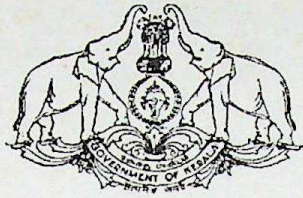
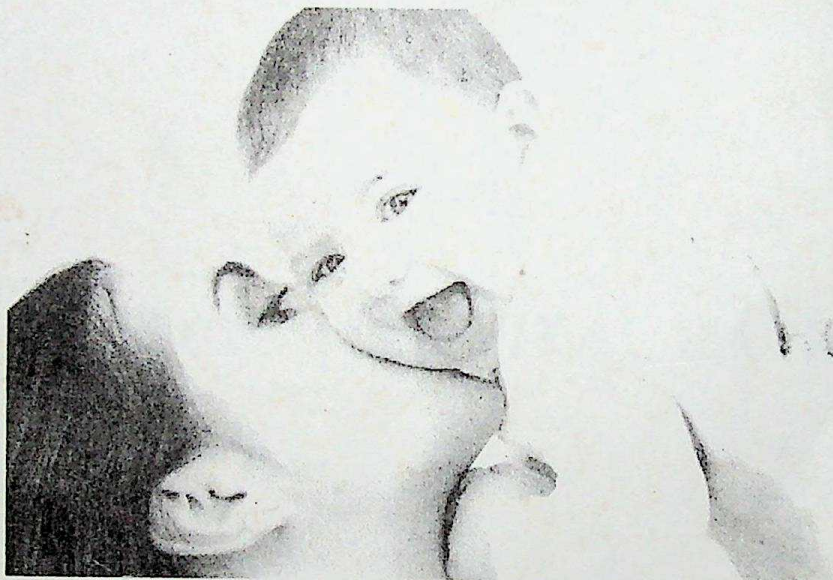


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GOVERNMENT OF KERALA



**RESIDENTIAL VITAL RATES
2007**

Directorate of Economics & Statistics
Thiruvananthapuram
2009



GOVERNMENT OF KERALA

RESIDENTIAL VITAL RATES

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Thiruvananthapuram
2009



GOVERNMENT OF INDIA

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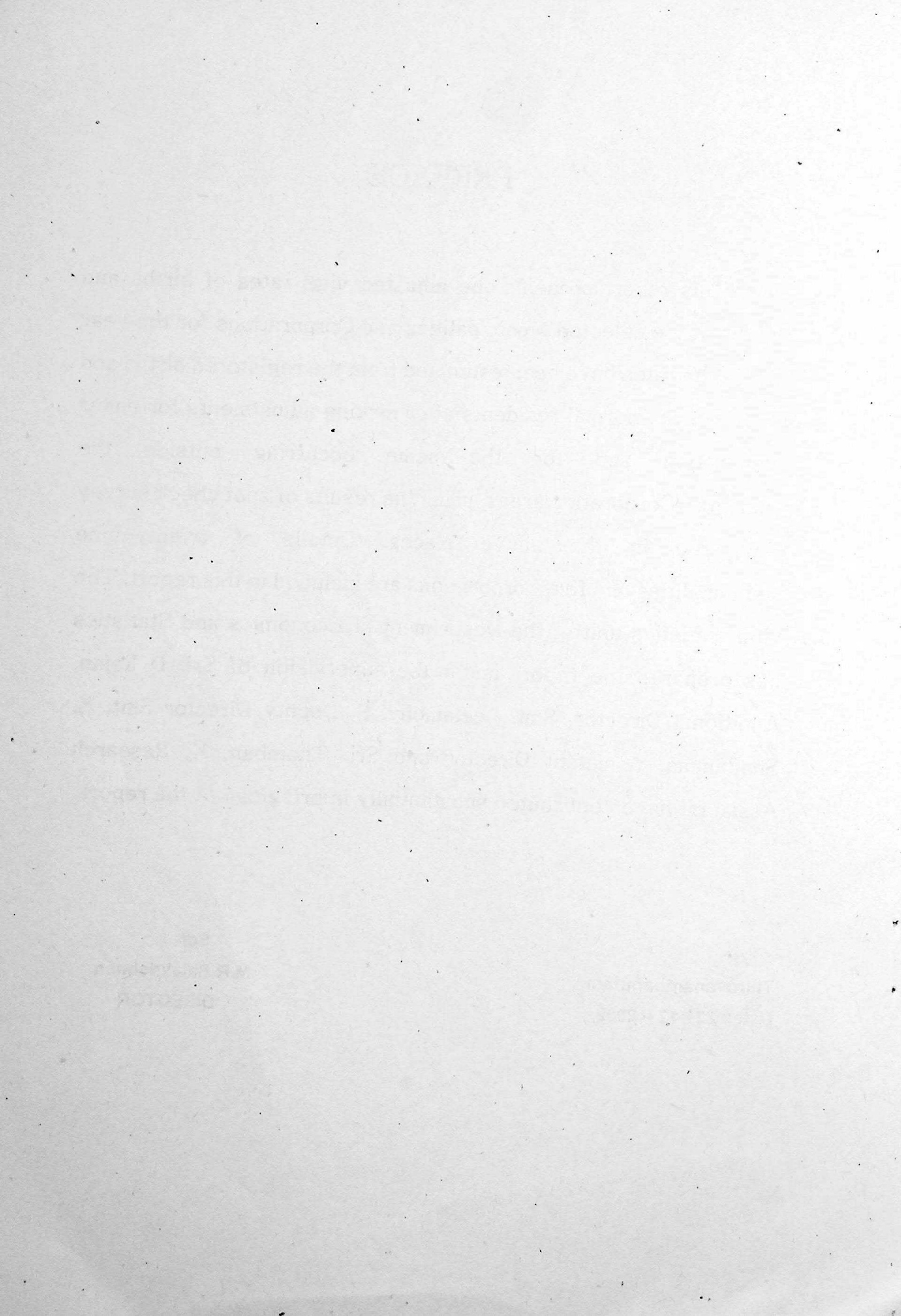
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PREFACE

This report presents the adjusted vital rates of births and deaths of the selected Municipalities and Corporations for the year 2007. 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. The vital statistics unit of the Department of Economics and Statistics has prepared the report under the supervision of Sri. D Rajan, Additional Director, Smt. Leelamony. S, Deputy Director Smt. K. Shailamma, Assistant Director and Sri. Thamban. K, Research Assistant have contributed substantially in bringing out the report.

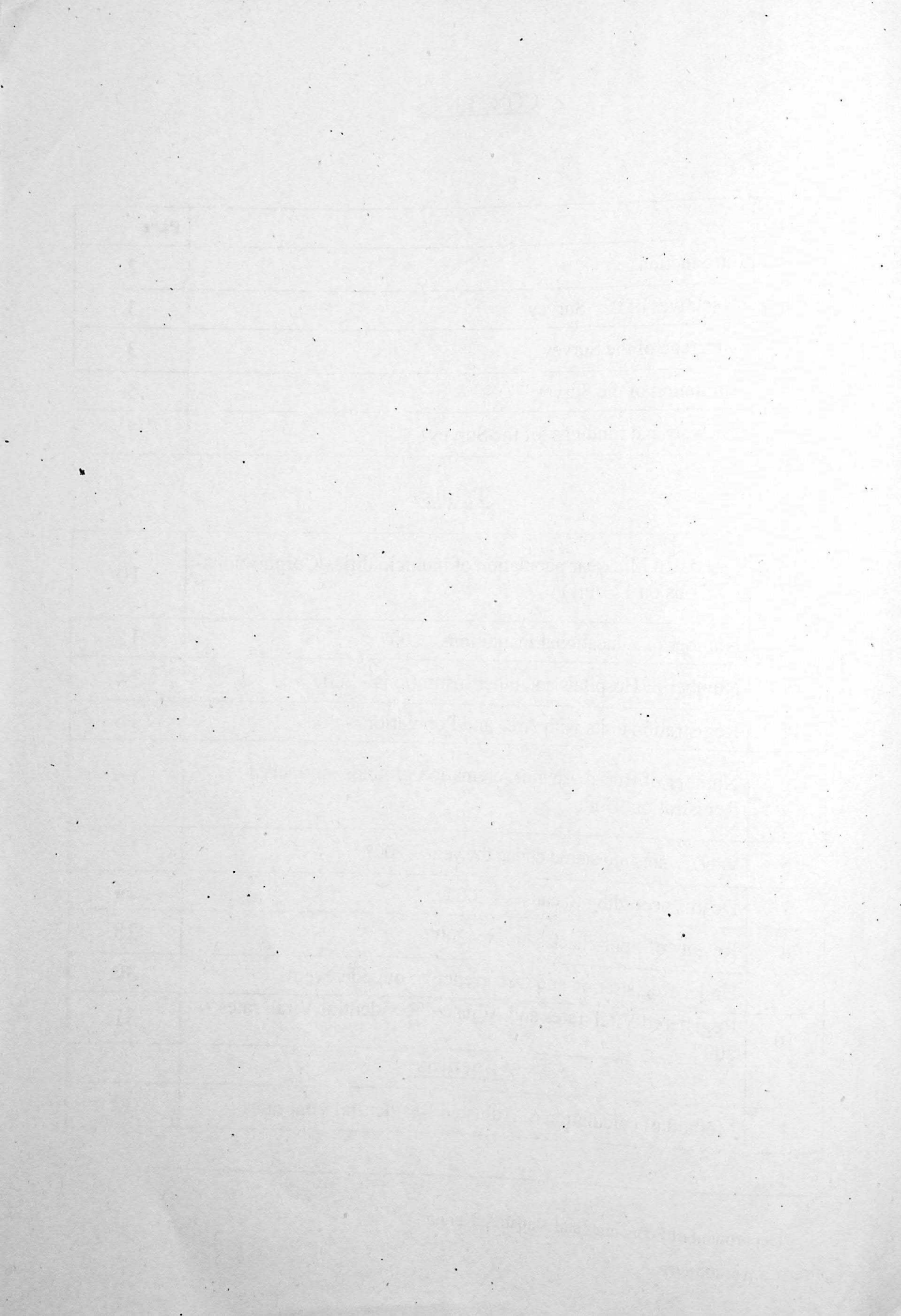
Thiruvananthapuram,
Date: 22 -12 - 2009.

Sd/-
M.R.Balakrishnan
DIRECTOR



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ANNUAL RESIDENTIAL VITAL RATES 2007

Introduction

The Civil Registration System was introduced in India under the Births and Deaths Registration Act chartered 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.

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 unawareness about 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 Stillbirths 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 the 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	Chalakydy (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 (M)	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 fieldwork 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.

Analysis and Findings of the Survey

Table 1 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 233, followed by

Thiruvananthapuram Corporation with 217 numbers. In the case of municipalities, the highest number of institution, 85 is recorded from Thalassery municipality. Guruvayur Municipality have only 9 Educational Institutions, Kochi Corporation stood first pertaining to the number of Technical Institutions in Private Sector.

Details of Medical Institutions and their number both 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 4079. In the case of private hospitals the maximum number of hospitals is recorded in Cochin Corporation with 68 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 106 and 97 respectively.

The number of maternity and child health centers in public sector was highest in Kozhikkode Corporation with 20 followed by 13 in Cochin and 12 in Kollam Corporations. In the private sector such facilities do not exist anywhere else in the entire state except in Thiruvananthapuram, Kollam, Kozhikkode Corporations 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 among the corporation followed by Thrissur Corporation with 101.42 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. 6607 /sq. km. followed by Kochi Corporation

with 6493/sq.km. In the case of Municipality, it is the highest in Kannur with 6054/ sq. km. and lowest is in Punalur Municipality with 1383/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 followed by Thrissur Corporation with 5 . Cochin Corporation has the highest number of private burial grounds i.e. 40 followed by Kollam Corporation with 37. Vaikom and Chittoor Thathamangalam municipality have no burial grounds both in Government sector and in private sector. More number of burial groundas 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 their respective centers. During the year under report 39119 live births, which is seen to be the highest, is registered in Kozhikkode Corporation out of which 5412 events were pertaining to the usual residents. Thiruvananthapuram Corporation stood in the second place with 35999 live births. In the case of municipalities the highest number 14893 was recorded in Palakkad municipality and the lowest 137 in Chittor Thathamangalam municipality.

The maximum number of stillbirths 476 was registered in Kozhikkode Corporation. Thiruvananthapuram Corporation stood in the second place with 418 No still births were reported in Attingal, Guruvayur, Perumbavoor municipalities.

In the case of infant deaths, the highest number 1029 was recorded in Kozhikkode Corporation out of which 545 are male and 484 are female and infant death corresponds to normal residents were 251. Thiruvananthapuram Corporation stood at the second place with 774 numbers. In the case of Municipalities the highest number of infant deaths 95 was registered in Palakkad municipality. The table reveals that no infant death was registered in Attingal, Changanassery, Aluva, Kodungallur and Chittur-Thattamangalam municipalities during the year under report

The number of deaths registered in Thiruvananthapuram Corporation was 12655 which is the highest in the state followed by Kozhikkode Corporation with 8885. In the case of municipality it was the highest in Palakkad municipality with 2020 numbers and the lowest 131 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 14 AIDS cases were reported from the selected centers, of which 9 cases from Thiruvananthapuram Corporation, 3 cases from Kozhikkode Corporation and 2 cases from Kochi Corporation. No specific causes of death have been reported from Malappuram and Thalassery municipalities.

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 Kasargode municipality were registered in the respective registration units. Out of 31 infant death enumerated, 6 deaths were occurred outside the registration units.

In the case of deaths, about 81% of enumerated deaths were registered in the respective registration units. Only 14% of deaths were occurred out side the units. Ie, most of the cases were occurred within the station. Cent percent registration of deaths were not done in Kochi and Kozhikkode corporations, Neyyattinkara, Punalur, Kayamkulam, Mavelikkara, Kottayam, North Paravur, Changanassry, Perumbavoor, Chalakkudy, , Vadakara , Chittur Thathamangalam, Thalassery 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 Kasargod municipality. In the case of deaths, cent percent registration was reported from 18 centers and under registration was reported from the remaining centers. The highest percentage of under registration of death 11.76% reported from Kayamkulam municipality and the lowest 0.66% in Thalassery Municipality.

This table reveals that percentage of outside registration of births was highest in Guruvayur Municipality, (96.27%) and lowest in Palakkad municipality

(2.42%). In the case of deaths, the highest percentage 58.73% was recorded in Guruvayur municipality followed by Aluva municipality with 51.92% and no outside registration was reported from Palakkad 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 registered birth rate 39.63 is recorded in Palakkad municipality followed by Thalassery Municipality with 28.48 and the lowest in Chittur Thathamangalam with 0.7. In terms of registered death rate, it is highest in Kochi Corporation (8.67) followed by Mavelikara municipality with 7.40 and the lowest in Kodungallur municipality (2.14).

The table reveals that, in the case of the adjusted residential vital rates of Births, highest rate 40.61 was reported from Palakkad municipality followed by Thalassery and Neyyattinkara Municipalities with 31.57 and 23.77 respectively. The lowest rate 6.64 was reported from Kodungallur municipality. As regards death, the adjusted residential vital rates was highest (9.59) in Vadakara Municipality followed by Irinjalakuda Municipality with 9.31 and the lowest 2.42 was in Thiruvananthapuram Corporation.

Executive Summary

The survey result reveals that under registration of birth events and death 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 take necessary steps to minimize the extent of under registration.

Table 1 - Estimated Mid-year Population of Municipalities and Corporations from 2001 to 2007 (as on 1st July)

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

Table 1 Contd.

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

Table-2, Number Of Educational Institutions-2007

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	7	11	2	4	6	1	-	1	1	2	3	42
2	Thiruvanthapuram	42	19	61	24	14	38	14	6	20	22	29	51	5	4	9	11	27	38	217
3	Attingal	4	16	20	2	11	13	1	-	1	3	3	6	2	-	2	2	2	4	47
4	Kollam Corpn.	7	33	40	4	12	16	10	13	23	11	15	26	1	9	10	8	43	51	166
5	Punalur	7	6	13	2	1	3	-	2	2	1	6	7	-	1	1	1	2	3	26
6	Kayamkulam	7	9	16	3	5	8	2	6	8	3	6	9	1	3	4	1	4	5	50
7	Mavelikkara	2	10	12	2	4	6	2	6	8	3	3	6	2	1	3	2	3	5	40
8	Alappuzha	8	14	22	3	3	6	4	11	15	5	6	11	-	2	2	-	3	3	59
9	Cherthala	3	1	4	1	1	2	2	2	4	2	2	4	1	2	3	1	15	16	33
10	Thiruvalla	4	15	19	4	6	10	2	9	11	-	6	6	-	2	2	-	-	-	48
11	Changanassery	7	12	19	3	7	10	2	7	9	2	6	8	-	5	5	-	1	1	52
12	Kottayam	2	17	19	3	2	5	2	12	14	2	12	14	-	4	4	1	2	3	59
13	Palai	2	3	5	-	3	3	1	4	5	1	4	5	-	2	2	1	2	3	23
14	Vaikom	3	3	6	1	2	3	3	6	9	3	6	9	-	-	-	1	-	1	28
15	Muvattupuzha	2	5	7	3	-	3	3	9	12	3	5	8	1	1	2	1	-	1	33
16	Kochi Corppn	15	55	70	6	22	28	4	18	22	10	20	30	2	8	10	2	71	73	233
17	Aluva	2	7	9	-	3	3	2	5	7	2	4	6	-	2	2	-	-	-	27

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	-	2	-	-	-	33
19	Perubavur	4	7	11	-	1	1	3	3	6	3	3	6	-	1	1	-	-	-	25
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	41	4	9	13	2	14	16	7	18	25	1	5	6	4	9	13	114
24	Guruvayoor	-	1	1	1	1	2	1	2	3	1	1	2	-	1	1	-	-	-	9
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	3	6	3	3	6	5	1	6	1	-	1	-	-	-	24
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	4	6	1	1	2	4	9	11	46
30	Kozhikode-Corpn.	23	32	55	15	23	38	19	24	43	19	24	43	2	4	6	11	16	27	212
31	Vadakara	-	27	27	-	11	11	3	4	7	3	2	5	1	-	1	2	-	2	53
32	Thalassery	4	31	35	3	12	15	6	3	9	6	2	8	1	13	14	-	4	4	85
33	Kannur	4	2	6	6	5	11	4	3	7	4	2	6	-	6	6	3	6	9	45
34	Kasaragod	6	6	12	4	4	8	3	1	4	2	1	3	2	-	2	1	1	2	31

Table 3 - Number of Hospitals and other Institutions 2007

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	550	13	986	1	-	12	-	13	-	2	-	-	-	2	-
2	Thiruvananthapuram corpn.	19	7019	53	3171	72	10190	21	-	57	-	78	-	3	-	4	-	7	-
3	Attingal	4	100	9	325	13	425	-	-	27	-	27	-	1	10	3	110	4	120
4	Kollam corpn.	9	1605	32	2326	41	3931	11	-	90	-	101	-	12	-	5	21	17	21
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	281	11	325	13	606	-	-	39	-	39	-	4	-	-	-	4	-
12	Kottayam	4	503	12	798	16	1301	-	-	-	-	-	-	-	-	-	-	-	-
13	Palai	3	341	5	520	8	861	-	-	35	-	35	-	1	-	-	-	1	-
14	Vaikom	1	275	1	52	2	327	2	24	25	15	27	39	1	-	-	-	1	-
15	Muvattupuzha	3	310	11	535	14	845	1	-	38	-	39	-	2	-	-	-	2	-
16	Kochi Corppn	18	2024	68	6212	86	8236	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	-	40	-	41	-	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	Chalakydy	1	144	8	545	9	689	2	-	27	-	29	-	3	-	-	-	3	-
23	Thrissur corpn.	6	1244	21	3210	27	4454	18	-	25	-	33	-	4	-	-	-	4	-
24	Guruvayur	1	30	5	184	6	214	-	-	-	-	-	-	1	-	-	-	1	-
25	Kunnamkulam	1	124	5	621	6	745	3	-	-	-	3	-	5	-	-	-	5	-
26	Palakkad	4	800	23	1150	27	1950	4	-	21	-	25	-	4	-	-	-	4	-
27	Chittoor- Thathamangalam	2	128	1	10	3	138	-	-	15	6	15	6	-	-	-	-	-	-
28	Thirur	11	199	10	400	21	599	7	-	-	-	7	-	4	-	-	-	4	-
29	Malappuram	4	187	5	486	9	673	1	-	27	-	28	-	-	-	-	-	-	-
30	Kozhikode Corpn.	9	4079	39	2414	48	6493	17	-	106	-	123	-	20	-	10	30	30	30
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	125	29	773	31	898	1	-	1	-	2	-	-	-	-	-	-	-
34	Kasaragod	2	236	11	546	13	782	1	-	22	-	23	-	-	-	-	-	-	-

Table 4- Registration units with Area and Population 2007

SL no	Municipality \ Corporation	No of Reg units	Area in sq/km	Area Per Reg units	Mid year population	Population per Reg units	Density per Sq km
1	2	5	6	7	8	9	10
1	Neyyattinkara	1	28.78	28.78	73822	73822	2565
2	Thiruvananthapuram	1	141.74	141.74	791663	791663	5585
3	Attingal	1	14.775	14.775	37777	37777	2557
4	Kollam Corporation	1	57.28	57.28	378425	378425	6607
5	Punalur	1	34.60	34.60	47851	47851	1383
6	Kayamkulam	1	21.79	21.79	69506	69506	3190
7	Mavelikara	1	12.65	12.65	28528	28528	2255
8	Alappuzha	1	46.77	46.77	178539	178539	3817
9	Cherthala	1	16.18	16.18	46271	46271	2860
10	Thiruvalla	1	27.52	27.52	58179	58179	2114
11	Changanacherry	1	13.50	13.50	54390	54390	4029
12	Kottayam	1	16.45	16.45	63547	63547	3863
13	Palai	1	16.06	16.06	23694	23694	1475
14	Vaikom	1	8.73	8.73	23695	23695	2714
15	Muvattupuzha	1	13.18	13.18	30338	30338	2302
16	Kochi Corporation	1	94.88	94.88	616083	616083	6493
17	Aluva	1	7.18	7.18	25618	25618	3568
18	North Parur	1	9.02	9.02	31506	31506	3493
19	Perumbavoor	1	13.61	13.61	27809	27809	2043
20	Irrinjalakuda	1	11.24	11.24	29786	29786	2650
21	Kodungallur	1	17.40	17.40	35076	35076	2016
22	Chalakydy	1	25.23	25.23	50604	50604	2006
23	Thrissur Corpn	1	101.42	101.42	334869	334869	3302
24	Guruvayoor	1	7.48	7.48	21825	21825	2918
25	Kunnamkulam	1	34.18	34.18	54410	54410	1592
26	Palakkad	1	26.60	26.60	135737	135737	5103
27	Chittoor- Thathamangalam	1	14.71	14.71	33881	33881	2303
28	Thirur	1	16.55	16.55	56499	56499	3414
29	Malappuram	1	33.69	33.69	64856	64856	1925
30	Kozhikode Corpn.	1	84.28	84.28	447502	447502	5310
31	Vadakara	1	21.34	21.34	78091	78091	3659
32	Thalasserry	1	23.98	23.98	107229	107229	4472
33	Kannur	1	11.03	11.03	66771	66771	6054
34	Kasaragod	1	16.69	16.69	54288	54288	3253

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	1	1	2		5	5	24	1
4	Kollam Corpn	2	37	39	2		2	52	1
5	Punalur	1	20	21	1	0	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	2	-	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	-	-	0	1	-	1	23	1
15	Muvattupuzha	1	8	9	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	26	1
19	Perumbavoor	1	8	9	-	1	1	21	1
20	Irrinjalakuda	1	5	6	-	-	-	25	1
21	Kodungallur	-	2	2	1	1	2	24	1
22	Chalakydy	1	13	14	-	-	-	28	1
23	Thrissur Corpn	5	2	7	1	-	1	52	1
24	Guruvayoor	1	4	5	1	1	2	20	1
25	Kunnamkulam	2	11	13	-	-	-	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 2007

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	304	292	596	93	30.59	78	26.71	171	28.69	2	-	2	-	-	-	
2	Thiruvananthapuram	18505	17494	35999	3515	18.99	2624	15.00	6139	17.07	233	185	418	-	-	-	
3	Attingal	800	705	1505	149	18.63	115	16.31	264	17.54	-	-	0	-	-	-	
4	Kollam Corpn	6900	6682	13582	1452	21.04	1558	23.32	3010	22.16	23	17	40	3	4	7	
5	Punalur	1616	1745	3361	267	16.52	252	14.44	519	15.44	7	6	13	3	1	4	
6	Kayamkulam	2356	2349	4705	426	18.08	447	19.03	873	18.55	6	7	13	-	2	2	
7	Mavelikara	1324	1273	2597	108	8.16	99	7.78	207	7.97	1	2	3	-	-	0	
8	Alappuzha	4725	4913	9638	1074	22.73	996	20.27	2070	21.48	53	62	115	15	19	34	
9	Cherthala	1967	1883	3850	157	7.98	166	8.82	323	8.39	4	2	6	1	-	1	
10	Thiruvalla	2176	2079	4255	182	8.36	169	8.13	351	8.25	15	13	28	2	1	3	
11	Changanacherry	1018	1001	2019	173	16.99	206	20.58	379	18.77	1	-	1	1	-	1	
12	Kottayam	1786	1763	3549	141	7.89	152	8.62	293	8.26	2	3	5	-	-	0	
13	Palai	1386	1242	2628	56	4.04	59	4.75	115	4.38	7	8	15	-	-	0	
14	Vaikom	586	455	1041	78	13.31	92	20.22	170	16.33	2	1	3	-	-	0	
15	Muvattupuzha	1730	1726	3456	159	9.19	165	9.56	324	9.38	5	4	9	-	-	0	
16	Kochi Corporation	9012	8595	17607	5676	62.98	5240	60.97	10916	62.00	73	44	117	29	18	47	
17	Aluva	2498	2362	4860	77	3.08	84	3.56	161	3.31	2	1	3	-	-	0	

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	1714	1569	3283	96	5.60	88	5.61	184	5.60	7	5	12		1	1	
19	Perumbavoor	1256	1215	2471	94	7.48	101	8.31	195	7.89			0			0	
20	Irinjalakuda	667	612	1279	49	7.35	39	6.37	88	6.88	2	3	5			0	
21	Kodungallur	2766	2709	5475	85	3.07	93	3.43	178	3.25	20	12	32			0	
22	Guruvayour	85	68	153	6	7.06	4	5.88	10	6.54			0			0	
23	Thrissur Corpn	9203	9845	19048	1101	11.96	1193	12.12	2294	12.04			138			18	
24	Chalakkudy	1949	1887	3836	212	10.88	202	10.70	414	10.79	9	7	16	1		1	
25	Kunnamkulam	2140	1931	4071	192	8.97	177	9.17	369	9.06	3		3			0	
26	Palakkad	7543	7350	14893	2862	37.94	2517	34.24	5379	36.12	26	30	56	15	8	23	
27	Chittoor- Thathamangalam	71	66	137	18	25.35	6	9.09	24	17.52	1	1	2			0	
28	Thirur	3939	3721	7660	298	7.57	243	6.53	541	7.06	25	16	41			0	
29	Malappuram	3945	3810	7755	272	6.89	261	6.85	533	6.87	32	22	54			0	
30	Kozhikode Corporation	20079	19040	39119	3010	14.99	2402	12.62	5412	13.83	260	216	476	20	38	58	
31	Vadakara	1197	1094	2291	235	19.63	219	20.02	454	19.82	4	4	8	2	1	3	
32	Thalasserry	6806	6587	13393	1543	22.67	1511	22.94	3054	22.80	38	40	78	3	3	6	
33	Kannur	3228	3069	6297	340	10.53	313	10.20	653	10.37	16	9	25	3	1	4	
34	Kasaragod	4478	4165	8643	476	10.63	410	9.84	886	10.25	35	30	65	5	7	12	

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	1		1	1		1	409	317	726	244	214	458
2	Thiruvananthapuram	444	330	774			0	7761	4894	12655	1164	734	1898
3	Attingal			0			0	160	119	279	68	55	123
4	Kollam Corpn	28	40	68	8	7	15	2199	1361	3560	573	760	1333
5	Punalur	4		4		1	1	381	228	609	173	120	293
6	Kayamkulam		1	1		1	1	235	203	438	169	140	309
7	Mavelikara	5	1	6	1		1	435	290	725	107	103	210
8	Alappuzha	27	35	62	8	6	14	654	825	1479	438	385	823
9	Cherthala	3	4	7			0	402	294	696	56	61	117
10	Thiruvalla	40	26	66	4	2	6	902	637	1539	207	173	380
11	Changana-cherry			0			0	213	145	358	128	103	231
12	Kottayam	16	9	25	2		2	441	289	730	165	147	312
13	Palai	4	4	8			0	329	174	503	84	34	118
14	Vaikom		1	1			0	150	99	249	71	46	117
15	Muvattupuzha	3	2	5	1		1	345	196	541	71	67	138
16	Kochi Corporation	218	132	350	75	47	122	5530	3169	8699	3131	2088	5219
17	Aluva	8	4	12			0	331	204	535	53	51	104

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	3	3	6	1	1	2	365	202	567	104	66	170
19	Perumbavoor	2		2			0	337	160	497	113	57	170
20	Irinjalakuda	1		1			0	186	106	292	86	69	155
21	Kodungallur			0			0	298	238	536	36	39	75
22	Chalakudy	6	2	8			0	424	243	667	165	120	285
23	Thrissur Corpn	126	137	263	16	17	33	2152	3359	5511	602	943	1545
24	Guruvayoor			0			0	83	48	131	51	27	78
25	Kunnankulam	5	3	8	1		1	352	275	627	152	145	297
26	Palakkad	42	53	95	17	11	28	1241	779	2020	410	264	674
27	Chittoor-Thathamangalam			0									
28	Thirur	11	12	23			0	140	112	252	108	96	204
29	Malappuram	24	17	41	4	2	6	272	173	445	77	70	147
30	Kozhikode Corporation.	545	484	1029	149	102	251	5640	3245	8885	1154	943	2097
31	Vadakara	7	6	13	4	2	6	485	371	856	312	248	560
32	Thalassery	47	30	77	3	5	8	1160	853	2013	351	302	653
33	Kannur	58	29	87	5		5	439	298	737	152	132	284
34	Kasaragod	13	11	24	2	2	4	449	261	710	132	91	223

Table 6 -Contd

Sl.No.	Municipality/Corporation	Total Events				Total Death				
		Total Events		Events to normal residents		Total		Events to normal residents		
		Male	Female	Total	Male	Female	Total	Male	Female	
1	2	3	4	5	6	7	8	9	10	11
1	Neyyattinkara	410	317	727	245	59.76	214	67.51	459	63.14
2	Thiruvananthapuram	8205	5245	13450	1164	14.19	734	14.05	1898	14.13
3	Attingal	160	119	279	68	42.50	55	46.22	123	44.09
4	Kollam Corpn	2227	1411	3638	581	26.09	771	54.64	1352	37.16
5	Punalur	385	228	613	173	44.94	121	53.07	294	47.96
6	Kayamkulam	235	204	439	169	71.91	141	69.12	310	70.62
7	Mavelikara	440	291	731	108	24.55	103	35.27	211	28.83
8	Alappuzha	681	862	1543	446	65.49	391	45.36	837	54.24
9	Cherthala	405	298	703	56	13.83	61	20.47	117	16.64
10	Thiruvalla	942	663	1605	211	22.40	175	26.40	386	24.05
11	Changanacherry	213	145	358	128	60.09	103	71.03	231	64.53
12	Kottayam	457	298	755	167	36.54	147	49.33	314	41.59
13	Palai	333	178	511	84	25.23	34	19.10	118	23.09
14	Vaikom	150	100	250	71	47.33	46	46.00	117	46.80
15	Muvattupuzha	348	198	546	72	20.69	67	33.84	139	25.46
16	Kochi Corporation	5748	3325	9073	3206	55.78	2135	64.21	5341	58.87
17	Aluva	339	209	548	53	15.63	51	24.40	104	18.98

Table 6 - Contd

Sl.No.	Municipality/Corporation	Total Death									
		Total Events					Events to normal residents				
		Male 3	Female 4	Total 5	Male 6	% 7	Female 8	% 9	Total 10	% 11	
1	2										
18	North Parur	368	206	574	105	28.53	67	32.52	172	29.97	
19	Perumbavoor	339	161	500	113	33.33	57	35.40	170	34.00	
20	Irinjalakuda	187	106	293	86	45.99	69	65.09	155	52.90	
21	Kodungallur	298	238	536	36	12.08	39	16.39	75	13.99	
22	Chalakyady	430	246	676	165	38.37	120	48.78	285	42.16	
23	Thrissur Corpn	2278	3519	5797	618	27.13	963	27.37	1581	27.27	
24	Guruvayoor	83	48	131	51	61.45	27	56.25	78	59.54	
25	Kunnamkulam	357	278	635	153	42.86	145	52.16	298	46.93	
26	Palakkad	1283	837	2120	427	33.28	278	33.21	705	33.25	
27	Chittoor-thathamangalam	140	112	252	108	77.14	96	85.71	204	80.95	
28	Thirur	299	253	552	91	30.43	75	29.53	166	30.02	
29	Malappuram	296	190	486	81	27.36	72	37.89	153	31.48	
30	Kozhikode Corporation.	6185	3772	9957	1303	21.07	1056	28.00	2359	23.69	
31	Vadakara	492	383	875	316	64.23	252	65.80	568	64.91	
32	Thalassery	1207	887	2094	354	29.33	308	34.72	662	31.61	
33	Kannur	497	335	832	157	31.59	132	39.40	289	34.74	
34	Kasaragod	466	272	738	134	28.76	93	34.19	227	30.76	

Table 7 - Deaths according to causes 2007

Sl.No	Municipality/ Corporation	Suicide	Accident	Pneumonia	B.P	T.B	Aids	Diabetics	Hydrophobia / Rabies	Pulmonary Disease	Other Internal Disease	Dysentery & Diarrhea	Respiratory Diseases
1		1	2	3	4	5	6	7	8	9	10	11	12
2	Neyyattinkara	6	-	-	9	-	-	8	-	-	-	1	8
3	Thiruvananthapuram	-	387	569	282	148	9	518	6	-	955	4	653
4	Attingal	-	9	4	-	1	-	5	-	1	-	-	3
5	Kollam Corpn	74	109	26	66	5	-	52	-	-	-	2	222
6	Punalur	31	17	1	63	-	-	2	-	-	-	-	10
7	Kayamkulam	2	10	7	14	1	-	12	-	-	-	1	21
8	Mavelikara	16	5	4	2	2	-	10	-	-	-	-	7
9	Alappuzha	-	-	-	-	-	-	-	5	93	-	-	-
10	Cherthala	1	2	-	6	-	-	2	-	-	-	2	-
11	Thiruvalla	27	53	-	-	-	-	94	-	-	-	-	-
12	Changanacherry	5	7	-	-	3	-	8	-	151	-	-	51
13	Kottayam	-	-	-	-	-	-	34	-	4	-	-	-
14	Palai	3	7	-	-	3	-	23	-	-	-	-	5
15	Vaikom	8	8	8	7	63	-	5	-	-	-	-	-
16	Muvattupuzha	-	-	-	-	-	-	-	-	-	-	-	3720
17	Kochi Corpora.	410	474	-	-	155	2	625	110	-	-	310	1800
18	Aluva	-	-	2	38	4	-	-	-	-	-	-	-

Table 7 Continued.....

Sl.No	Municipality/ Corporation	Suicide	Accident	Pneumonia	B.P	T.B	Aids	Diabetics	Hydropho bia / Rabies	Pulmonary Disease	Other Internal Disease	Dysentery & Diarrhea	Respiratory Diseases
18	North Parur	1	2	3	4	5	6	7	8	9	10	11	12
19	Perumbavoor	-	-	-	-	-	-	-	2	-	-	-	-
20	Irinjalakuda	-	-	-	-	-	-	-	-	49	-	-	-
21	Kodungallur	-	-	-	-	-	-	-	-	-	-	-	-
22	Chalakudy	16	34	8	-	-	-	-	1	-	-	20	32
23	Thrissur Corpn	-	-	-	-	-	-	-	-	-	-	-	-
24	Guruvayoor	-	25	-	13	-	-	-	-	-	-	-	32
25	Kunnamkulam	-	21	-	-	4	-	14	1	-	-	-	36
26	Palakkad	-	-	-	-	-	-	-	-	-	-	6	-
27	Chittoor- Thathamangalam	8	4	-	5	-	-	-	-	44	-	-	3
28	Thirur	-	8	-	-	1	-	11	-	76	-	1	-
29	Malappuram	-	-	-	-	-	-	-	-	-	-	-	-
30	Kozhikode Corpn	48	221	81	68	9	3	56	-	-	-	2	645
31	Vadakara	-	-	-	-	-	-	-	-	-	-	-	-
32	Thalassery	-	-	-	-	-	-	-	-	-	-	-	-
33	Kannur	-	-	-	-	4	-	-	-	-	-	-	-
34	Kasaragod	-	-	-	-	29	-	-	-	58	-	19	-

Table 7 Continued.....

Sl.No	Municipality/ Corporation	Liver Decease	Kidney Diseases	Cancer	Malaria	Heart Failure	Senility	Fever	Jaundice	Meningitis	Others	Total
1	Neyyattinkkara	13	14	15	16	17	18	19	20	21	22	23
2	Thiruvananthapuram	-	4	6	-	34	-	-	-	-	651	727
3	Attingal	452	516	1216	1	3135	987	-	40	54	3518	13450
4	Kollam Corpn	-	-	7	-	114	17	-	-	-	119	279
5	Punalur	108	56	144	8	1259	471	-	8	1	1027	3638
6	Kayamkulam	14	1	22	-	298	121	-	3	1	30	613
7	Mavelikara	8	1	22	-	184	89	-	1	-	66	439
8	Alappuzha	-	1	16	-	476	61	-	2	-	130	732
9	Cherthala	-	-	231	-	-	-	10	-	-	1214	1543
10	Thiruvalla	-	-	12	-	41	-	-	-	-	637	703
11	Changanacherry	-	-	76	-	287	-	6	-	-	1062	1605
12	Kottayam	-	-	12	-	-	-	1	-	-	120	358
13	Palai	4	3	38	-	-	-	-	2	-	677	755
14	Vaikom	-	5	11	-	133	-	2	-	-	327	511
15	Muvattupuzha	-	-	3	-	64	43	-	-	-	28	250
16	Kochi Corpora.	-	-	-	-	167	-	-	-	-	379	546
17	Aluva	-	-	1220	-	-	-	18	-	-	4118	9073
		-	-	87	-	168	31	-	-	-	218	548

Table 7 Continued

Sl.No	Municipality/ Corporation	Liver Disease	Kidney Diseases	Cancer	Malaria	Heart Failure	Senility	Fever	Jaundice	Meningitis	Others	Total
		13	14	15	16	17	18	19	20	21	22	23
18	North Parur	-	-	53	-	304	-	4	-	-	211	574
19	Perumbavoor	-	-	10	-	149	-	-	-	-	292	500
20	Irinjalakuda	-	-	13	-	126	-	-	-	-	154	293
21	Kodungallur	-	-	14	-	118	-	-	-	-	404	536
22	Chalakudy	-	-	54	-	140	-	-	-	-	371	676
23	Thrissur Corpn	-	-	-	-	523	-	-	-	-	5274	5797
24	Guruvayoor	7	-	11	-	14	-	-	-	-	29	131
25	Kunnamkulam	2	14	28	-	232	-	-	-	-	283	635
26	Palakkad	-	-	83	-	214	-	-	-	-	1817	2120
	Chittoor-											
27	Thathamangalam	2	2	7	-	24	-	3	-	-	150	252
28	Thirur	-	-	72	-	137	-	-	-	-	246	552
29	Malappuram	7	4	44	-	253	93	1	1	-	115	639
30	Kozhikode Corpn.	154	80	484	-	968	393	-	23	-	6722	9957
31	Vadakara	-	-	104	-	269	-	-	-	-	502	875
32	Thalassery	-	-	62	-	807	-	-	-	-	1225	2094
33	Kannur	-	-	38	-	351	-	-	-	-	439	832
34	Kasaragod	-	-	59	4	-	-	-	-	-	569	738

Table 8 - Results of Spot Check Survey - 2007

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					
					Fnunerated	Registered	N.R	occurred outside	Fnunerated	Registered	N.R	occurred outside	Fnunerated	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	8193	7310	246	24		222	2	1		1	143	119	1	23
2.	Thiruvanantha- puram ©	15	45309	22640	550	513		37	1	1			201	199		2
3.	Attingal	15	7871	7871	198	120		78					130	74		56
4.	Kollam Corpn	15	25457	18377	740	637		103					331	291		40
5.	Punalur	15	6223	6223	242	175		67	1			1	161	116	13	32
6.	Kayamkulam	15	5667	5667	304	215		89	1			1	131	75	10	46
7.	Mavelikkara	15	3930	3930	121	58		63					101	86	3	12
8.	Alappuzha	15	20255	20255	842	707		135					398	327		71
9.	Cherthala	15	10147	10147	75	47		28					54	47		7
10.	Thiruvalla	15	6293	6293	122	101		21					92	82		10
11.	Changanassery	15	7909	5081	235	107		128					145	82	8	55
12.	Kottayam	15	4755	4755	214	98		116					147	118	1	28
13.	Palai	15	5708	3264	110	75		35					120	102		18
14.	Vaikom	15	5328	3257	119	46		73					82	44		38
15.	Muvattupuzha	15	4652	4652	210	126		84					90	62		28
16.	Kochi Corporation	15	22857	22857	860	728		132	4	4			448	435	7	6
17.	Aluva	15	4778	4778	232	161		71					158	104		54

Table 8 (Contd....)

	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
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
18	15	4690	4690	217	123		94					117	78	6	33
19	15	4679	4679	228	112		116					125	93	1	31
20	15	5828	4027	166	24		142					68	38		30
21	15	4957	4957	473	132		41					99	75		24
22	15	6869	6443	299	219		80	1			1	144	125	3	16
23	6	9314	8905	262	215		47					178	165		13
24	15	3559	3559	161	6		155					63	26		37
25	15	7224	5914	277	159		118	1		1		174	136		38
26	15	9159	9145	124	121		3	8	8			48	48		
27	15	4595	4595	177	9		168					126	96	3	27
28	15	6201	6201	524	334		190	1			1	104	78		26
29	15	9033	9123	533	475		58	6	5		1	147	133		14
30	15	36185	20724	982	898		84	4	4			414	369	30	15
31	15	5364	5364	232	78		154	1	1			119	90	5	24
32	15	5694	5594	265	239		26					177	151	1	25
33	15	4737	4737	233	159		74					86	52	4	30
34	15	7871	4359	74	57	1	16					42	39		3

* 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	-	0.83	90.24	16.55
2	Thiruvananthapuram	-	-	6.73	0.99
3	Attingal	-	-	39.39	43.08
4	Kollam Corpn	-	-	13.92	12.08
5	Punalur	-	10.08	27.69	20.37
6	Kayamkulam	-	11.76	29.28	35.61
7	Mavelikara	-	3.37	52.07	11.88
8	Alappuzha	-	-	16.03	17.84
9	Cherthala	-	-	37.33	14.89
10	Thiruvalla	-	-	17.21	10.87
11	Changanacherry	-	8.89	54.47	37.93
12	Kottayam	-	0.84	54.21	19.05
13	Palai	-	-	31.82	15.00
14	Vaikom	-	-	61.34	31.67
15	Muvattupuzha	-	-	40.00	31.11
16	Kochi Corporation	-	1.57	15.35	1.33
17	Aluva	-	-	44.10	51.92
18	North Parur	-	7.14	43.32	28.21
19	Perumbavoor	-	1.06	50.88	24.80
20	Irinjalakuda	-	-	85.54	44.12
21	Kodungallur	-	-	23.70	24.24
22	Chalaky	-	2.34	26.76	11.72
23	Thrissur Corpn	-	-	15.21	6.81
24	Guruvayoor	-	-	96.27	58.73
25	Kunnankulam	-	0.73	42.60	21.71
26	Palakkad	-	-	2.42	-
27	Chittoor- Thathamangalam	-	3.03	94.92	21.43
28	Thirur	-	-	36.26	25.71
29	Malappuram	-	-	10.88	9.80
30	Kozhikode Corpn.	-	7.44	8.55	3.59
31	Vadakara	-	5.21	66.38	20.00
32	Thalasserry	-	0.66	9.81	14.12
33	Kannur	-	7.14	31.76	34.88
34	Kasaragod	1.72	-	21.62	7.14

Table 10 - Registered Vital Rates and Adjusted Residential Vital rates 2007

Sl. No.	Municipality/ Corporation	Registered vital rates		Adjusted residential vital rates	
		Births	Deaths	Births	Deaths
1	2	3	4	5	6
1	Neyyattinkara	2.32	6.22	23.77	7.51
2	Thiruvananthapuram	7.75	2.40	8.30	2.42
3	Attingal	6.99	3.26	11.53	5.73
4	Kollam Corpn.	7.95	3.57	9.24	4.06
5	Punalur	10.85	6.14	15.00	8.58
6	Kayamkulam	12.56	4.46	17.76	7.84
7	Mavelikara	7.26	7.40	15.15	8.66
8	Alappuzha	11.59	4.69	13.80	5.71
9	Cherthala	6.98	2.53	11.14	2.96
10	Thiruvalla	6.03	6.63	7.28	7.44
11	Changanacherry	6.97	4.25	15.31	7.51
12	Kottayam	4.61	4.94	10.07	6.15
13	Palai	4.85	4.98	7.11	5.86
14	Vaikom	7.17	4.94	18.55	7.23
15	Muvattupuzha	10.68	4.58	17.80	6.65
16	Kochi Corporation	17.72	8.67	20.93	8.93
17	Aluva	6.28	4.06	11.23	8.44
18	North Parur	5.84	5.46	10.30	8.19
19	Perumbavoor	7.01	6.18	14.27	8.22
20	Irrinjalakuda	2.95	5.20	20.40	9.31
21	Kodungallur	5.07	2.14	6.64	2.82
22	Chalakkudy	8.18	5.63	11.17	6.53
23	Thrissur Corpn	6.85	4.72	8.08	5.06
24	Guruvayoor	0.46	3.57	12.38	8.65
25	Kunnamkulam	6.78	5.48	11.81	7.05
26	Palakkad	39.63	5.19	40.61	5.19
27	Chittoor- Thathamangalam	0.70	6.21	13.98	7.90
28	Thirur	9.58	2.94	15.03	3.96
29	Malappuram	8.22	2.36	9.22	2.62
30	Kozhikkode Corpn.	12.09	5.27	13.22	5.91
31	Vadakara	5.81	7.67	17.28	9.59
32	Thalasserry	28.48	6.17	31.58	7.23
33	Kannur	9.78	4.33	14.33	7.16
34	Kasaragod	16.32	4.18	21.19	4.50

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)	$\frac{\text{Residential birth/death rate to normal residents occurred inside the town (weighted for under registration)} \times 100}{(100 - \text{Percentage of events occurred outside the town to normal residents})}$

69

1393

