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Rural Health Infrastructure in India: Its Impact on Growth and Development

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Rural infrastructure can be classified as social infrastructure and economic infrastructure. Infrastructure of all types related to the social sector i.e. health, education, water, and sanitation could be defined under the ambit of social infrastructure. In this article we would focus on the rural health infrastructure that includes the sub-health centers, primary health centers, and community health centers. The successive National Health Policy documents brought out by the Government of India have helped to reduce several dreaded diseases in the country specially in the rural areas, such as small pox, guinea worm, leprosy, kala azar, and filariasis. The other improvements include total fertility rate, and infant mortality rate over three decade period.

Keywords: Rural Development, Health Infrastructure, HDI

Introduction

The rural health centers in India have gone up from 57363 in 1981 to 1.52 lakh in 2000 and currently 1.73 lakh as on March 2012. Despite these improvements, there are certain standing problems related to physical access to health care by the rural population. The infant mortality rate in India and certain states in India are very high compared to the developed countries. There is also a high level of malnutrition among the women of all age groups in rural India. Share of children born under Institutional delivery is still not satisfactory. Above all there is also inequality in the access to health care as well as the health status of different sections of the society. Health indicators such as IMR, institutional delivery, and nutritional status show that the persons of SC and ST group are worse off as compared to the Non-SC/ST persons.

The major health concern presently in the country is HIV / AIDS. This has severe impact on public health as well as economic development also, including. newer diseases such as diabetes, cardio-vascular disease, and hepatitis. The National Health Policy 1983 had envisaged "Health for All" by 2000. The National Health Policy 2002 has realized these shortcomings and plans to improve the public health goals. The objective of this article is to link the importance of health infrastructure in rural areas with growth. The paper will analyse the actual status of rural health infrastructure in India and relation with health status and human development point across states in India.

The paper first discusses the status of rural health infrastructure i.e. the sub-centres, Primary health centre, and community health center in the country across the states. The health status is discussed in the subsequent section along with human development and human poverty. Role of rural health infrastructure on growth and reduction in poverty is dealt in the final section along with policy implications.

Rural Health Infrastructure

Hospitals and Hospital Beds

There were 15,188 hospitals in India according to the India Year Book, 2002 including 4817 government hospitals and 10371 private hospitals. In one decade's time the number of government hospitals has increased to 11993 in 2012. Thus there is on an average one hospital for every 63578 persons in the country in 2002 and increased to 98970 persons per hospital in 2012. This implies an average of 1512 persons per hospital bed (refer Table 1).

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Number of Sub-Centres, Primary Health Centres, and Community Health Centres

Total Health Centres

According to 2001 data, there were 137311 sub-centres, and in the country. This has increased to 146026 sub centres and in 2005 and now 148124 sub centres in 2012. As per the Ministry of Health and Family Welfare Statistics, the number of PHCs has shown a steady increase from 18671 in 7th plan to 22370 in 10th plan and 23391 during 11th plan. The increase in number of sub centres have been in the states of Chattisgarh, Haryana, Jammu and Kashmir, Karnataka, Maharashtra, Odisha, Punjab, Rajasthan, Tamil nadu, Tripura and Uttarakhand. There were 22842 primary health centres in 2001 and went up to 23236 in 2005 and 23887 in 2012. The states that have shown an increase in number of centres is Andhra Pradesh, Assam, Bihar, Chattisgarh, Haryana, Uttarakhand, Karnataka, Maharshtra, Nagaland and Uttar Pradesh. Similarly, the number of community health centres has shown an increase from 3043 in 2001 to 3346 in 2005 and 4809 as on March 2012. Arunachal Pradesh, Chattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Punjab, Odisha, Rajasthan, Tamil Nadu, Uttarakhand, Uttar Pradesh and West Bengal have shown improvements in the number of community health centres during the said period (refer Table 2).

Health Centres Per Unit Area

The coverage of rural health care institutions can be analysed based on spatial dispersion. At all-India level, in 2001 each sub-centre covered about 23 sq.km., and 21.05 sq.km in 2012. In case of PHC the area coverage is 140.52 sq.k.m., and reduced to 130.54 sq. km. The CHC, which is at the block level, covered an area of 1054.89 sq.km. in 2001 and 648.43 sq. km in 2012. We observe a positive change through decrease in the area covered by a health centre in all three cases; the reduction is highest in case of CHC as it accounts for a significant increase in the number of centres (MHFW, 2012).

Health Centres Per Radial Distance

As the number of all three health centres have increased, the average radial distance between two health centres has decreased in the distance in case of sub centre from 2.73 km in 2001 to 2.59 km in 2012. Similarly it has decreased from 6.69 km to 6.44 km in case of primary health centre during the same period. however, there is no significant change in the average radial distance between the community health centres at 14.32 km in 2001 and 14.36 km during 2012 (MHFW, 2012).

Population per Health Centre

As per the norms, each sub centre has to cover a population of 5000 in normal areas and 3000 persons in hilly areas. As per statistics each sub centre now covers about 5624 persons. Each primary health centre has to cover 30,000 persons in normal area and 20,000 in hilly region and currently covers 34,876 persons. Similarly each community health centre covers an average population of 1, 73,235 persons as per 2012 statistics. This is much higher than the average of 80,000 persons in normal areas and 12,000 persons in hilly areas (MHFW, 2012). As per 2011 population norms there is short fall in the number of health centres to the extent of 13.2 per cent in case of sub centres, 18.5 per cent in case of PHC and 40.9 per cent in case of CHC.

Status of Infrastructure in Rural Health Centres

The number of health centres of all three types has increased in actual numbers as well as coverage in terms of population and area covered. However, this does not ensure the increase in quality of the facilities available in the health centres. This includes equipments, facilities as well as staff.

The number of health centres with own building has improved significantly with 48.5 percent to 62.7 per cent in case of sub centres between 2005 and 2011. The percentage of PHC increased from 75.3 per cent to 86.7 per cent during the same period. in 2011, 95.3 percent of CHC is situated in own building compared to 92.4 percent in 2005. The primary health centres in general have poor basic facilities. For instance, only 53.7 percent of PHC have labour rooms, 36.5 per cent have operation theatre, PHC with 4-6 beds account for

62.4 per cent only and those with telephones are 43.2 percent. The number of PHC that provide 24-hour delivery service account only for 40 per cent of the total in the country. There are few but insignificant proportion of PHC without water, electricity connections and approach road accounting for 6.3, 5.1 and 4.8 percent respectively.

Regarding facilities at the sub centre the situation is worse than that of the PHC. For instance in 2011, only 42 per cent of sub centres provide quarters for ANM. There is no regular water supply in 28 per cent of sub centres and 29.5 per cent do not have electricity connection. Similarly 23 per cent of the sub centres do not have proper approach road.

There is shortage of Staff at both sub centre and PHC levels. There is no ANM in 5.4 per cent of the sub centres and 42.7 per cent of them do not have male health workers. There are no doctors in 7.5 per cent of the PHC, 38.9 per cent do not have lab technicians, and 17.7 per cent do not have pharmacists. There is a shortfall of staff of female health workers in 10.9 per cent of health centres, male health workers in 53.4 per cent, female health assistants in 26.9 percent and male health assistants in 32.5 per cent. There is also a short fall of doctors in 9.7 per cent of the health centres.

The status of each of the health centres shows better picture at the state level as compared to all-India level that is described below.

Sub-Health Centres:

According to the norms a sub centre must have a building, electricity, water supply, a toilet, and quarters for the ANM to live. From the secondary sources across the states it is seen that among the major states Kerala tops the list with availability of government building, electricity connection, and toilet facility. Except for Kerala and few northeastern states sub-centres with government buildings and water supply is not satisfactory. The availability of toilet facility is satisfactory in almost all the states. The share of sub-centres with supply of electricity is above 75 percent only in six states. The percentage of ANMs living in quarter is in the order of 40 to 50 percent in only four states. Overall, the SHC infrastructure facility across the states has less relevance with their levels of development. That is to say that, higher the level of development has not resulted in higher infrastructure facility in the state and vice versa (refer Table 3).

Primary Health Centres:

The primary health centre should have a building with water, electricity, and toilet facilities. In addition, it must also have a labour room, telephone connection, one vehicle, and at least one bed. As compared to the sub-centres more than 70 percent PHCs have own buildings in the states except for Uttar Pradesh where only about 60 per cent of the PHCs have own building. The infrastructure is poor with respect to availability of water, labour room, and to a certain extent vehicle also. Comparing the facilities of infrastructure in PHCs in all states, all four southern states, Gujarat and Maharashtra are well equipped with all the necessary facilities. The percentage of PHCs with labour room, telephone, and vehicle facility is very low in the low income and high poverty states namely Bihar, Chattisgarh, Jharkhand, M.P, Orissa, Rajasthan, and U.P. PHCs with at least one bed account for more than 70 per cent of total in all states except Assam, Bihar, Chattisgarh, M.P., and West Bengal (refer Table 4).

Community Health Centres:

Community health centres are located at the Block or Tehsil level head quarters. The infrastructural facility at each CHC is larger as compared to PHC. This includes electricity generation, operation theatre, specialized OPD, and linkage with blood bank. By and large, we observe that the CHC are equipped with basic facilities such as water, electricity, telephone, and vehicle. They however, lack the other specialized facilities such as operation theatre, specialized OPD, and linkage with blood bank. This is true across all the states irrespective of their levels of development.

From the analysis, the overall observation is that the rural health infrastructure in terms of building and facilities is lacking at the village as well as the block levels. Specialized facility in specific, are severely lacking in almost all the states. The four southern states have fared well in terms of providing facilities at the village level. The low

income / high poverty states have not been able to provide the required facilities for PHCs as well as the CHCs. These states have not been able to achieve targets of setting up PHC and CHC during the 10th Five Year Plan period. At all-India level also, the achievement was 33 percent in case of PHC and 35 percent in case of CHC (refer Table 5).

Health Infrastructure and Development

The Status of health infrastructure in a state gets reflected in the health status of the people of the state. Similarly the status of health of the people gets reflected in the human development. Hence in this section we are trying to see the link between the health infrastructure availability and its impact on status of human development in the state. The national health policy also recognizes the inequalities in health status across states, regions, rural / urban areas, and social groups in the country. We shall analyse the status of health infrastructure with macro indicators such as income, human development index and infant mortality rate across the states.

The health infrastructure in the country across the States of India, gauged by the coverage with respect to population per health centre gives us a mixed result. With respect to all three levels of health centres, the tribal region especially northeastern states have best coverage. This is followed by the southern states especially Karnataka and Kerala. Developed States such as Gujarat, Haryana, Punjab and Maharashtra do not have enough health centres as compared to less developed such as Rajasthan. The comparatively poorer States also do not have sufficient health centres in the States.

The human development indices are comparatively lesser for States with infrastructural facilities in terms of lesser concentration of health centres. However certain states like Maharashtra, Gujarat, Punjab and Haryana, have higher HDI values due to higher per capita incomes. Lower concentration of health centres is also reflecting on lower health status indicated by higher infant mortality rates both state level average as well as average for rural sector of the State (refer Tables 6,7).

HDI at social group level shows that the value is very less for marginalized group i.e. scheduled caste and scheduled tribe as compared to the rest of the society. The HDI's values for the social groups, namely the SCs, the STs, and Non SC/STs. was 0.303, 0.270, and 0.393 respectively compared to 0.366 at the aggregate. This is to show that deprivation of income, health facility and other social indicators for the marginalized group leads to lower HDI. This is true in case of all States (Thorat et.al, 2007).

The debate on economic growth and development has always emphasized that growth is essential for development. It is also that the former precedes the latter. For sustained economic growth and development, attainment of social development is essential. Health care and economic development have two-way effects i.e. through better living conditions, and better work efficiency of labour, leading to better economic development. Moreover health care is a public good with high externality (Sarma, 2004).

In the present era the focus is on a much larger issue of human development. There are exceptions of better social development and human development despite lower economic growth. However, it is mandatory that social infrastructure including schools, health clinics, hospitals, water supply, sanitation, etc. are made adequately accessible to attain good levels of human development. Though there are several other related factors for human development, we wish to focus on the infrastructure. The quality of infrastructure as well as the services obtained from them is crucial. The adequacy in access to the service, the quality of infrastructure and its services together will have impact on the level of human development. In the social sector, health is an important sector for the well being apart from education, nutrition, water, and sanitation. The focus is on rural health infrastructure namely primary health center and sub-health center, and its impact on human development.

Physical access to health centers in terms of geographical coverage is important factor in infrastructure development and its impact on human development. The quality of the

infrastructure is also equally important in terms of own building, water, toilet, labor room, bed, and telephone facilities. Across the states, though Bihar has indicated higher availability of health centers in the rural areas, only about 65 per cent of them have own building. Similarly Uttar Pradesh also lagged behind. Madhya Pradesh, Rajasthan, and Orissa, the status is satisfactory as compared to high-income states of Haryana with only 57 per cent of PHCs with own building.

Comparing the water facility in PHCs across the states, the low-income states of Uttar Pradesh, Bihar, Jharkhand, Chattisgarh, and Orissa are distinct with less than or equal to five per cent of total PHCs. Madhya Pradesh and Rajasthan have reasonably higher percentage of PHCs with 16 and 38 per cent respectively. The situation is similar in case of availability of electricity in the PHCs. Exceptionally; in Madhya Pradesh 64 percent of PHCs have electricity. Labor room and Inpatient beds, which are also important, the situation is worse. There are only three states, which have more than 90 per cent of PHCs with labor rooms. In the states of Chattisgarh, Madhya Pradesh, Orissa, Manipur, and Assam, only 40 to 60 percent of the PHCs have at least one bed (refer Tables 3,4,5).

Conclusion

From the analysis on the status of health infrastructure in rural areas of India, it is clear that the poorer states are worse off in creating access to public health facility. It may also be inferred that the poor health infrastructure is having direct impact on the health status of the rural people as indicated by IMR and HDI. The existing public health infrastructure is far from satisfactory. This has lead to loss of faith in government health services by the people and rise in epidemiological diseases related to respiratory and malaria (Nayar, 1999).

The rural health infrastructure has significant impact on the health status of the people and in turn affects the level of human development in the medium and long term. The rural health infrastructure in terms of sub-centres, primary health centres, and community health centres is not satisfactory in low income / low developed states and vice versa. This has reflected in low health status of the people in these states as seen in terms of infant mortality rate and levels of malnourishment of women. The lack of health infrastructure has also reflected on the low levels of human development and high deprivation. But the States have to consider these issues on a high priority basis in terms of capital expenditure on the infrastructure in the health centres in sub-centres, primary health centres, and community health centres.

The intensity of rural health infrastructure measured through both radial distance and population covered by SHC and PHC across the states do not have much relevance with their status of economic growth. There has however been impact of infrastructure on the status of health indicate by IMR and percentage of anemic women. It has repercussion on the human development status as well.

India's human development measured by the human development index is ranked among the countries with medium level indices. Health is an important component of the HDI along with income and education. Health status, which is measured through infant mortality rate and percentage of women with severe malnourishment, shows that across the states, the prevalence of IMR and anemia are higher in low-income states. The reverse is not true in cases of middle income and high-income states.

Decentralization will improve the quality of delivery mechanism (Gupta and Anil, 1999), the focus on information, education, and communication (IEC); the role of panchayati raj institutions (PRI), the role of private partnership including NGO and CSO become important for improving rural health infrastructure through increase in public health expenditure as a percentage of total health expenditure, as experienced in many other developing and developed countries. The share of expenditure on health has to increase at the central and state levels as a percentage of gross domestic product and state domestic product respectively.

Table 1 State-wise Number of Government Hospitals and Beds (Including CHCs) in Rural and Urban Areas of India (As on 01.01.2012)

States/UTs	Rural Hospitals (Govt.)		Urban Hospitals (Govt.)		Total Hospitals (Govt.)		Provisional Projected Population as on Reference Period (In '000)	Average Population Served Per Govt. Hospital	Average Population Served Per Govt. Hospital Bed
	No.	Beds	No.	Beds	No.	Beds			
Andhra Pradesh	143	3725	332	34325	475	38050	84666	178243	2225
Arunachal Pradesh	146	1356	15	862	161	2218	1184	7354	534
Assam	108	3240	45	4382	153	7622	29814	194863	3912
Bihar	61	1830	169	16686	230	18516	103805	451325	5606
Chhattisgarh	119	3270	99	6158	218	9428	22934	105202	2433
Goa	8	1422	9	1187	17	2609	1458	85765	559
Gujarat	318	11099	127	182111	445	193210	60384	135694	313
Haryana	61	1212	93	6667	154	7879	24597	159721	3122
Himachal Pradesh	97	2905	53	5574	150	8479	6856	45707	809
Jammu and Kashmir	61	1820	31	2125	92	3945	11099	120641	2813
Jharkhand	NR	NR	NR	NR	500	5414	29745	59490	5494
Karnataka	468	8010	451	55731	919	63741	58181	63309	913
Kerala	308	12233	138	19727	446	31960	33388	74861	1045
Madhya Pradesh	333	10040	124	18493	457	28533	71050	155470	2490
Maharashtra	523	11672	843	56282	1366	67954	112373	82264	1654
Manipur	217	664	8	721	225	1385	2722	12098	1965
Meghalaya	29	870	10	1967	39	2837	2591	66436	913
Mizoram	20	770	7	660	27	1430	1091	40407	763
Nagaland	23	705	25	1445	48	2150	2197	45771	1022
Odisha	1659	7099	91	8715	1750	15814	41947	23970	2653
Punjab	78	2360	135	8063	213	10423	27704	130066	2658
Rajasthan	380	13754	446	12236	826	25990	68621	83076	2640
Sikkim	30	730	3	830	33	1560	608	18424	390
Tamil Nadu	533	25078	48	22120	581	47198	65629	112959	1391
Tripura	14	950	18	2082	32	3032	3574	111688	1179
Uttar Pradesh	515	15450	346	40934	861	56384	197271	229118	3499
Uttarakhand	666	3746	29	4219	695	7965	9511	13685	1194
West Bengal	364	13693	290	57498	654	71191	91348	139676	1283
India	**7347**	**160862**	**4146**	**618664**	**11993**	**784940**	**1186944**	**98970**	**1512**

Source: Ministry of Health & Family Welfare, Govt. of India.

Table 2. State-wise Government Health Facility for Rural Population in India as on March 2010

S. No.	State/UT	Sub centre	PHCs	CHCs
1	Andhra Pradesh	12522	1570	167
2	Arunachal Pradesh	286	97	48
3	Assam	4604	856	108
4	Bihar	9696	1863	70
5	Chhattisgarh	4776	716	143
6	Goa	172	19	5
7	Gujarat	7274	1096	290
8	Haryana	2484	441	107
9	Himachal Pradesh	2071	449	73
10	Jammu & Kashmir1	1907	375	77
11	Jharkhand	3958	330	188
12	Karnataka	8143	2193	325
13	Kerala2	4575	813	233
14	Madhya Pradesh	8869	1155	333
15	Maharashtra	10580	1816	365
16	Manipur	420	73	16
17	Meghalaya	405	109	29
18	Mizoram	370	57	9
19	Nagaland	396	126	21
20	Orissa	6688	1279	231
21	Punjab3	2950	446	129
22	Rajasthan	11487	1504	368
23	Sikkim	147	24	0
24	Tamil Nadu	8706	1283	256
25	Tripura	627	79	11
26	Uttarakhand	1765	239	55
27	Uttar Pradesh	20521	3692	515
28	West Bengal4	10356	909	348
All India		147069	23673	4535

Source: Rural Health Statistics in India, 2010

1 *8 CHCs upgraded to the level of District Hospital*

2 *Because of the implementation of standardization of health institutions some of the PHCs were changed to CHC and vice versa Some of the CHCs with more facilities and patient attendance have been changed to Taluk Hospitals.*

3 *State Govt notified rural hospitals and other institutions functioning in the state as PHCs.*

4 *PHCs upgraded to CHCs*

5 *12 new Sub Centres opened*

Table 3. State-wise Status of Infrastructure of Sub Health Centers in India

States	SC having	Water supply		Electricity	Toilet	ANM staying
	Govt. building	Tap	Well	Yes	Yes	In Quarter
Andhra Pradesh	32.6	12.4	4.3	52.2	62.2	12.7
Assam	51.0	2.7	39.8	30.9	67.2	23.4
Bihar	32.5	0.2	30.0	10.5	26.6	3.6
Gujarat	49.5	45.9	2.4	68.0	91.4	22.2
Haryana	47.6	43.4	1.0	27.7	69.5	13.4
Himachal Pradesh	55.0	70.6	1.2	77.1	71.8	13.9
Jammu and Kashmir	32.5	24.4	27.9	29.1	30.2	0.4
Karnataka	65.7	46.3	4.9	88.8	89.4	41.9
Kerala	74.7	15.3	39.0	76.3	96.6	51.3
Madhya Pradesh	46.4	9.5	10.3	37.0	70.6	23.5
Maharashtra	60.4	52.9	9.9	72.3	91.1	44.0
Orissa	38.9	3.0	9.9	47.2	73.1	28.7
Punjab	48.6	32.8	0.0	55.0	68.8	7.7
Rajasthan	65.0	13.4	3.2	28.0	69.7	33.9
Tamil Nadu	63.3	41.9	0.2	81.8	83.6	42.2
Uttar Pradesh	36.2	1.1	0.6	46.7	79.6	14.8
West Bengal	13.6	8.8	3.5	37.0	64.9	0.2

Source : Family Welfare Statistics in India, 2011

Table 4. State-wise Status of Infrastructure in Primary Health Centres in India

	Percentage of PHCs Having							
State	Own Building	Toilet Facility	Water	Electricity	Labour Room	Telephone	Vehicle	% of PHCs with at least one bed
Andhra Pradesh	90.8	89.5	16.3	98.4	87.4	36.3	24.5	92.4
Assam	96.9	37.6	14.8	65.5	56.2	3.8	12.4	41.7
Bihar	64.6	29.5	2.1	32	27	2.4	19.4	3.9
Gujarat	79.5	91.3	59.3	96.1	66.9	85.7	86.5	92.7
Haryana	57.1	56.3	48.4	85.4	39	67.6	4.7	96.5
Himachal Pradesh	74	55.6	81.7	91	31.4	18.6	19.2	69.5
Jammu and Kashmir	60.7	52.8	55.9	69.9	36.7	7.3	27	92
Karnataka	85.6	88.9	40.7	95.9	61.3	58.7	17.2	77.6
Kerala	91.4	98.6	24.3	92.9	42.9	35.7	41.4	48.6
Madhya Pradesh	70.7	56.9	16.4	64.5	41.9	3.7	1.8	54.4
Maharashtra	84.2	87.7	49.6	95.3	78.9	47.1	55.8	96.8
Orissa	71.9	28.1	5.7	47.7	25.7	1.7	1	46.4
Punjab	76.7	60.6	46.5	80.3	45.1	49.3	11.3	95.8
Rajasthan	71.7	71.4	38.2	79.6	66	7.3	8.8	95.8
Tamil Nadu	94.4	98.2	34.3	99.8	95.6	39.7	41.7	73.5
Uttar Pradesh	58.2	14.7	5.7	45	36	5.5	18.1	89.3
West Bengal	93.8	85.2	11.5	61.2	56	11	2.4	23.9

Source : Family Welfare Statistics in India, 2011

Table 5. State-wise Status of Infrastructure of Community Health Centres in India

State	Water Facility		Tank & Pump	Electricity all Part	Generator Functional	Telephone	Vehicle Functional	OT	OT For gynic	Separate Aseptic labour room	Gynic OPD Facility	RTI/ STI OPD Facility	Lin-kage with District Blood Bank
	Tap	Well											
Andhra Pradesh	22.9	5.6	95.2	98.6	95.2	85.7	94.7	94.3	25.8	18.6	48.6	11.4	1.4
Assam	43.6	0	66.7	84.6	29.4	10.3	76	71.1	35.7	51.3	30.8	12.8	10.3
Bihar	19.2	0	69.2	53.8	91.7	19.2	64.7	100	42.3	42.3	38.5	30.8	3.8
Gujarat	73.9	1.8	85.6	94.6	87.3	95.5	74.8	75.7	4.8	47.7	16.2	2.7	10.8
Haryana	63.5	0	73.2	88.9	90.9	88.9	89.6	85.7	9.3	31.7	65.1	34.9	31.7
Himachal Pradesh	97.7	0	66.7	88.6	63.2	84.1	91.9	93.2	22	59.1	36.4	25	13.6
Jammu and Kashmir	86.4	0	91.7	86.4	71.4	54.4	94.4	68.2	26.7	31.8	77.3	50	9.1
Karnataka	49.3	0	83.6	97.3	61.9	95.9	84.6	89	0	13.7	45.2	4.1	12.3
Kerala	30.8	61.5	100	84.6	16.7	84.6	77.8	84.6	18.2	7.7	0	0	0
Madhya Pradesh	21.2	3.4	70.2	92.1	85.4	57.6	89.9	96	15.3	6.2	32.8	7.9	6.2
Maharashtra (RH)	52	11	84.1	94.1	88.3	81.3	86	84	12.1	55.4	22	13.4	54.1
Orissa	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Punjab	48.7	0	100	100	85.7	93.3	100	93.3	57.1	53.3	60	46.7	86.7
Rajasthan	7	1	79.6	98.4	86.1	49.2	66.67	89	27.1	52.4	46.6	36.6	15.2
Tamil Nadu	50	0	100	100	100	100	100	50	0	0	50	0	0
Uttar Pradesh	13.2	0	66.1	92.7	90	25.3	92.8	96.1	34.8	30.4	49.8	19.1	10.5
West Bengal (BPHC)	42.2	0	94	85.5	86.1	75	79	61.4	7.8	4.8	4.8	2.4	1.2

Source : Social Welfare Statistics in India, 2011.

Table 6. State Wise Infrastructure Facilities at Community Health Centres

Sl.No.	State/UT	Infrastructure, staff and services at CHC(%)						
		Obstetrician/ Gynaecologist	24 hours normal delivery services	Functional Operation Theatre	Designated as FRUs	Designated FRUs offering caesarean section	New born care services on 24 hour basis	Blood storage facility
	INDIA	25.2	90.0	65.2	52.0	18.7	76.1	9.1
1	Andhra Pradesh	42.6	93.8	80.9	88.9	35.3	61.8	28.5
2	Assam	31.3	91.6	24.1	32.5	37.0	88.9	25.9
3	Bihar	40.9	90.9	86.4	87.9	18.8	72.4	0.0
4	Chattisgarh	19.7	99.3	73.0	56.9	22.1	80.8	7.7
5	Gujarat	11.3	97.6	65.6	74.1	25.5	86.0	8.9
6	Haryana	13.1	88.1	60.7	44.1	21.6	62.2	18.9
7	Jharkhand	62.5	100.0	87.5	87.5	0.0	85.7	0.0
8	Karnataka	28.8	94.1	72.0	75.4	22.5	60.7	5.6
9	Kerala	14.3	18.4	26.3	18.0	15.4	28.2	2.6
10	Madha Pr	15.8	99.6	70.7	61.4	17.7	86.2	6.3
11	Maharashtra	40.3	95.9	84.6	58.7	14.9	83.7	11.6
12	Orissa	87.3	79.0	59.4	53.7	15.5	53.7	15.5
13	Punjab	31.6	85.2	69.5	39.4	52.5	82.0	8.2
14	Rajasthan	29.9	98.9	60.3	52.7	38.0	88.2	15.0
15	Tamil Nadu	7.2	100.0	56.8	46.7	0.0	86.1	1.8
16	Uttar Pr	19.5	92.1	88.5	55.8	6.2	71.8	1.3
17	West Bengal	11.6	96.1	46.3	17.9	22.5	86.7	10.0
18	Arunachal Pr.	34.2	89.5	60.5	65.8	12.0	68.0	0.0
19	Goa	20.0	100.0	60.0	80.0	0.0	100.0	0.0
20	Himachal Pr	4.4	87.0	47.8	35.9	6.1	84.9	3.0
21	J & K	45.2	84.9	58.9	71.2	20.4	67.3	15.4
22	Manipur	15.8	84.2	5.3	31.6	0.0	50.0	0.0
23	Meghalaya	11.5	96.2	15.4	46.2	8.3	50.0	16.7
24	Mizoram	0.0	90.0	80.0	70.0	0.0	100.0	85.7
25	Sikkim	na	na	na	na	na	na	na
26	Tripura	0.0	100.0	16.7	25.0	0.0	100.0	0.0
27	Uttarakhand	16.8	92.6	67.4	53.7	5.9	88.2	2.0

Table.7. State Wise Information on Per Capita Income, Human Development Index and Infant Mortality Rate

State	Income Details (PPP 2008 - Per Capita in Rs.) *	HDI *	IMR Total @	IMR Rural @	IMR Urban @
All India	3337	0.504	44	48	29
Andhra Pradesh	3398	0.485	43	47	31
Assam	2883	0.474	55	58	34
Bihar	2161	0.447	44	45	34
Chattisgarh	2497	0.449	48	49	41
Gujarat	3782	0.514	41	48	27
Haryana	4574	0.545	44	48	35
Himachal Pradesh	4168	0.558	38	38	28
Jammu& Kashmir	NC	NC	41	43	28
Jarkhand	2516	0.464	39	41	28
Karnataka	3269	0.508	35	39	26
Kerala	5262	0.625	12	13	09
Madhya Pradesh	2673	0.451	59	63	39
Maharashtra	3913	0.549	25	30	17
Odisha	2185	0.442	57	58	40
Punjab	4885	0.569	30	33	25
Rajasthan	3289	0.468	52	57	32
Tamil nadu	3835	0.544	22	24	19
Uttar Pradesh	2910	0.468	57	60	41
Uttarakhand	3536	0.515	36	39	23
West Bengal	3414	0.509	32	36	26

Source :: Table 1 (Suryanarayana, et.al, 2011)*
@Table 1 (Registrar General, India, 2011)
NC : Not Calculated.

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