6.88
16	Kochi Corporation	17.14	8.40	19.61	8.73
17	Aluva	8.66	6.19	15.27	11
18	North Parur	5.70	5.39	9.62	7.58
19	Perumbavoor	6	5.18	9.8	7.54
20	Immudlakuda	2.37	5.71	22.06	6.40
21	Kodungallur	4.76	2.43	6.4	3.03
22	Chittakkudy	8.97	5.34	14.32	6.55
23	Thiruvananthapuram Corpn	6.86	4.36	7.7	4.7
24	Chavayoor	0.68	4.83	13.8	9.16
25	Kannamkulam	6.98	5.95	11.7	7.96
26	Kozhikkad	40.72	5.63	48.25	6.62
27	Thiruvananthapuram Corporation	0.12	6.769	11.6	8.75
28	Thiruvananthapuram	9.62	2.60	15.02	3.04
29	Malappuram	9.69	2.43	10.90	2.85
30	Kozhikkode Corpn.	10.77	4.51	11.71	4.95
31	Vadakkara	6.16	7.10	21.12	9.47
32	Thiruvananthapuram	27.4	6.16	32.43	7.17
33	Kozhikkode	10.20	4.54	16.84	7.00
34	Kozhikkode	16.63	4.75	20.58	4.75

APPENDIX

Method of calculation of adjusted residential vital rates

Residential vital rates can broadly be defined as the rate of occurrence of vital events among the normal residents of an area in a year. In order to calculate the percentage of under registration, the events occurring among persons coming to the town/city to avail themselves of better medical facilities are excluded and those of normal residents who are going outside the town are included.

- | | |
|--|--|
| 1. Percentage of under registration | $\frac{\text{Number of events occurred to normal residents inside the town but not registered} \times 100}{\text{Number of events occurred among normal residents inside the town registered and not registered}}$ |
| 2. Percentage of events occurred outside the town to normal residents | $\frac{\text{Number of events occurred among normal residents outside the town registered and unregistered} \times 100}{\text{Number of events enumerated and occurred among normal residents inside and outside the town}}$ |
| 3. Registered birth/death rate to normal residents | $\frac{\text{Total no of birth/death occurred to normal residents and registered in the town} \times 1000}{\text{Mid year population of the town}}$ |
| 4. Residential birth/death rate to normal residents occurred inside the town (weighted for under registration) | $\frac{\text{Registered birth/death rate} \times 100}{(100 - \text{percentage of under registration})}$ |
| 5. Adjusted Residential birth/death rate (weighted for outside events) | $\frac{\text{Residential birth/death rate to normal residents occurred inside the town (weighted for under registration)} \times 100}{(100 - \text{Percentage of events occurred outside the town to normal residents})}$ |

764

