

Health Infrastructure Requirement in Dang District

Parin Manishbhai Patel

PG Student, Master of Planning, Bhaikaka Centre for Human Settlements (APIED),
Vallabh Vidhyanagar, Gujarat, India

How to cite this paper: Parin Manishbhai Patel "Health Infrastructure Requirement in Dang District" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-3 | Issue-4, June 2019, pp.1691-1695, URL: <https://www.ijtsrd.com/papers/ijtsrd25352.pdf>



IJTSRD25352

ABSTRACT

Health, as defined by the World Health Organization (WHO), is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Good health is essential to sustainable development. It takes into account widening economic and social inequalities, rapid urbanization, threats to the climate and the environment, other infectious diseases and emerging challenges such as non-communicable diseases. To overcome this problem efficient health infrastructure is required. Even in 20th century some tribal regions of India still facing issue of shortage of health infrastructure. Present paper discuss the issues and relatable solution of health infrastructure requirement in The Dangs district in Gujarat.

Keywords: Health, Dang, Infrastructure, Gap analysis, Tribal

INTRODUCTION

Socio-cultural and economic framework determines health condition of the population. After independence lot of efforts were made to improve health standards of the rural and tribal areas. But it is common phenomena that resources are mostly diverted towards towns and cities than the rural and tribal parts. The health services show a lopsided pattern with expenditure concentrated on sophisticated facilities in the towns, leaving the rural majority practically unserved. (Borse, 2017)

Uniform distribution of any service or facility is always a challenging job as the physical and cultural factors are not homogeneous.

Copyright © 2019 by author(s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



Providing Health care facility to a large population which is distributed in variety of landforms or physical region is not easy task. Study of health care services is one of the major aspects of Health Geography. (Borse, 2017)

Healthcare is India's one of the largest part of service sector in terms of revenue and employment, and is expanding rapidly. During the 1990s, Indian healthcare grew at annual compound growth rate of 16%. In year 2009, the number of beds available per 1000 people in India was only 1.27, which is less than half the global average of 2.6. Rural people in India in general, and tribal populations in particular, have their own beliefs and practices regarding health. Some tribal groups still believe that a disease is always caused by hostile spirits or by the breach of some taboo. They therefore seek remedies through magic religious practices. On the other hand, some rural people have continued to follow rich,

undocumented, traditional medicine systems, in addition to the recognised cultural systems of medicine such Ayurveda, Unani, Siddha and Naturopathy, to maintain positive health and to prevent disease. (Patil, 2002)

Aim:

To study the current status of health facility and providing required facility as per the standards and specification.

Objectives:

- To understand current scenario of the health infrastructure in Dang district.
- To study the standards and norms for provision of the health infrastructure.
- To recommend and proposal for required health infrastructure.

Literature review:

Table 1: Population serving criteria for health facility

Sr. No	Category	Population served (URDPFI guideline)	Population served (IPHS guideline)	Area serving by facility (km)
1.	Dispensary	2500	2500	2 to 4
2.	Health sub centre	3000	3000	2 to 4
3.	Family welfare centre	5000	5000	5 to 10
4.	Maternity home	15000	15000	5 to 10
5.	Nursing home	15000	15000	5 to 10
6.	Primary health centre	20000	20000	16 to 20
7.	Community health centre	20000	80000	16 to 20
8.	Hospital	100000	100000	16 to 20

(Source: Planning Commission India; URDPFI guidelines 2015)

Here table 1 is showing the guidelines of the health infrastructures as per population serving given by IPHS guidelines (Indian public health standards) and URDPFI guidelines (Urban and Regional Development Plans Formulation and Implementation). It also indicates the area serving by different levels of health infrastructure. Comparison shows almost same data given by both guidelines. Area serving criteria are only given for the hilly terrain as the Dang district is hilly terrain.

Methodology:

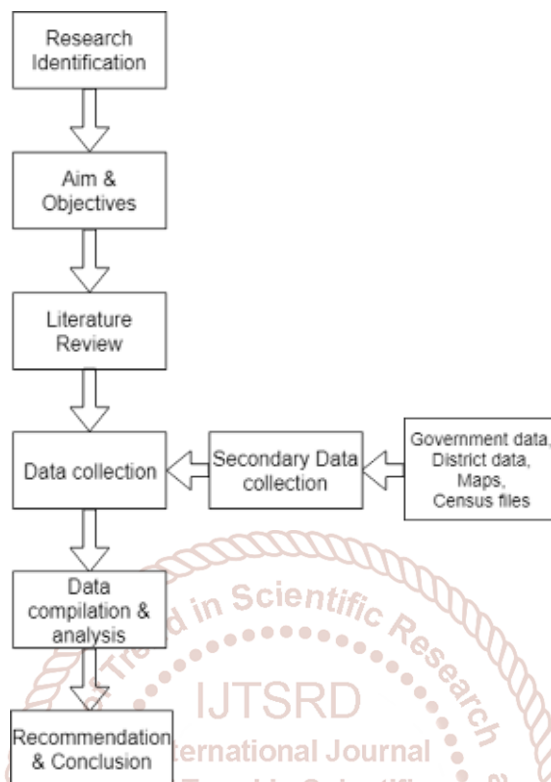


Figure 1: Methodology

About The Dangs district:

The Dangs district is located in the southern part of the Gujarat state. To the north and west of Dangs district lies Surat and Navsari districts of Gujarat whereas to its east and south are the districts of the Maharashtra state. The district of Dangs lies between 20.39° to 21.5° North latitudes and 72.29° to 73.51° East longitudes. The Bombay State was bifurcated on 1st May, 1960 and separate state of Gujarat and Maharashtra were formed. The Dangs district became a part of the Gujarat State and placed under the administrative control of the Collector of Surat. The area covered by this district is 1,766.00 sq. km i.e. it covers 0.90% of total geographical area of Gujarat. The elevation of this region varies between 675 and 1290 meters above M.S.L. The Dangs district is essentially a mountainous tract covered with dense forest which occupy 53 percent of its total area of Dang district. The Dangs district is comprised of 311 villages and has an area of 1764 sq. km. Dang district is having three taluka – Ahwa, Subir and Waghai. Ahwa taluka is the headquarters of the Dang district. The Dangs district population constituted 0.38 percent of total Gujarat population. The provisional data shows that male and female were 112,976 and 113,793 respectively as per 2011 Census. The Dangs district is totally Scheduled Tribe [ST] area; about 94 percent population is the Scheduled Tribe in the district.¹

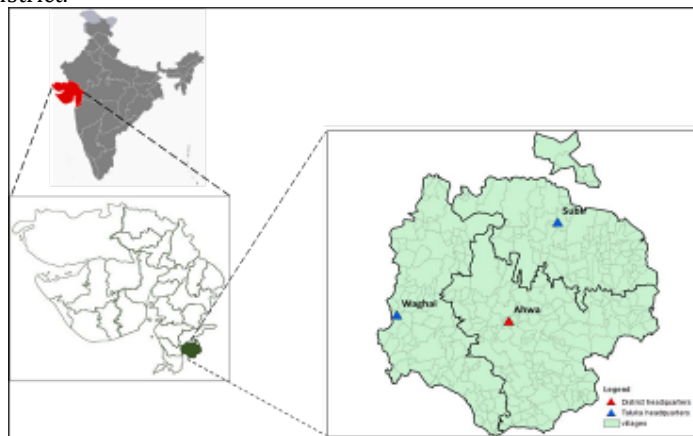


Figure 2: Location of the Dang district (Source: Author)

¹ http://censusindia.gov.in/2011census/dchb/2422_PART_B_DCHB_THE%20DANGS.pdf

Table 2: Demographic details of Dang district

Description	2001	2011
Total population	1,86,729	226769
Male population	93974	112976
Female population	92755	113793
ST population	158,456	216,073
Density (per sq. km.)	129	106
Sex ratio	987	1006
Child sex ratio	974	964
Child population (0 – 6 age)	36547	39387
Total literates	89,586	140,968
Female literates	36,247	63,654

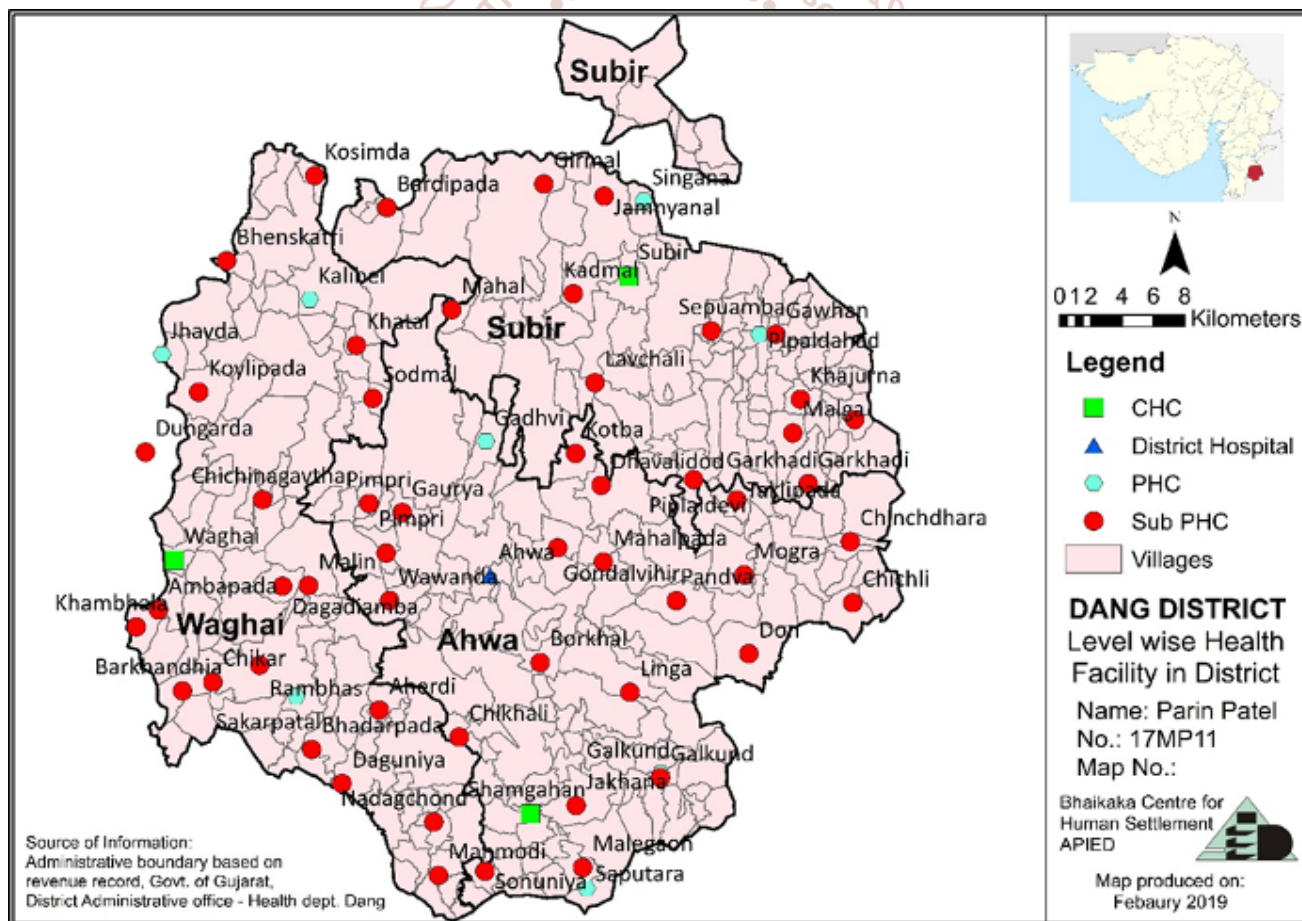
(Source: Census of India 2001 and 2011)

Health infrastructure data and analysis:

Table 3: Health facility in Dang (as per year 2019)

Sr. No.	Facility	Existing
1	Sub PHC	68
2	PHC	10
3	CHC	3
4	District Hospital	1

(Source: District administrative office, Ahwa –The Dangs)

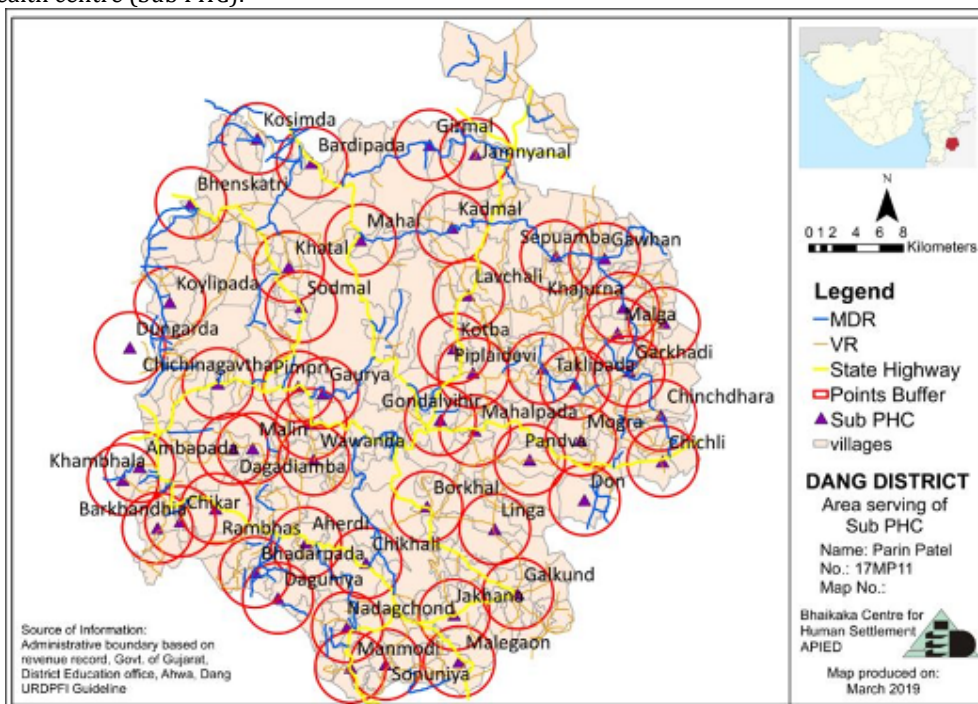


Map 1: Health facility in the Dang district
(Source: Author)

Figure 1 is showing level wise health infrastructure facility in the dang district. There are total 68 sub PHC in the district serving 311 villages. 8 sub PHC are covered under one PHC centre and there are total 10 PHC in the Dang district.

Analysis:

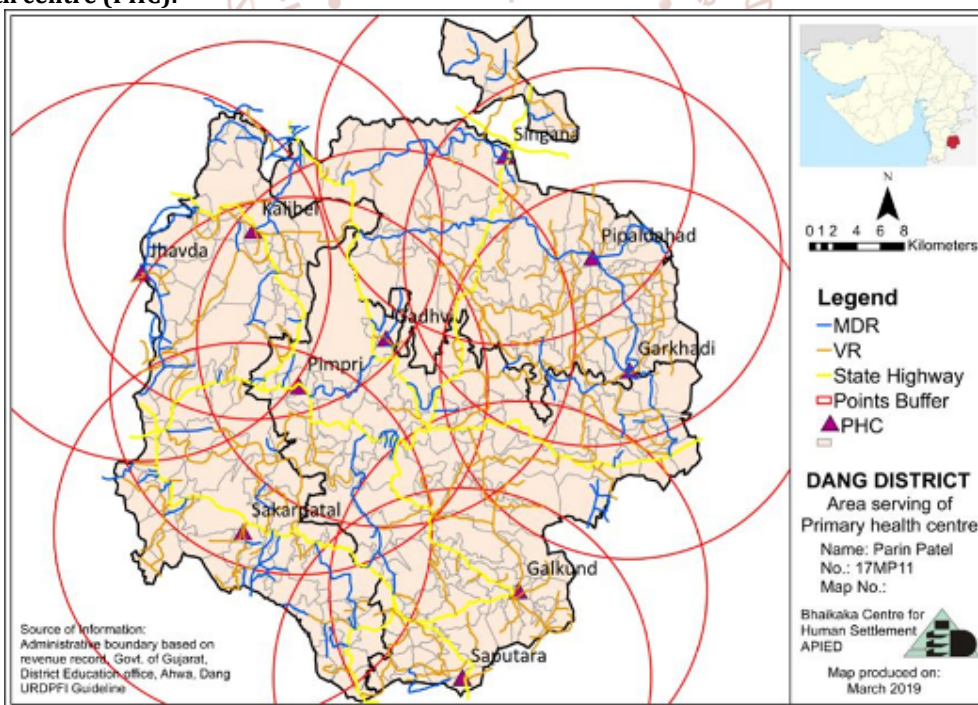
Analysis of health facility as per area coverage:
 Sub Primary health centre (Sub PHC):



Map 2: Area serving by Sub PHC
 (Source: Author)

Map 2 is showing location map of sub primary health centres location in the Dang district. There are total 61 numbers of sub PHC available in Dang district. As per guideline of planning commission/URDPFI, sub PHC serves 4 km of its surrounding. After performing area serving analysis of sub PHC, total 38 villages are not accessing the service of sub PHC. Out of 38 villages 13 villages are from Ahwa taluka, 15 villages are from Subir taluka and 10 villages are from Waghai taluka not accessing the service of sub PHC.

Primary health centre (PHC):

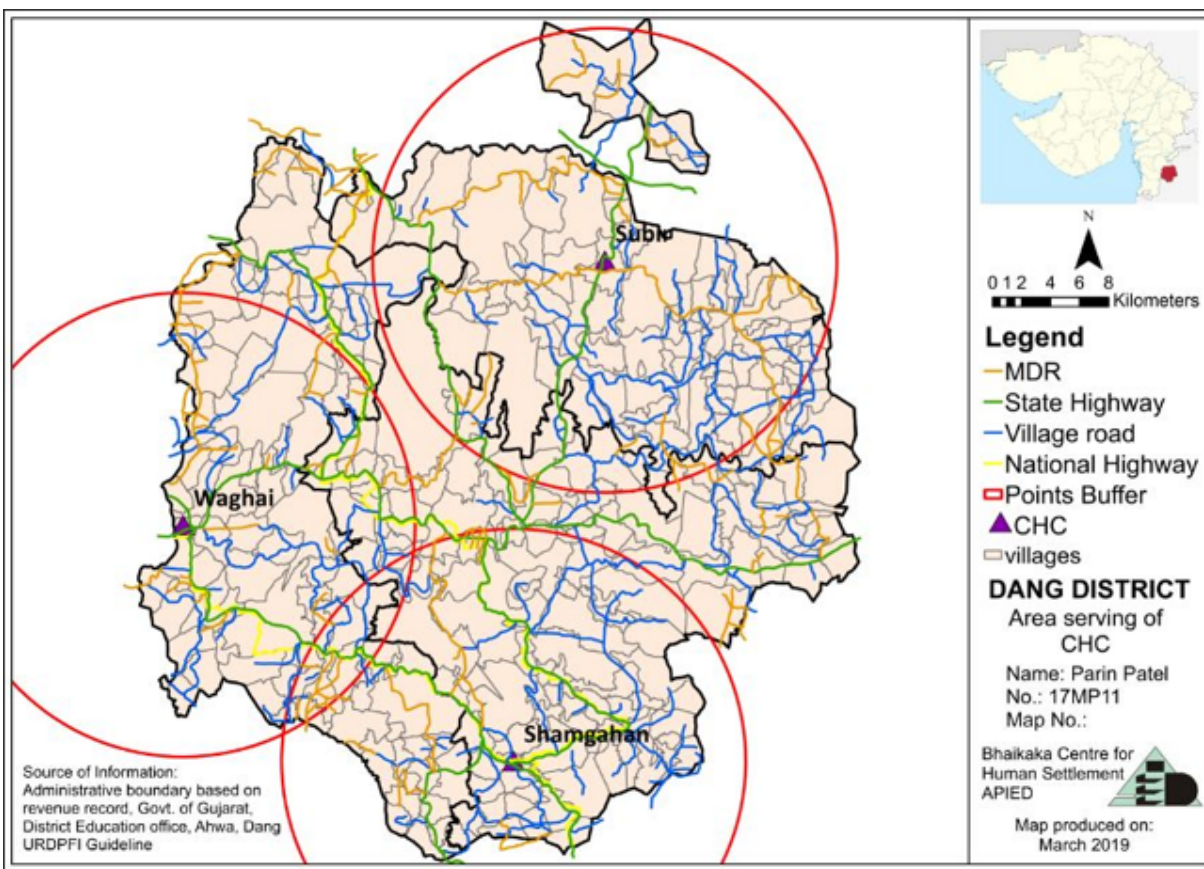


Map 3: Area serving of primary health centre
 (Source: Author)

Map 3 is representing the location of primary health centres in Dang district. There are total 10 primary health centres in Dang district. Out of 10 PHC, 4 PHC are in Ahwa taluka, 3 PHC are in Waghai taluka and 3 PHC are in Subir taluka. As per guideline of planning commission/URDPFI, PHC serves 16 km of its surrounding. After performing service area analysis of PHC, whole the district is covered by existing primary health centre.

Community health centre (CHC):

Map 4 is showing the location of community health centres in Dang district. There are total 3 community health centres in Dang district. Out of 3 CHC, every taluka is having 1 community health centre. As per guideline of planning commission/URDPFI, CHC serves 20 km of its surrounding. After making buffer to CHC, whole the district is covered by existing community health centre. Some of the villages in eastern part of the district are not covered.



Map 4: Area serving of primary health centre
(Source: Author)

Analysis of facility as per population coverage (GAP analysis):

Table 4: Gap analysis of health facility

Dang district population (as per year 2011)					228291
Sr. No.	Facility	As per norms Population serving	Require in district	Existing	GAP
1	Sub PHC	1 for 3000	76	61	-15
2	PHC	1 for 20000	12	10	-2
3	CHC	1 for 80000	3	3	0
4	District Hospital	1 for 180000	1	1	0

(Source: Planning commission/URDPFI guidelines)

Table 4 is representing existing facilities, required facilities and gap analysis for health sector facilities. The difference between existing facility and required facility is GAP. By performing gap analysis of the health facility, sub primary health centre is having gap of 15 and primary health centre is having gap of 2, which indicates that facilities are required more accordingly.

Suggestion & recommendation:

- After performing spatial analysis of the various health facility, many villages are not having health facility. Proposals can be given for those unserved villages.
- After performing gap analysis, there are total 15 sub PHC are required in the whole district.
- By combining two analysis, 15 new sub PHC can be proposed as per required location given in area serving map.

- Gap analysis is showing requirement of 2 new PHC, which can be proposed as per emerging area.

References:

- [1] Borse, N. B. (2017). Comparison of Development of Government Healthcare Facilities In Tribal And Non Tribal Region Of Nashik District (Maharashtra) India. *International Journal in Management and Social Science*, 392-398.
- [2] Patil, A. V. (2002). CURRENT HEALTH SCENARIO IN RURAL INDIA. *AUSTRALIAN JOURNAL OF RURAL HEALTH*, 129-135.
- [3] Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, Volume 1, January 2015.
- [4] District census handbook, The Dangs, census 2011
- [5] Revenue record of government of Gujarat.