Demography, Health and Nutrition

5.1 Introduction

Health is an essential factor in the computation of the Human Development Index. The World Health Organization (WHO) defined health in its broader sense in 1946 as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." The WHO's 1986 Ottawa Charter for Health Promotion further stated that health is not just a state, but also "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities." The new agenda for Public Health in India includes the epidemiological transition, demographic transition, environmental changes and social determinants of health.

As stated earlier Economic status alone is no longer an indicator of a region's development. Indicators of Human Development are now increasingly dependent on qualitative factors, rather than simply being limited by quantitative once. Health is invariably intertwined with economic development because a healthy population can contribute viably to an economy. The pattern of population distribution will help in the understanding of existing health standards and enable better decisions towards a progressive health policy.

5.2 Demography, Population by Place of Residence, Sex and Social Groups, Sex Ratio

There are ten Taluks in Tumakuru District-demographically, Tumakuru taluk is the largest and Turuvekere being the smallest taluk.

Table No. 5.1: Population of Taluks in 2011 – Total, Male and Females [No.&%]

Sl. No.	Name	Total Population	Total Male Population	%	Total Female Population	%
1	C.N.Halli	212130	105583	49.77	106547	50.23
2	Gubbi	262518	132102	50.32	130416	49.68
3	Koratagere	167591	84349	50.33	83242	49.67
4	Kunigal	225783	112803	49.96	112980	50.04
5	Madhugiri	267866	134670	50.28	133196	49.72
6	Pavagada	245194	123680	50.44	121514	49.56
7	Sira	313758	158978	50.67	154780	49.33
8	Tiptur	222749	111282	49.96	111467	50.04
9	Tumakuru	592397	303197	51.18	289200	48.82
10	Turuvekere	168994	83950	49.68	85044	50.32
	District	2678980	1350594	50.41	1328386	49.59

Source: Census of India, 2011

5.2.1 Population by Sex- 2011

As demonstrated in Table 5.1, there are no drastic inequities in the proportional percentage of male and female population within the taluks, indicative of a balanced sex ratio.

Fig.5.1: Population by Sex - 2011

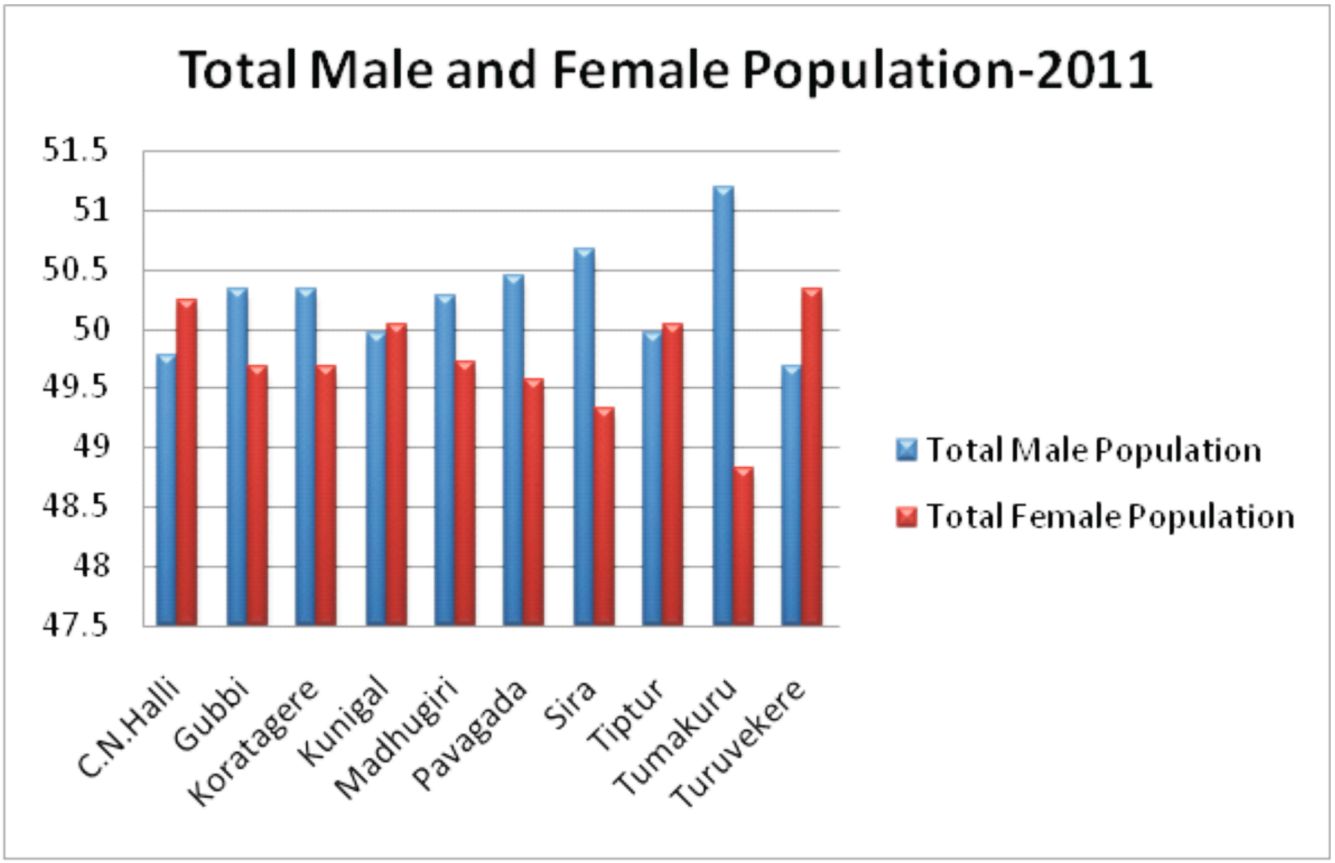


Table No.5.2: Population by place of residence -2011 [No.&%]

Sl. No	Name	Total Population	Urban	% to Total Urban	% to Total Taluk - Urban	Rural	% to Total Rural	% to Total Taluk - Rural
1	C.N.Halli	212130	37510	6.26	17.68	174620	8.40	82.32
2	Gubbi	262518	18446	3.08	7.03	244072	11.73	92.97
3	Koratagere	167591	15265	2.55	9.11	152326	7.32	90.89
4	Kunigal	225783	34155	5.70	15.13	191628	9.21	84.87
5	Madhugiri	267866	29159	4.87	10.89	238707	11.48	89.11
6	Pavagada	245194	28486	4.75	11.62	216708	10.42	88.38
7	Sira	313758	57554	9.61	18.34	256204	12.32	81.66
8	Tiptur	222749	59543	9.94	26.73	163206	7.85	73.27
9	Tumakuru	592397	302143	50.43	51.00	290254	13.96	49.00
10	Turuvekere	168994	16817	2.81	9.95	152177	7.32	90.05
	District	2678980	599078	100.00	22.36	2079902	100.00	77.64

Source: Census of India, 2011

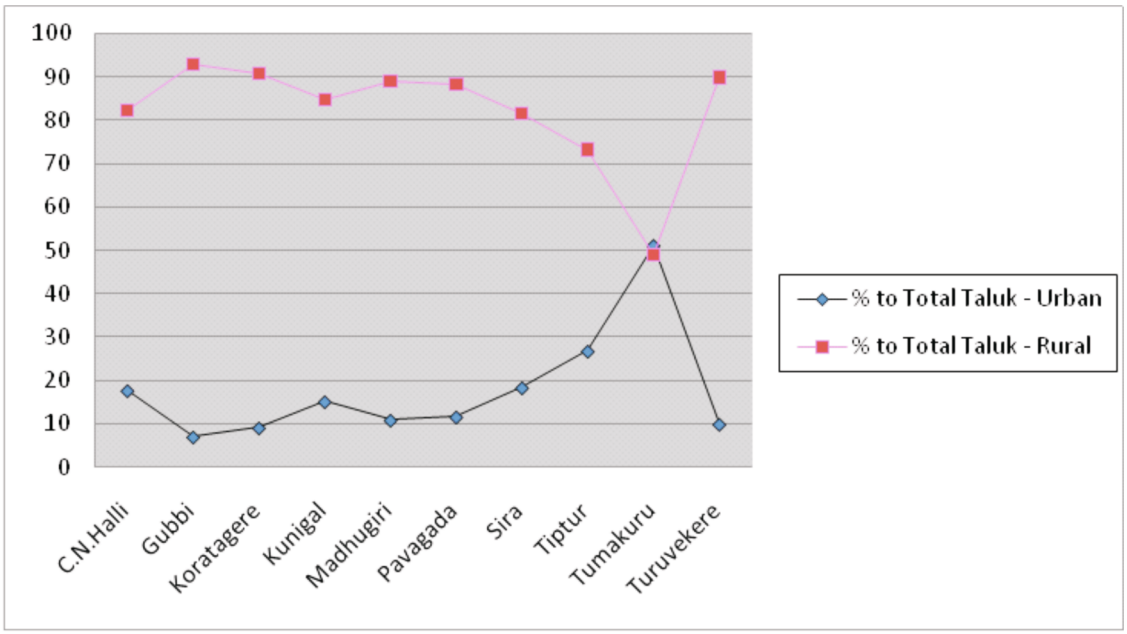
Table 5.2 shows the demography of Tumakuru District in terms of place of residence. Among the taluks, the distribution of population is predominantly rural with Gubbi taluk having the least share (7.03percent) of urban population and Tumakuru taluk having the highest (51percent) share of urban population.

5.2.2 Population by Place of Residence: Rural

Gubbi, Turvekere and Kortagere all have a rural population of over 90 per cent. The effects of a large rural population can be seen in other indicators of development such as electrification and availability of drinking water.

A higher rural population also puts pressure on the health care sector and provision of education. With a more scattered and disorganized population, providing modern education and health care is problematic and many families in remote areas do not have adequate access to either of the facilities.

Fig.5.2: Population Across Taluks in Rural & Urban Areas – 2011



5.2.3 Population by place of Residence: Urban

Out of the total Tumakuru population for 2011 census, 22.36 percent lives in urban regions of the District.

The urban population of Tumakuru District is small and is highly concentrated in the Tumakuru taluk. Chicknayakanahalli, Kunigal and Tiptur follow with a vast lag. This shows vast disparities between taluks.

5.2.4 Population by Social Groups in 2011

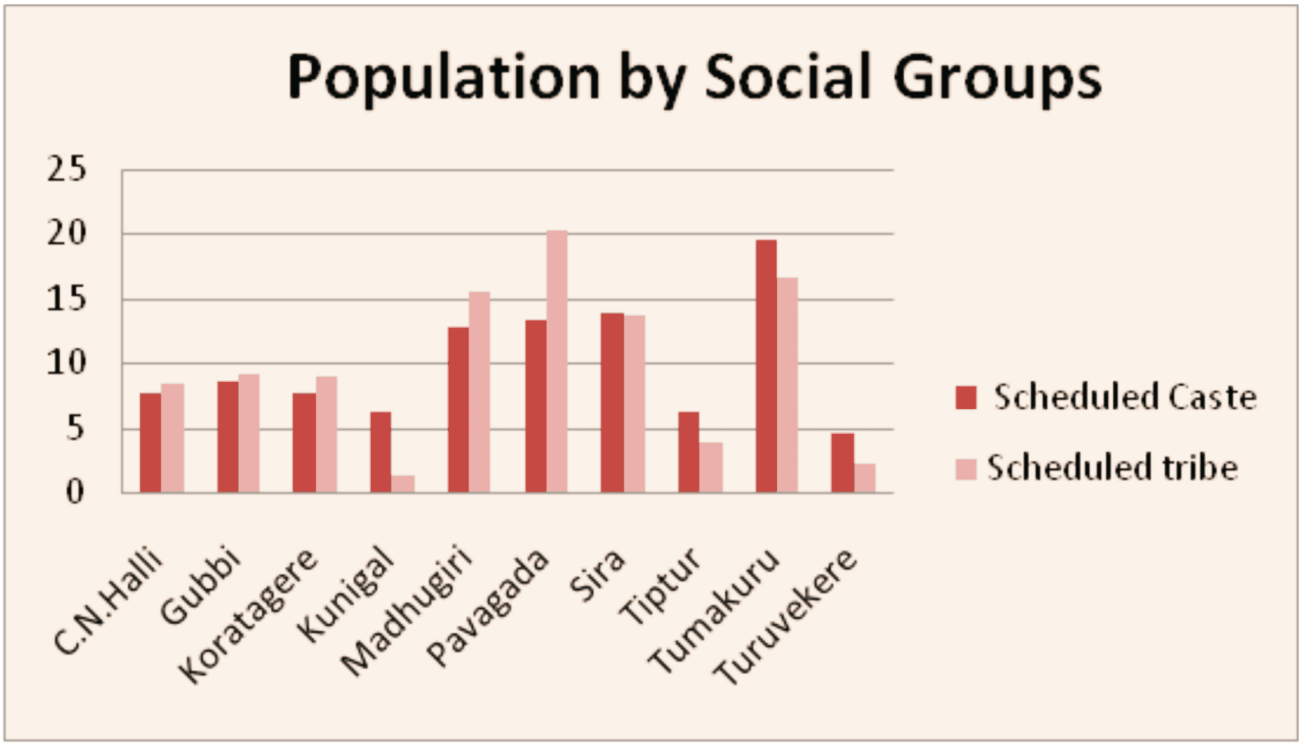
Table No.5.3: Population by Social Groups - 2011[No.&%]

Sl. No.	Name	Total Population	Population Scheduled Caste	% of SC Population	Population Scheduled Tribe	% of ST Population
1	C.N.Halli	212130	38805	7.66	17654	8.42
2	Gubbi	262518	43596	8.60	19154	9.14
3	Koratagere	167591	38500	7.60	18831	8.99
4	Kunigal	225783	31123	6.14	2725	1.30
5	Madhugiri	267866	64608	12.75	32648	15.58
6	Pavagada	245194	67427	13.30	42268	20.17
7	Sira	313758	69930	13.80	28770	13.73
8	Tiptur	222749	31371	6.19	8054	3.84
9	Tumakuru	592397	98531	19.44	34755	16.58
10	Turuvekere	168994	23010	4.54	4700	2.24
	District	2678980	506901	100.00	209559	100.00

Source: Census of India, 2011

When we compare the data in tables 5.2 and 5.3, we see that even though Tumakuru is relatively more urbanized than the other taluks in the District, the percentage of Scheduled Castes and Scheduled Tribes here is the highest as 19.44 per cent and 16.58 per cent respectively. This could be due to the availability of job prospects, higher pay grades and ease of mobility.

Fig.5.3: Population by Social Groups Across Taluks – 2011



Turuvanakere taluk has the lowest percentages of SCs (4.24) and STs (2.24).

5.2.5 Sex Ratio

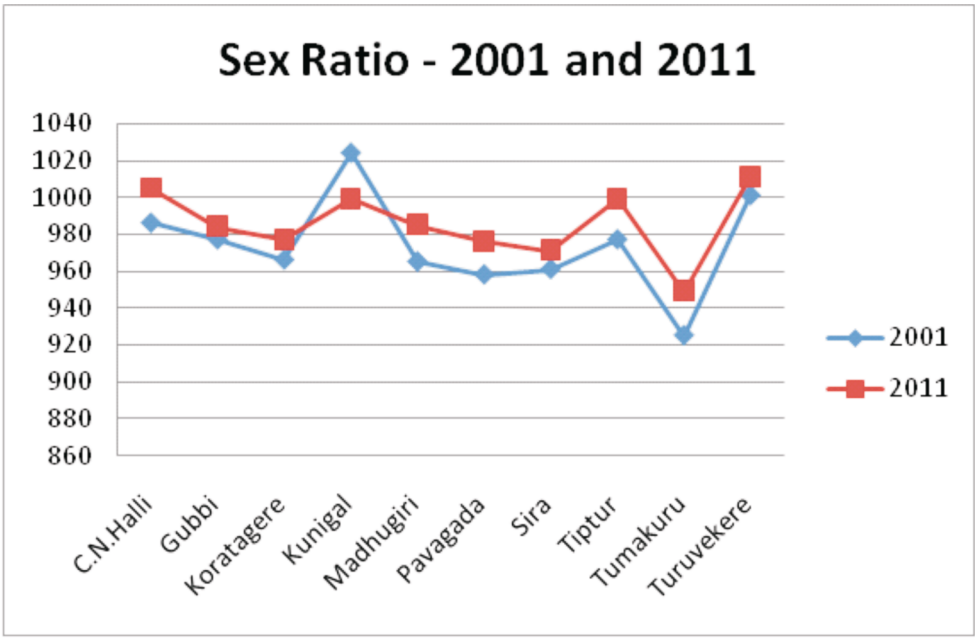
Table No.5.4: Sex Ratio - 2001 and 2011 [No.]

Sl. No.	Taluk	2001	2011
1	C.N.Halli	986	1005
2	Gubbi	977	984
3	Koratagere	966	977
4	Kunigal	1024	999
5	Madhugiri	965	985
6	Pavagada	958	976
7	Sira	961	971
8	Tiptur	977	999
9	Tumakuru	925	949
10	Turuvekere	1001	1011
	District	967	979

Source: Census of India, 2001 & 2011

Another demographic aspect having influence on health is sex ratio. Sex Ratio is the proportion of males to females in a population and it is usually expressed as the number of females per thousand males. Gender imbalances may arise as a consequence of several health issues and these in turn affect sex ratios. The decadal comparison of sex ratios for the Tumakuru District (Table 5.4) shows an increase in sex ratio from 967 to 979. Turuvekere in 2001 had a sex ratio of 1001, which in 2011 increased to 1011. It is noteworthy that this taluk has a largely rural population. Kunigal Taluk, on the other hand, saw a decline in the sex ratio from 1024 in 2001 to 999 in 2011. Tumakuru, a relatively urbanized taluk, has consistently had a low sex ratio- 925 in 2001 to 949 in 2011. Except Kunigal, all other taluks of the District show increase in the sex ratio, in that decade.

Fig.5.4: Sex Ratio Across Taluks – 2001 & 2011



It is observed that there are more women in urban areas than in rural areas of the District (with the exception of Kunigal and Tiptur). On an average the female population in rural areas is 49.58 percent whereas in urban areas it is 49.61 per cent. The lowest percentage of female population is found in rural areas of Tumakuru taluk (48.23) and the highest percentage of female population is found in urban areas of Chikkanayakanahalli (50.61)

5.3 IMR and MMR

Infant Mortality Rates and Maternal Mortality Rate are regarded as important and sensitive indicators of the health status, general standard of living and effectiveness for improving maternal and child health in a country or region. In line with this, the Government of India has adopted National Development Targets which are in line with – and at times more ambitious than - the Millennium Development Goals [MDGs]. The MDGs laid down by the United Nations aim for a reduction in maternal deaths by 75% to 109 [MMR] between 1990 and 2015 in India which requires a reduction rate of 5.5% per year to achieve the goal.

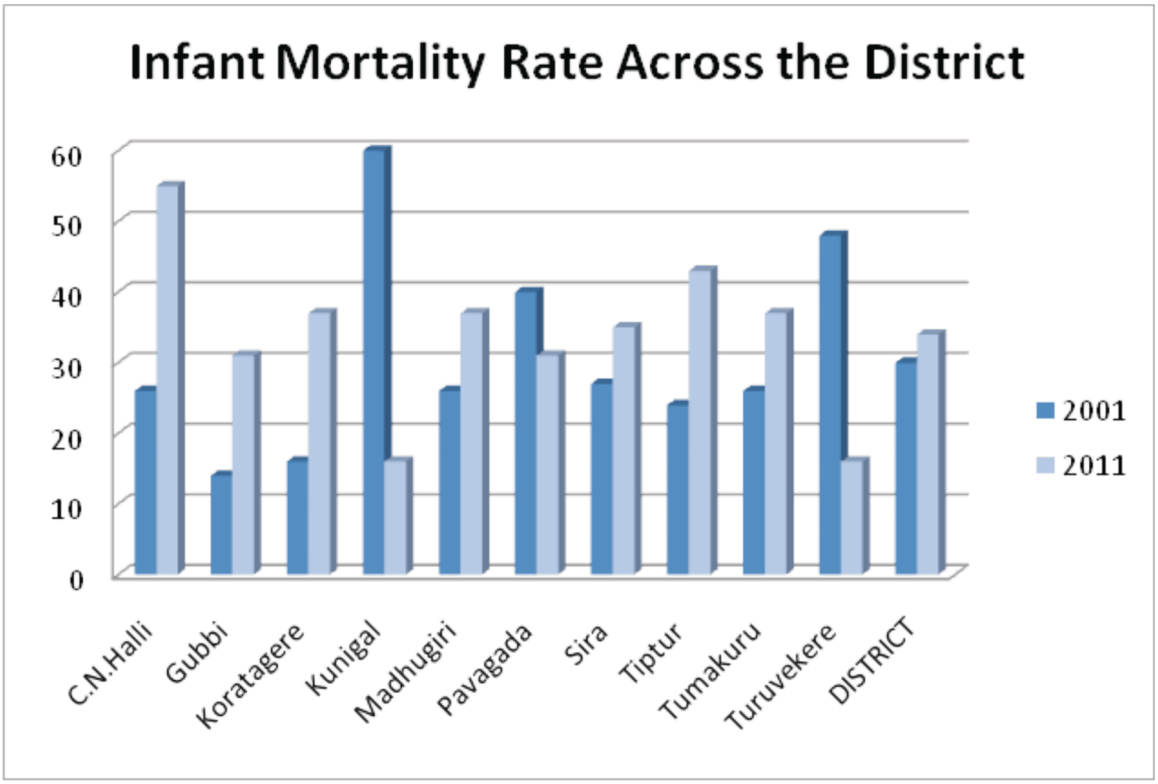
Table No.5.5: Infant Mortality Rate [No.]

Sl. No.	Taluk	Infant Mortality Rate(IMR)	
		2001	2011
1	C.N.Halli	26	55
2	Gubbi	14	31
3	Koratagere	16	37
4	Kunigal	60	16
5	Madhugiri	26	37
6	Pavagada	40	31
7	Sira	27	35
8	Tiptur	24	43
9	Tumakuru	26	37
10	Turuvekere	48	16
	District	30	34

Source: DHO, 2012 SRS, 2011

The infant mortality rate (IMR) is defined as the number of deaths among children below 1 year of age per 1000 live births in the same year. The infant mortality rate in Karnataka has been steadily decreasing over time.

Fig.5.5: IMR across the District – 2001 & 2011



Interestingly, despite evidence of son preference, the risk of mortality during infancy and early childhood is higher for boys than for girls in Karnataka. As shown in Table 5.5, Turuvekere and Kunigal Taluks have the lowest Infant Mortality rates, while Chikkanayakanahalli has the highest during 2011. The IMR for 2001 is different. It was 30 for the District as a whole and the taluks with higher IMR was Kunigal [60], Turuvekere [48] and Pavgada [40]. The IMR for the two time periods is found to be different for the taluks.

5.3.1 Maternal Mortality Rate

Table No.5.6: Maternal Mortality Rate [No.]

Sl.No.	Taluk	Maternal Mortality Rate	
		2001	2011
1	C.N.Halli	290	105
2	Gubbi	200	298
3	Koratagere	260	206
4	Kunigal	350	71
5	Madhugiri	280	358
6	Pavagada	101	53
7	Sira	196	266
8	Tiptur	209	169
9	Tumakuru	192	33
10	Turuvekere	260	325
	District	233	124

Source: DHO, 2012 and SRS, 2011

Maternal Mortality Rate (MMR) is the number of maternal deaths in a population divided by the number of women of reproductive age, usually expressed per 1,00,000 live births. Complications during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age.

The MMR for the District in 2001 was 233 and the taluks with higher rates, i.e. above the District average is Kunigal [350], Madhugiri [280], Chikkanayakanahalli [290] and Turuvekere [260].

The maternal mortality for the District during 2011 is 124 and thus, it has decreased. The situation is not the same across the taluks. The MMR is lowest in Tumakuru (33) and highest in Madhugiri (358). The variations could be due to a number of factors.

Maternal Mortality Rates can be significantly reduced with the help of Anganwadi and ASHA workers as well as continued emphasis on ensuring 100 per cent institutional deliveries. An increase in specialized maternal health care in every taluk will also induce positive changes in the maternal mortality rate.

5.4 Couple Protection Issues and Family Welfare

Family planning refers to a conscious, premeditated, systematic program through which couples decide to avoid unwanted births and to have only a limited number of children taking into account the economic and health position of the family. Family planning is absolutely essential not only to save households from health and economic hardships caused by excessive child birth but to conserve resources of the nation by way of having limited size of population. Couple protection is a part of the broader scheme of Family Planning and deals with providing methods of contraception to couples. The government family planning programme promotes three temporary methods: the pill (Oral Pill-O.P), the IUD (Intrauterine Device), and condoms (Condom Contraception-C.C).

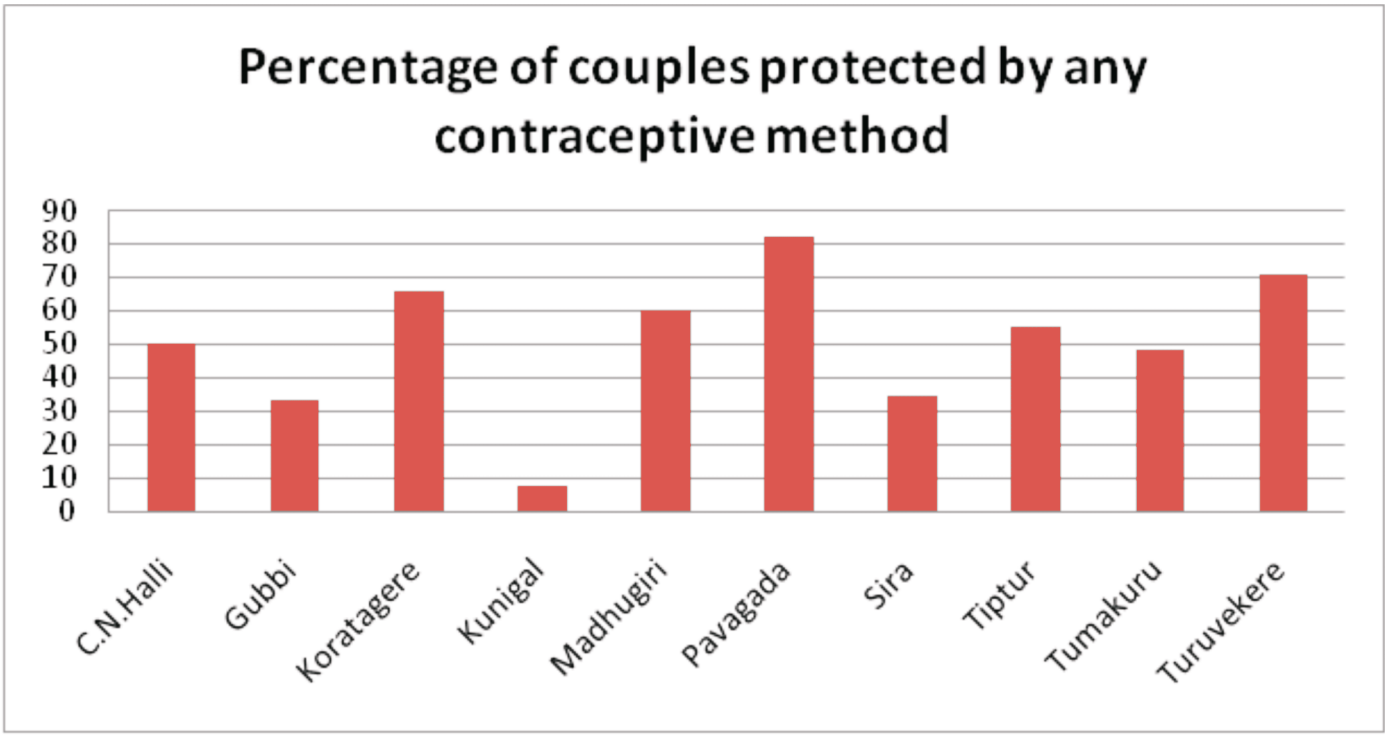
Table No.5.7: Couple Protection -2011 [%]

Sl.No.	Taluk	Percentage of couples protected by any contraceptive method
1	C.N.Halli	50.39
2	Gubbi	33.48
3	Koratagere	66.3
4	Kunigal	7.38
5	Madhugiri	60.67
6	Pavagada	82.3
7	Sira	34.41
8	Tiptur	55.61
9	Tumakuru	48.66
10	Turuvekere	71.22
	District	50.07

Source: DHO, Tumakuru, 2012

The Contraceptive Prevalence Rate is the percent of women of reproductive age who are using (or whose partner is using) a contraceptive method at a particular point in time, almost always reported for women married or in sexual union. Table 5.7 depicts how the Contraceptive Prevalence Rate is highest in Pavagada and lowest in Kunigal, while it is 50.07 per cent for the entire District.

FIG. 5.6: Couples Protected by any Contraceptive Method



It is said that Condom Contraception is the most preferred method of family planning, followed by Oral Pills and the IUD.

5.5 Infrastructure and Health Personnel Facility

Table No.5.8: Allopathic Hospitals-2008 [No.]

Sl. No.	Taluk	Hospital	PHCs	No. of Doctors per 1000 population	Private Hospital	Family Welfare Centres
1	C.N.Halli	-	15	16	4	3
2	Gubbi	-	17	24	3	2
3	Koratagere	1	10	21	2	3
4	Kunigal	-	18	30	1	3
5	Madhugiri	1	13	16	2	4
6	Pavagada	-	6	10	10	3
7	Sira	-	14	28	6	5
8	Tiptur	1	12	25	12	5
9	Tumakuru	1	18	21	24	7
10	Turuvekere	-	11	16	5	3
	Total	4	134	207	69	38

Source: District at a Glance, 2009

Table No.5.9: Allopathic Hospitals-2011 [No.]

Sl. No.	Taluk	Hospital	PHCs	No. of Doctors per 1000 population	Private Hospital	Sub Centres	Family Welfare Centres
1	C.N.Halli	1	15	22	6	49	3
2	Gubbi	1	18	28	3	65	4
3	Koratagere	1	12	23	1	42	4
4	Kunigal	1	20	34	3	66	3
5	Madhugiri	1	13	14	2	59	5
6	Pavagada	1	5	16	9	47	5
7	Sira	1	16	30	5	55	5
8	Tiptur	1	12	22	20	41	5
9	Tumakuru	1	21	22	44	65	8
10	Turuvekere	1	11	22	3	37	3
	Total	10	143	233	96	526	45

Source: District at a Glance, 2011

As shown in Table 5.8, there were 4 government hospitals, 134 primary health centres, 69 private hospitals and 38 family welfare centres in the District. The distribution of the health infrastructure across the taluks is shown in the table.

According to the Table 5.9 there is one Government Allopathic hospital in each of the taluks of the Tumakuru District, amounting to a total of ten for the District. Primary Health Centres (PHCs) are established usually covering a population up to 30,000. Kunigal Taluk has the highest number of PHCs (20), with a total population of 225783. Kunigal also has the highest number of doctors per 1000 population. The number of private hospitals in Tumakuru Taluk is the highest, whereas Koratagere has only one private hospital. The District has a total of 526 sub centres for health. The number of family welfare centres range from three to eight, across the taluks, with a total of 45 for the District. Thus, there is the augmentation of the health infrastructure in the District which must be resulting in better health of the communities.

5.6 ANC Coverage and Anaemia among pregnant women -2007 & 2011

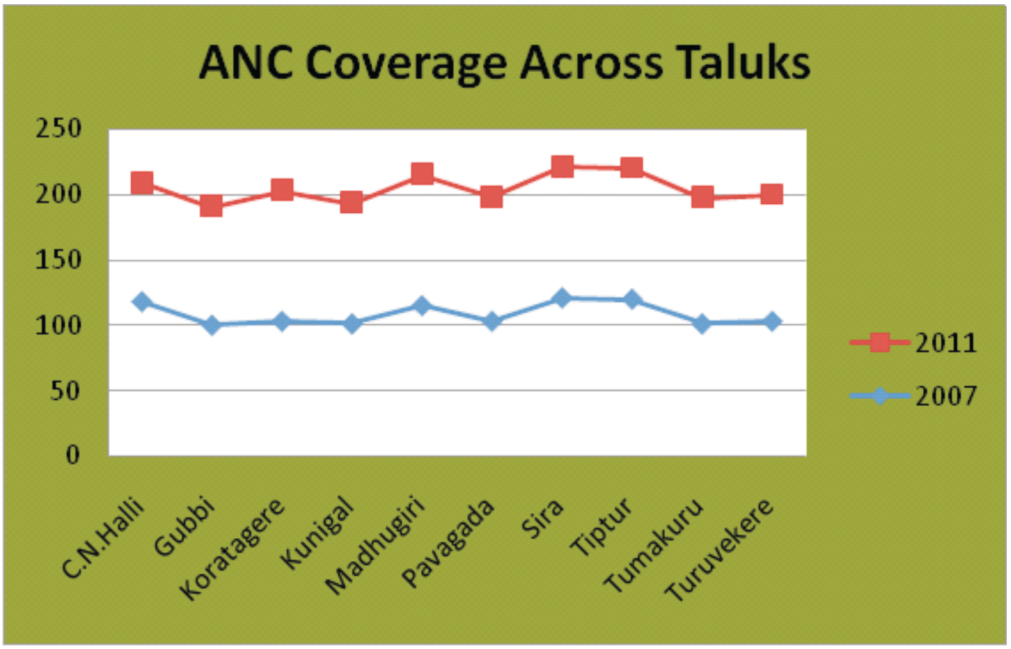
Table No.5.10: ANC Coverage Among Pregnant Women -2007 & 2011 [%]

Sl. No.	Taluk	Percentage of Pregnant Women Receiving full ANC	
		2007	2011
1	C.N.Halli	118	90.70
2	Gubbi	100	90.40
3	Koratagere	103	100.00
4	Kunigal	101	92.02
5	Madhugiri	115	100.00
6	Pavagada	103	94.78
7	Sira	121	100.00
8	Tiptur	120	100.00
9	Tumakuru	101	96.23
10	Turuvekere	103	96.62
	District	107	98.67

Source: DHO, Tumakuru, 2011

Antenatal Care (ANC) Coverage includes identification and management of obstetric complications and is also an opportunity for ensuring skilled attendants at birth. The percentage of pregnant women receiving full ANC for the District during 2007 is 107. In all, the taluks of the District, the achievement is higher than the targets. This could be due to the migration of the pregnant women to their native place. It is highest in taluks such as Sira, Tiptur and Chikkanayakanahalli.

Fig.5.7: ANC Coverage Across Taluks- 2007 & 2011



During 2011 Koratagere taluk has 100 percent ANC Coverage among pregnant women and all other taluks of the District have between 90 and 96 percent coverage, bringing the average for the District to 98.67 per cent, as shown in Table 5.10. Although antenatal care coverage in Karnataka is among the highest in the country, it is the lowest among all the southern states.

Table No.5.11: Pregnant Women with Anaemia - 2011 [%]

Sl.No.	Taluk	Share of Pregnant Women with Anaemia (ANE)
1	C.N.Halli	40.97
2	Gubbi	34.99
3	Koratagere	52.69
4	Kunigal	68.1
5	Madhugiri	24.87
6	Pavagada	44.25
7	Sira	57.89
8	Tiptur	34.5
9	Tumakuru	55.07
10	Turuvekere	55.17

Source: HMIS, DHO, Tumakuru, 2011

Anaemia may cause serious problems for the mother and the unborn child. Vitamin A deficiency can cause eye related problems and a higher risk of dying from measles, diarrhoea, or malaria. Eating foods rich in iron and taking iron supplements can prevent anaemia. The share of pregnant women with anaemia is and highest in Kunigal 68.1 per cent, while it is lowest in Madhugiri (24.87 per cent).

5.7 Institutional Delivery

Table No.5.12: Institutional Delivery -2011 [%]

Sl.No.	Taluk	Share of Institutional Deliveries (ID)
1	C.N.Halli	94.84
2	Gubbi	93.79
3	Koratagere	98.17
4	Kunigal	98.69
5	Madhugiri	97.25
6	Pavagada	97.01
7	Sira	98.17
8	Tiptur	99.69
9	Tumakuru	99.24
10	Turuvekere	99.55
	District	99.26

Source: DHO, Tumakuru, 2011

A key determinant of the health of mothers and children is the place where the delivery takes place. Safe delivery depends on the education and literacy level of the mothers and on whether delivery takes place in a health institution. As the education level increased, so did the proportion of mothers delivering babies at the health institutions. Skilled attendance at birth has been shown to reduce maternal mortality, but not necessarily at home. Table 5.11 indicates that all taluks in the District have over 90 percent of institutional deliveries, thus contributing to the District's overall rate of 99.26 per cent. Despite a steady increase in institutional births, one in three births in Karnataka, still take place at home.

Early postnatal care for a mother helps safeguard her health and can reduce maternal mortality. However, only 59 percent of mothers in Karnataka had a postnatal check-up within two days of birth, as is recommended. Thirty-one percent of mothers received no postnatal care at all. Postnatal care is most common following births in a medical facility; however, about one in five births even in medical facilities were not followed by a postnatal check-up of the mother. Forty percent of home births were followed by a postnatal check-up.

5.8 Immunization of Children

Table No.5.13: Immunization of Children – 2007 & 2011 [%]

Sl.No.	Taluk	Percentage of children fully Immunized	
		2007	2011
1	C.N.Halli	110	100
2	Gubbi	100	100
3	Koratagere	107	100
4	Kunigal	104	100
5	Madhugiri	101	100
6	Pavagada	93	100
7	Sira	108	100
8	Tiptur	102	84.98
9	Tumakuru	102	85.86
10	Turuvekere	106	100
	District	103	100

Source: DHO, Tumakuru, 2011

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Immunization is a proven tool for controlling and eliminating life-threatening infectious diseases. All the eligible children in the District are reported to be fully covered by the immunization during 2007. Pavgada is the only taluk with a reported coverage of 93 per cent.

During 2011, in Tumakuru District, other than Tiptur and Tumakuru taluks which have an average of 85 per cent of immunized children, all other taluks have attained 100 per cent immunization. Although higher than the national average, full immunization coverage in Karnataka is lower than in many other Indian states.

5.9 Children Born Under-weight

Disease and malnutrition are closely linked.

Sometimes disease is the result of malnutrition, or it is a contributing cause. In fact, malnutrition is the largest single contributor to disease in the world, according to the UN's Standing Committee on Nutrition (SCN). Malnutrition at an early age leads to reduced physical and mental development during childhood. Under nourishment affects school performance and studies have shown it often leads to a lower income as an adult. Undernourishment is particularly serious among teenagers.

Table No.5.14: Children Born Under-weight and Malnutrition Children-2011 [%]

Sl.No.	Taluk	Percentage of Children born under-weight	Percentage of malnutrition children
1	C.N.Halli	15.24	21.5
2	Gubbi	10.5	22.51
3	Koratagere	9	21.92
4	Kunigal	12.14	23.25
5	Madhugiri	50.09	24.95
6	Pavagada	3.96	28.87
7	Sira	9.51	25.19
8	Tiptur	7.25	22.27
9	Tumakuru	10.48	19.93
10	Turuvekere	17.59	22.42

Source: DHO, Tumakuru, 2011

Underweight in children is low weight-for-age according to the WHO child growth standards. Child malnutrition – as measured by poor child growth – is an important indicator for monitoring population nutritional status and health. The percentage of underweight children is maximum, as mentioned in Table 5.14, by a large margin, in Madhugiri (50.09) and lowest in Koratagere (9%). All taluks have about 30 per cent malnutrition in children with Tumakuru taluk having the lowest of 19.23 per cent.

Fig.5.8: Children Born Under-weight

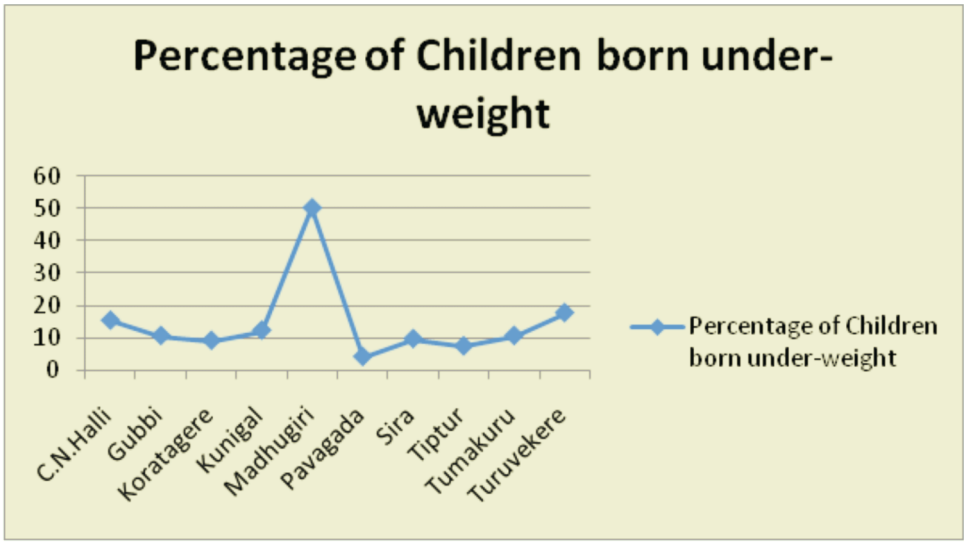


Fig.5.9: Children in Distress



Figure 5.10: An Overview of Children



The positive point to note is that District has got many institutions for the protection of child as per Juvenile Justice (Care and Protection of Children) Act, 2000, i.e. the Child Welfare Committee, Juvenile justice Board, Child line, Balkiyara Balamandira. But the District is in need of Balakara Balamandira, Specialized adoption agency, Cradle baby reception centre to address the various needs of children who are in conflict with law or for deserted children

The situation analysis has highlighted that the number of neglected children are high and the percentage of girl children is high (CWC reports). In 2011 census the sex ratio is 959 girls per 1000 boys compared to figure of 949 girls per 1000 boys of 2001. The discussions with stakeholders have brought the fact that child marriages are prevalent in the District. But that the official statistics maintained are sketchy. However, actions initiated by the department based on Shivaraj Patil report serves as a ray of hope in

stopping the future child marriages. The taluk and block level officers are being trained to arrest the problem.

The Sexual abuse of girl children are often reported in the media but official figures are not maintained. The data from Crime branch, Missing children Bureau and Child line need to be streamlined for better management and future actions in addressing the issue.

Likewise child trafficking is reported in the media but official figures are not there with one agency. Hence monitoring and preventive actions throws challenges. The Anatha and Nirgathikara kuteeras have provided shelter and education to the orphan or single parent children (576). Increased financial support would improve the conditions of the services. Of the 17805 identified, vulnerable children, 58% are with single parent and 9% are orphans. It is necessary to increase the number of Kuteeras to house such children.

Under the Vishesha palana yojane 421 children HIV/AIDS infected affected have been identified. But the process needs to be faster for the beneficiaries to utilize the same as majority of them belong to economically weaker section.

The ICDS (Integrated Child Development Services) programme provides nutrition and health services for children under age 6 years and pregnant or breastfeeding women, as well as preschool activities for children age 3-5 years.

5.10 Communicable Diseases

Epidemiology is the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems. Epidemiological information is used to plan and evaluate strategies to prevent illness and as a guide to the management of patients in whom disease has already developed.

Table No.5.15: Communicable Diseases – 2007 & 2011[%]

Sl. No.	Taluk	Percentage of people affected by major communicable diseases	
		2007	2011
1	C.N.Halli	0.07	0.3
2	Gubbi	0.13	0.39
3	Koratagere	0.31	0.41
4	Kunigal	0.26	0.29
5	Madhugiri	0.31	0.38
6	Pavagada	0.13	0.19
7	Sira	0.38	0.43
8	Tiptur	0.10	0.24
9	Tumakuru	0.41	0.1
10	Turuvekere	0.11	0.18
	District	0.25	0.27

Source: DHO, Tumakuru, 2011

Table 5.15 lists the taluk-wise distribution of the percentage of people affected by major communicable diseases like TB and leprosy during 2007 and 2011. The percentage of people affected by communicable diseases in all the taluks is found to vary significantly, and thereby in the District it is 0.25 per cent during 2007 and 0.27 per cent during 2011. Thus, there is a slight increase in the number people suffering from communicable diseases in taluks such as Sira and Madhugiri-it has been consistently high.

5.11 Per-capita Expenditure Analysis on Health Sector

The table below 5.16 gives an insight into the spending on health per person per year in the District. This table shows that the average per capita expenditure on health for Tumakuru District comes up to Rs. 425. The highest expenditure is in Chikkanayakanahalli taluk (Rs. 471), while lowest is in Tumakuru taluk (Rs. 185).

Table No.5.16: Per-capita Expenditure Analysis on Health Sector – 2011 [No.]

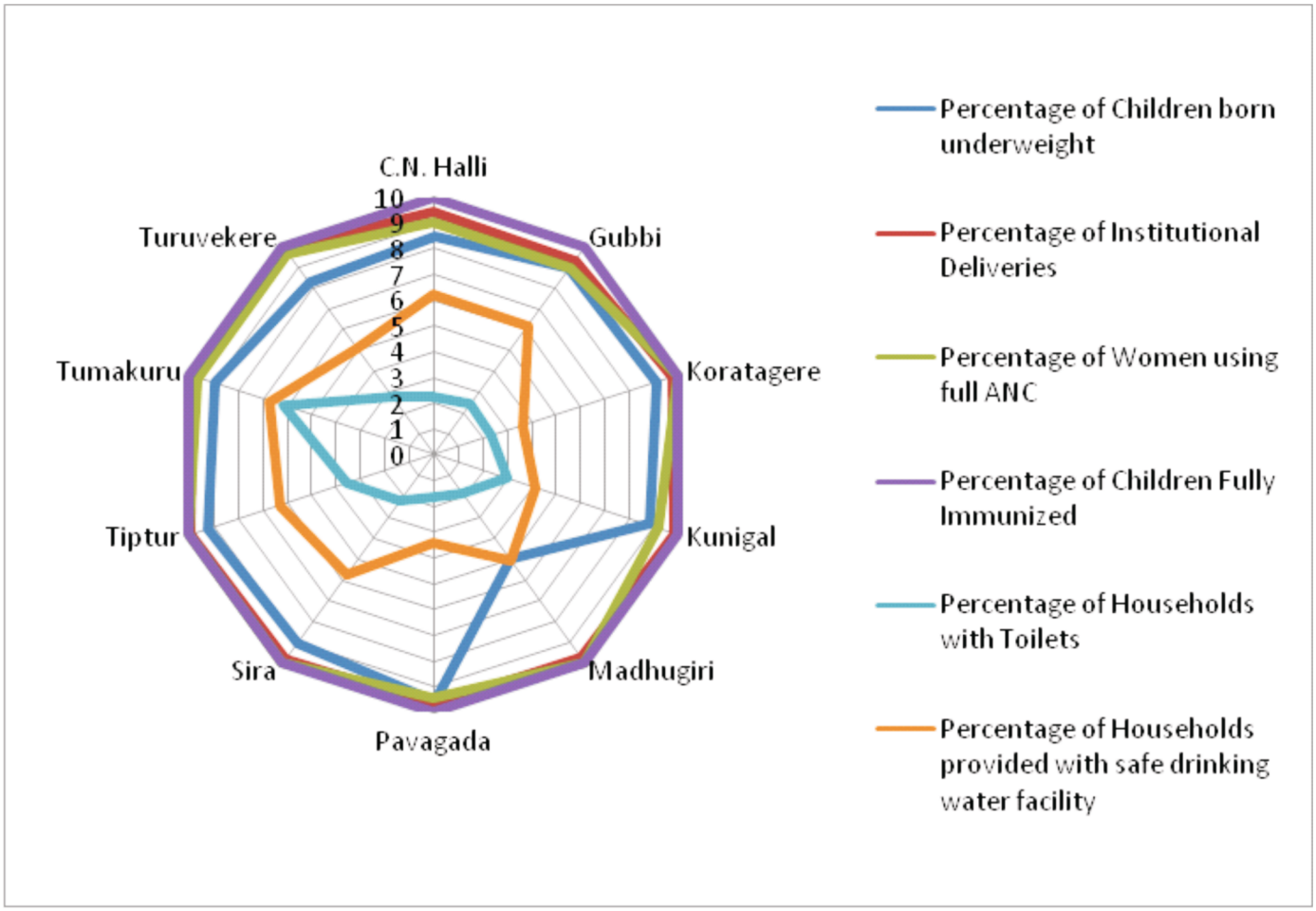
Sl.No.	Taluk	Per-capita expenditure (Amount in Rs.)
1	C.N.Halli	471
2	Gubbi	383
3	Koratagere	581
4	Kunigal	448
5	Madhugiri	385
6	Pavagada	427
7	Sira	350
8	Tiptur	443
9	Tumakuru	185
10	Turuvekere	577
	District	425

Source: DHO, Tumakuru, 2011

Enhancing the government health sector financing to reach at least 2-3 per cent of total GDP by 2012 was an important objective of the National Rural Health Mission (NRHM) launched by the Government of India in 2005-06. However, government spending on health has plateaued at 1.2 per cent (Sept 2013). Without adequate government spending on health care, it is the most marginalized groups like women and the physically challenged who suffer in silence.

5.12 Radar Analysis for Health

Fig.5.11: Radar Analysis for Health for Tumkur District



This section conducts a radar analysis on key health indicators for the entire District. All the indicator values have been calibrated to a 10 point scale in order to standardise discussion and give a clear idea on the items that require attention District and Taluk wise. The percentage of children born underweight, the percentage of institutional deliveries, the percentage of women using full ANC, the percentage of children fully immunized by the age of 11 months, the percentage of households with toilets and the percentage of households with safe drinking water are the key indicators so chosen for this analysis.

The graph depicts a 100 per cent immunization of children across the District before the age of 11 months. This is a commendable achievement. There are a small proportion of children being born underweight in the District – with the exception of Madhugiri that has a significant spike in this indicator.

A small percentage of households need to have adequate safe drinking water facilities and toilets. Hygiene and overall health will significantly deteriorate if these facilities are not provided at the earliest; particularly Kunigal has a much lesser than the average percentage of households that have toilet facilities compared to the entire District.

Finally, women are well taken care of by ANCs, which is a very encouraging sign for all the taluks and the District.

Fig.5.12: Radar Analysis for Health for CN Halli Taluk

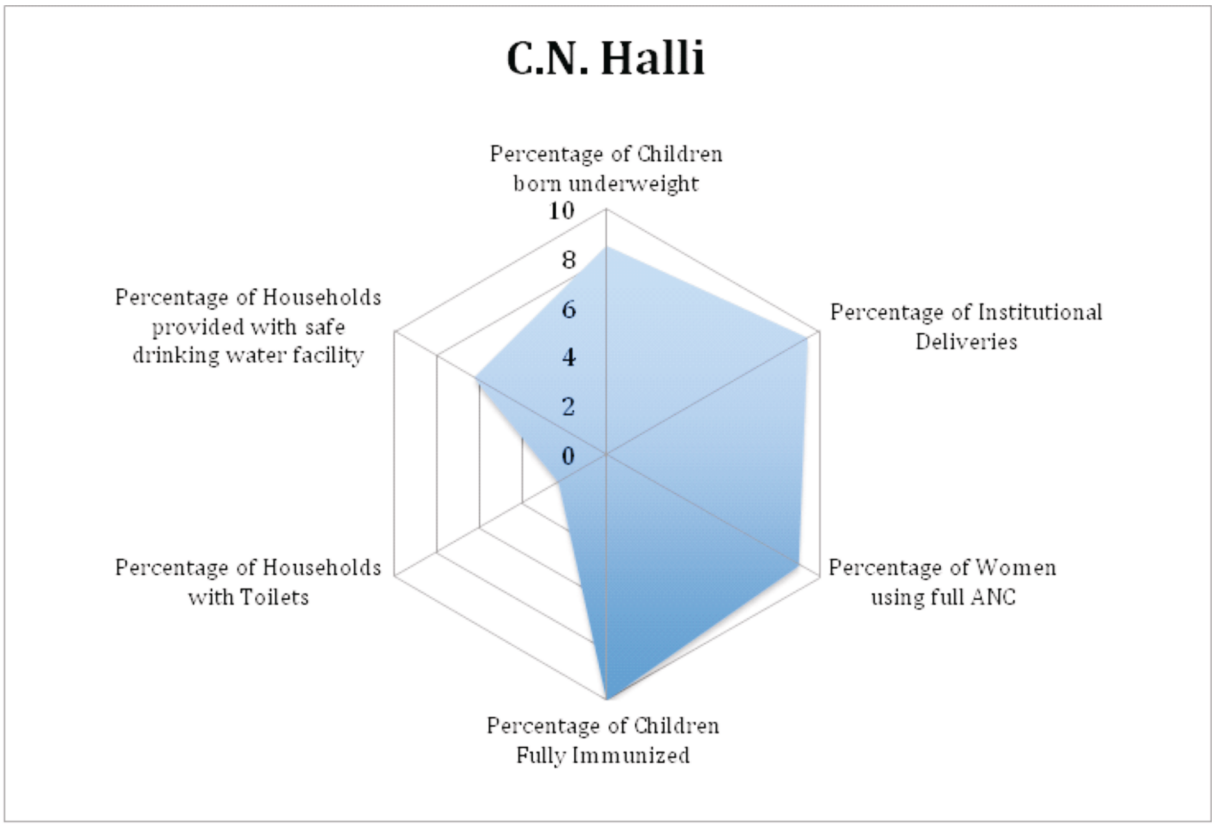


Fig.5.13: Radar Analysis for Health for Gubbi Taluk

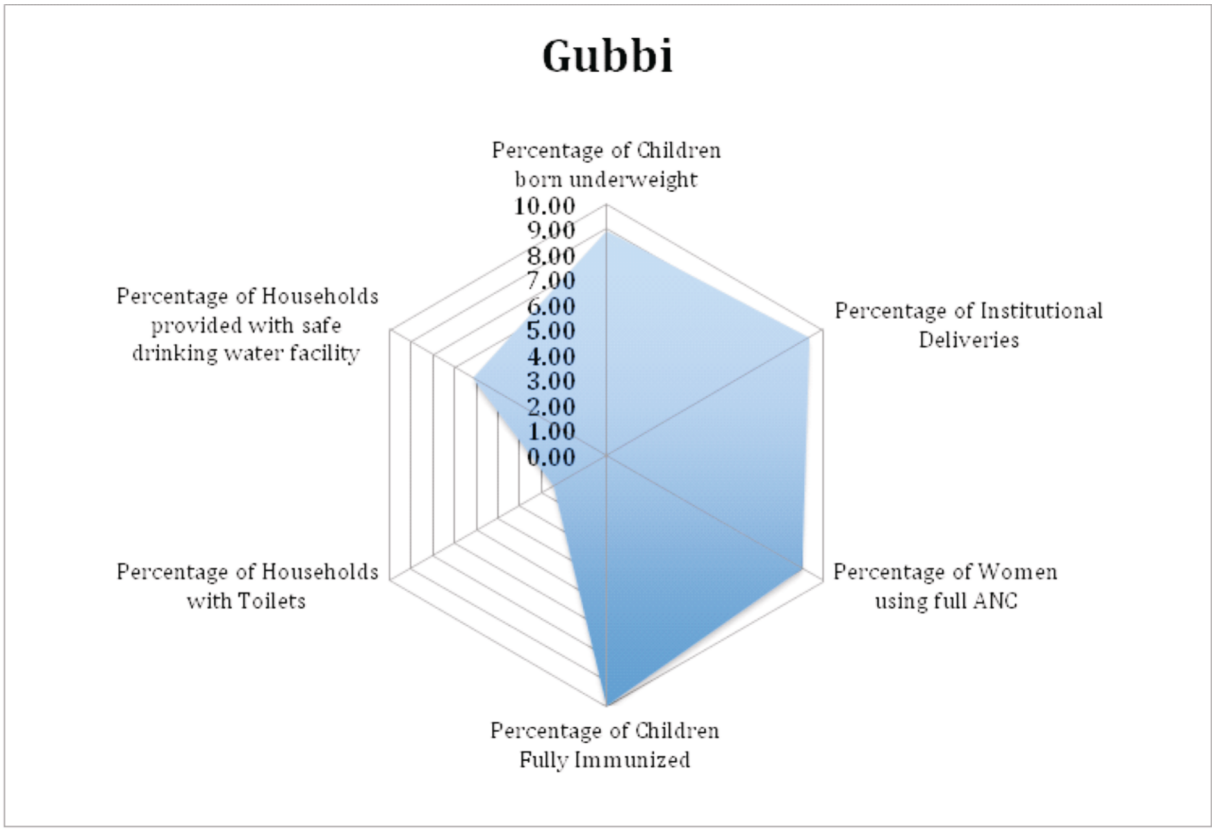


Fig.5.14: Radar Analysis for Health for Koratagere Taluk

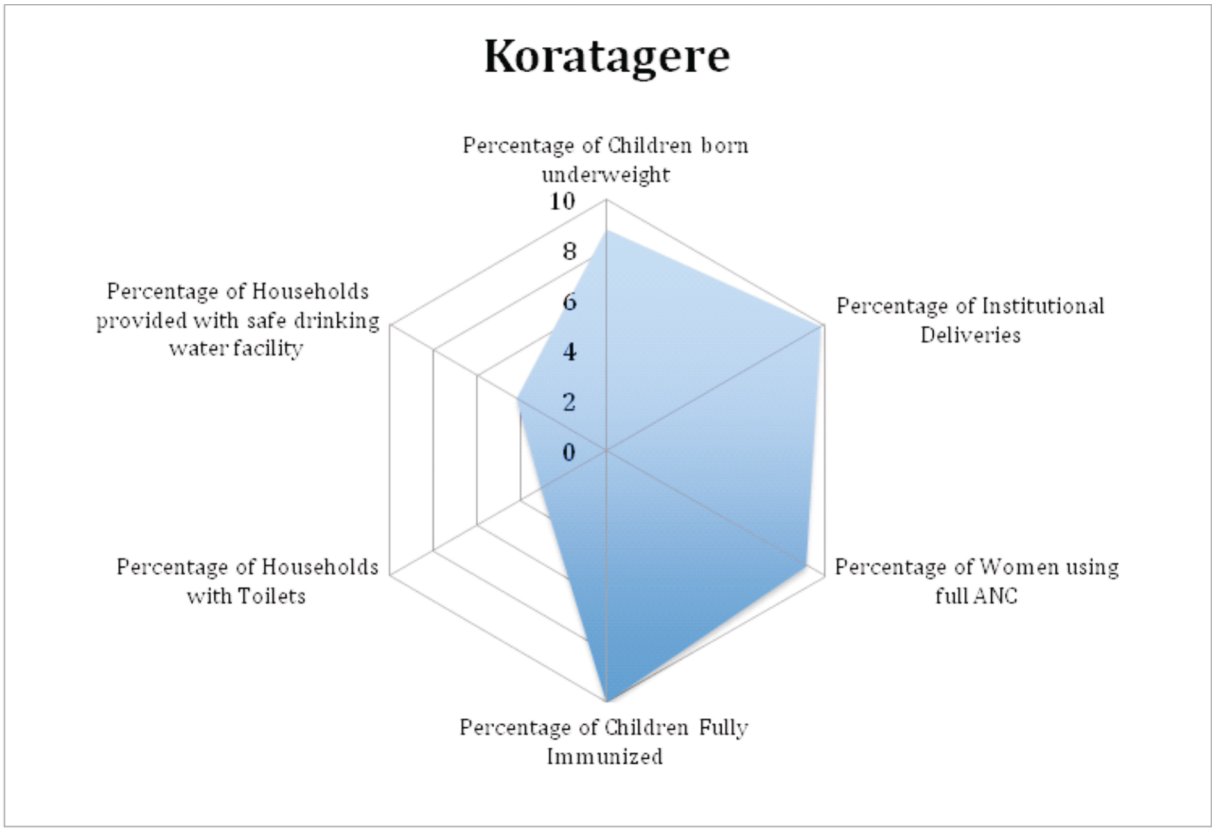


Fig.5.15: Radar Analysis for Health for Kunigal Taluk

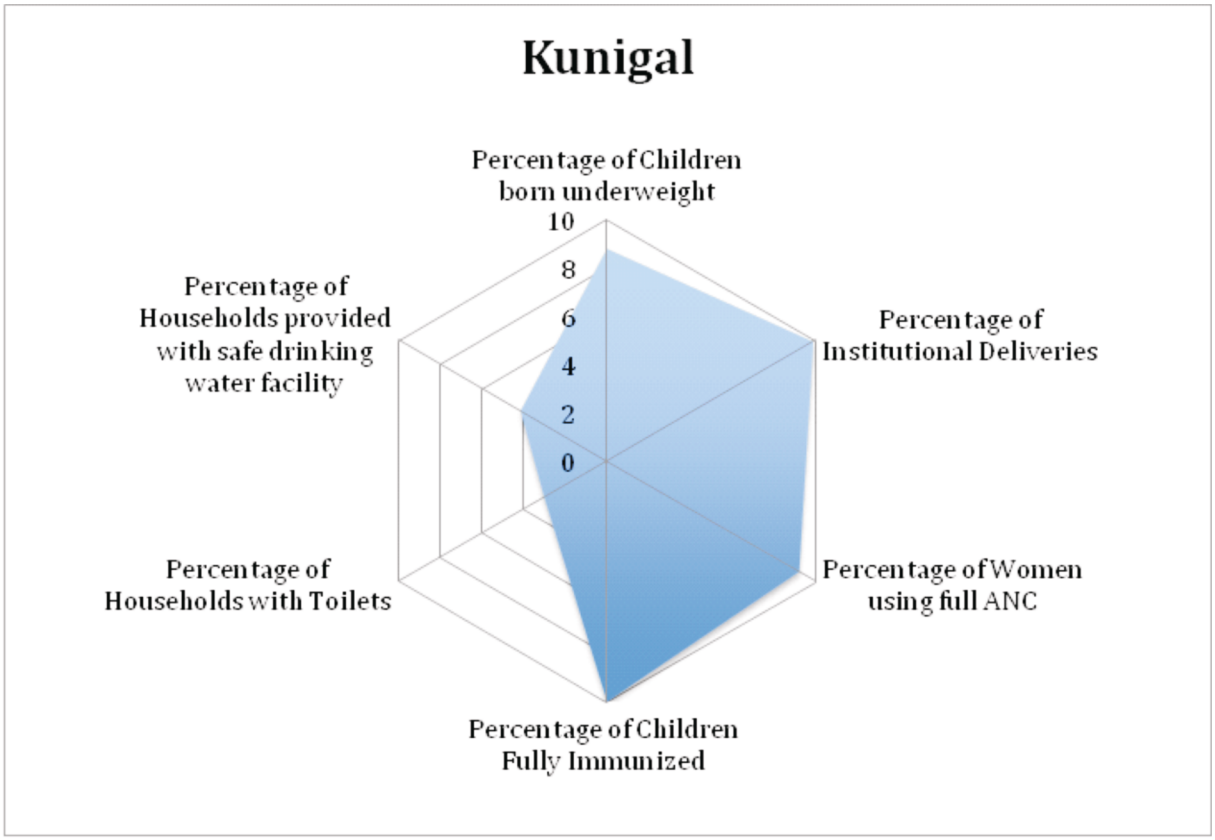


Fig.5.16: Radar Analysis for Health for Madhugiri Taluk

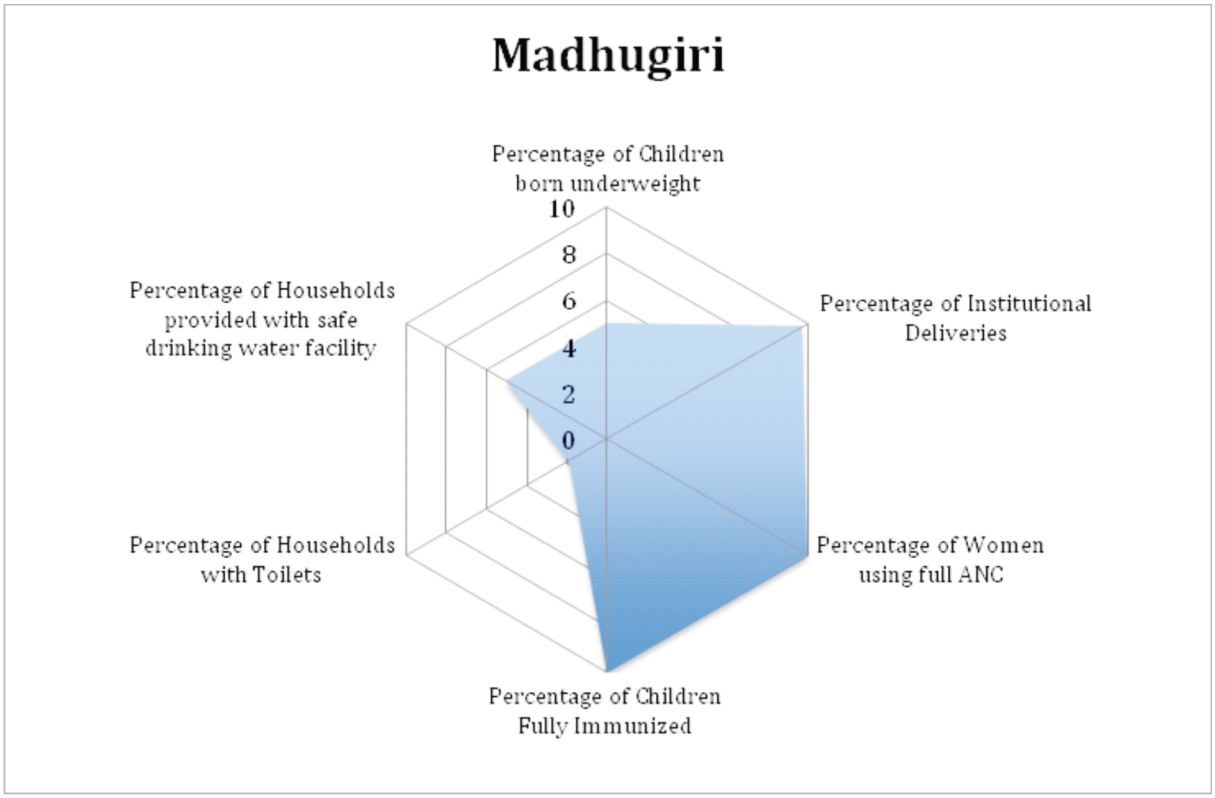


Fig.5.17: Radar Analysis for Health for Pavgada Taluk

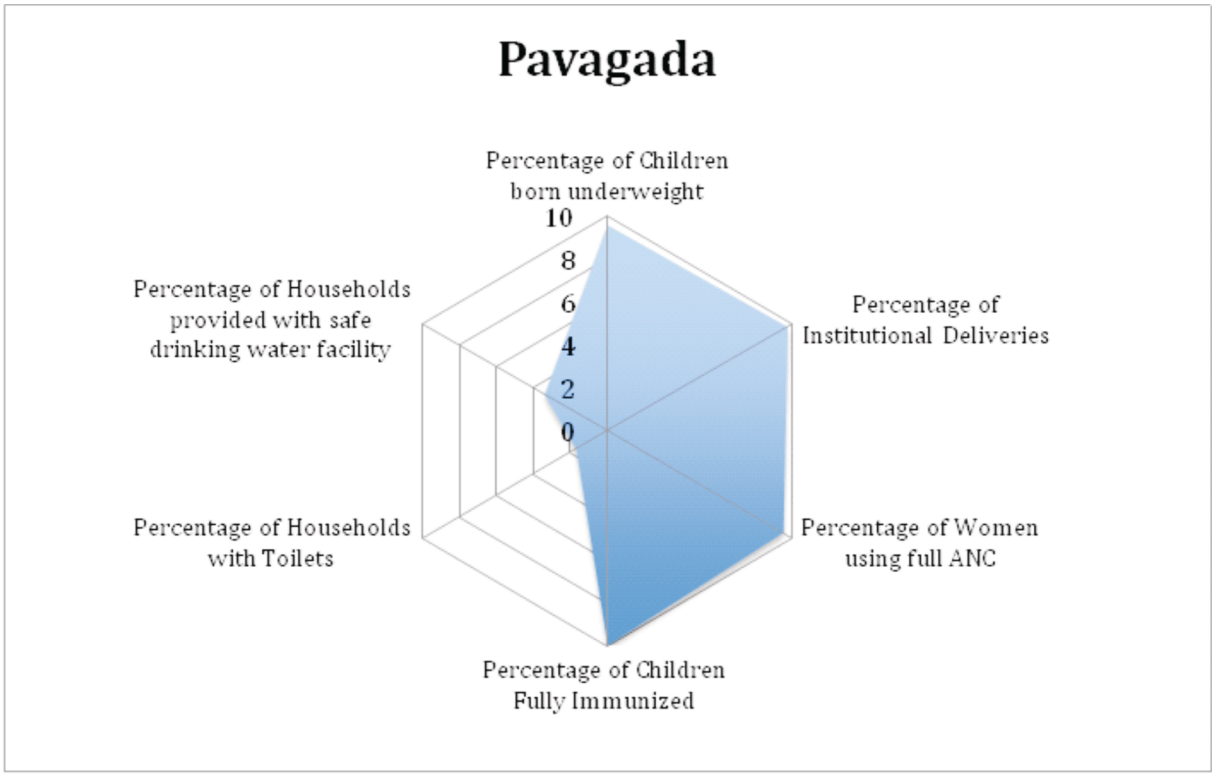


Fig.5.18: Radar Analysis for Health for Sira Taluk

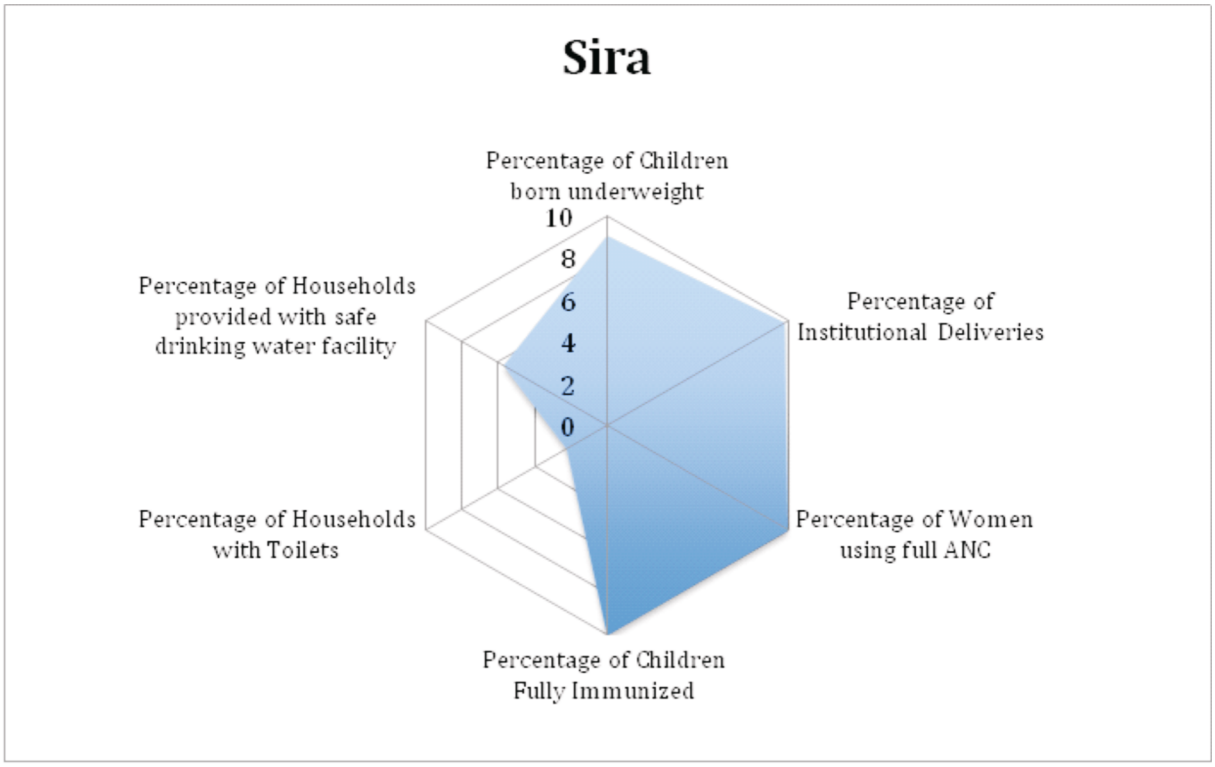


Fig.5.19: Radar Analysis for Health for Tiptur Taluk

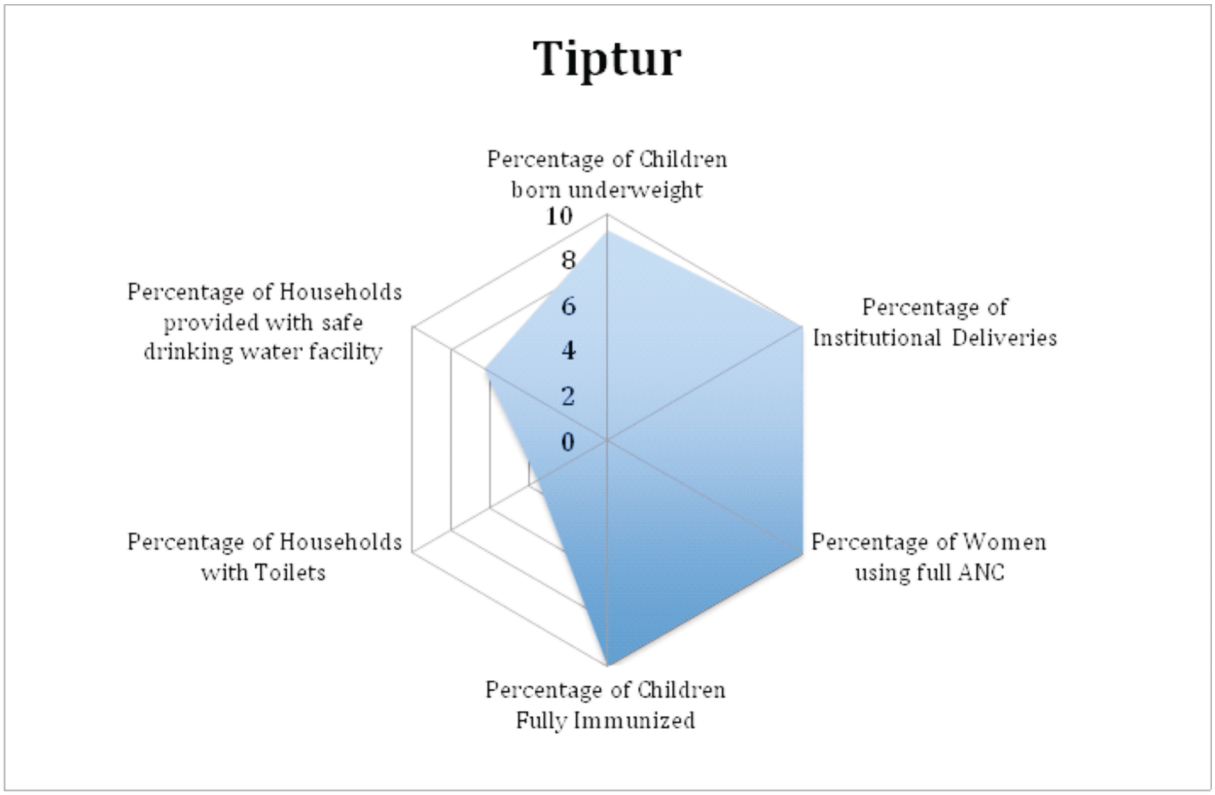


Fig.5.20: Radar Analysis for Health for Tumakuru Taluk

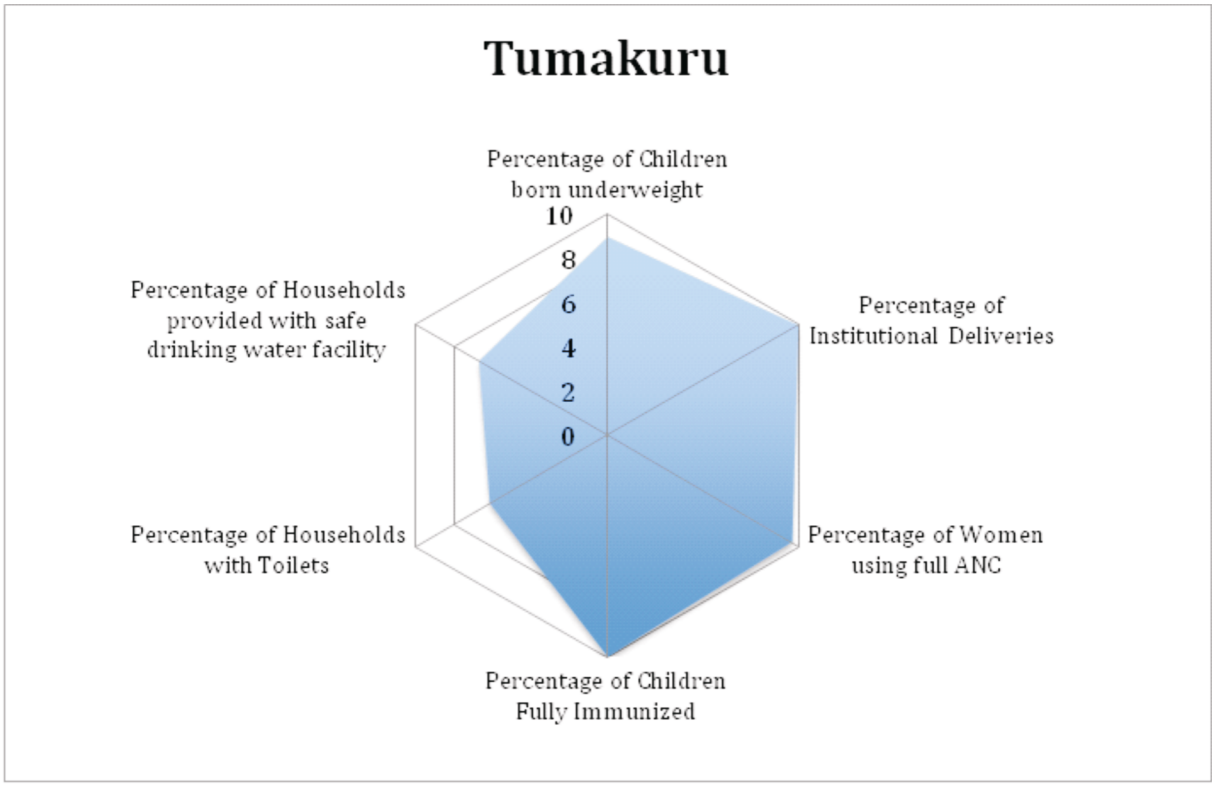
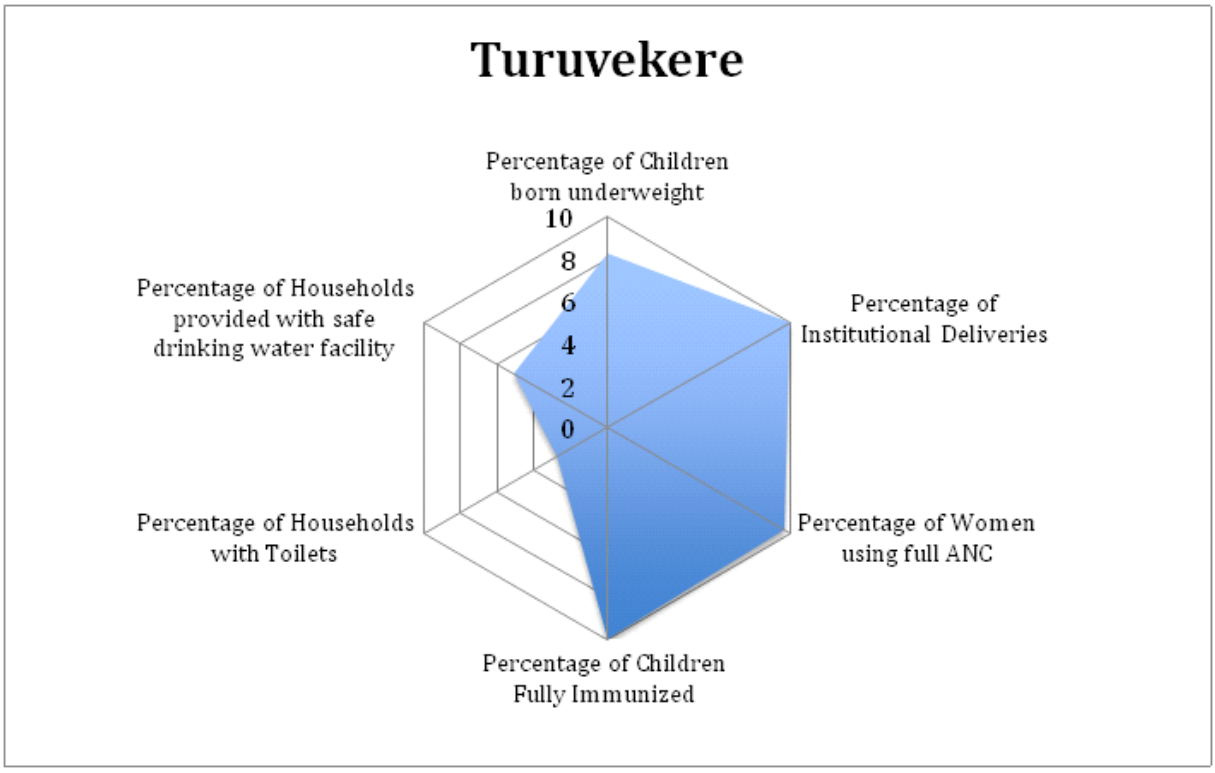


Fig.5.21: Radar Analysis for Health for Turuvekere Taluk



5.13 Success Story

A report prepared for the Social Science and Development Conference in Karnataka Involved a case study of the Yeshasvini Health Insurance Scheme for rural farmers and peasants in Karnataka. The scheme, now in its second year of operation, covers 2.2 million farmers and peasants who pay an annual premium of Rupees 60 ($1.50) for comprehensive coverage of all surgical procedures and outpatient care. The scheme is unique and it has overcome many of the problems associated with health insurance schemes for the poor (such as low levels of coverage and benefits). These features raise the potential of the scheme to be a model for developing countries in providing a modicum of health security for their citizens. This case finds support for replication to several other states in India, particularly those with a reasonable network of private hospitals. This scheme has been quite useful for the rural poor of the informal sector.

5.14 An Overview of Performance and Inadequacies of Health Care System

Tumakuru District's ranking, among the other Districts in Karnataka, in the Composite Development Index has consistently been lowering. In 1960-61, Tumakuru ranked fifth, in 1971-72, it slipped to the sixteenth position, in 1976-77, it occupied the thirteenth position and it more or less maintained its status quo, with the twelfth rank in 1998-99. Among the twenty seven Districts in Karnataka that were ranked for HDI in 2001, Tumakuru District ranked ninth in health, while it ranked fifteenth overall. In 2001, Tumakuru District's HDI ranking slipped further by three, since 1991, while its health ranking also slipped from eight. The 2001 Karnataka HDI report has rightly suggested that Tumakuru is traditionally a District with average performance in terms of Health indicators and has severe regional imbalances.

The per capita expenditure on health benefits by the Karnataka State Government's Department of Health and Family Welfare was Rs. 225 in 2000-2001 and had increased only to Rs. 297 in 2008 -2009. Compared to the state's per capita expenditure on health, Tumakuru's average is much higher.

Health schemes such as Yeshasvini should be popularized. Companies like WIPRO, along with NGOs, are already involved in investing in health care systems for the District. The public- private participation for the same may be encouraged.

Focus should be given to traditional methods of healing such as Ayurveda and Naturopathy. Since Tumakuru is a primarily rural District, these health techniques and services should be organized and promoted in order to penetrate into remote parts of the village. Health insurance schemes could also be investigated and encouraged.

Compared to other backward Districts, Tumakuru District already has fairly good access to safe drinking water and this should be used to maintain sanitation in order to control communicable and non-communicable diseases. To provide for equity and quality in health care and to instil integrity among the health care staff, it would be advisable to follow the recommendations of the Task Force on Health and Family Welfare 2001, constituted by the Karnataka Government to work out an Action Plan.