



## A Geographical Perspectives of Health Facilities & Index in Bhandara District of Eastern Vidarbha.

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### *Abstract:*

*Health care facilities is an important part of Medical Geography. Generally we says, Health Care facilities are in any location where health care is provided. In this Research paper is attempted to study the health care facilities in Bhandara district of Eastern vidarbha. Tahsilwise data is used for calculating health index of Bhandara district. Indicators of Health Index are health Centres, number of beds in hospitals, no of doctors, no of family welfare centres. Health index is the Average value including of all the above four indicators. The Forgoing analysis reveals that there is uneven distribution of health care facilities in Bhandara district.*

**Keywords :-** Health Facilities, Health Index.

### **Introduction**

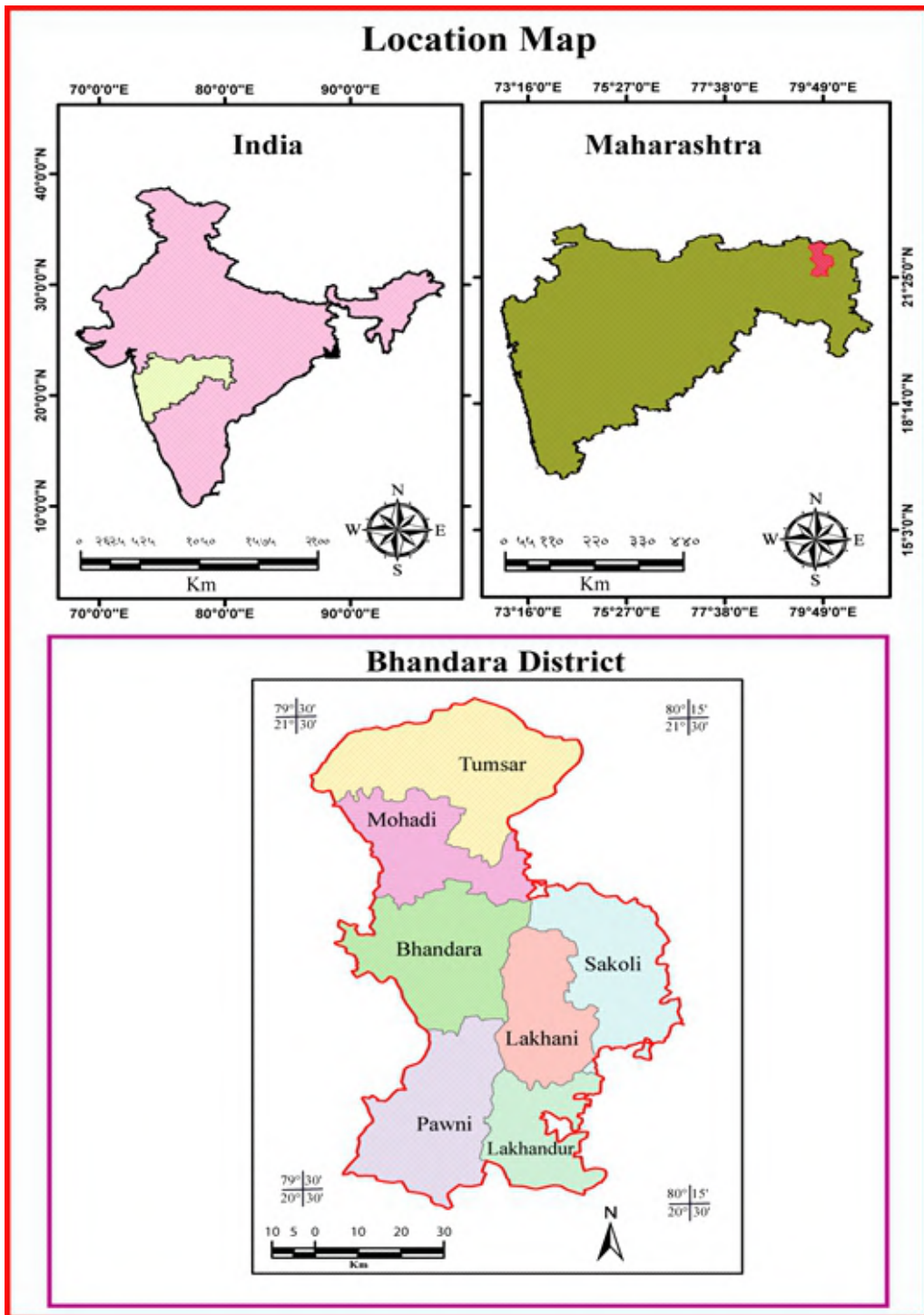
Health Facilities is very important part of Medical Geography. Health Facilities is influenced by a number of factors such as adequate food, housing, minimum sanitation, health, life styles. etc. (census. 2011)

Thus health care facilities comprises multitude health services supply to society by agent of health services. Health facilities range from all small clinics and large hospitals, to urgent care centres, with elaborate emergency rooms and trauma care centres. Therefore, facilities are rendered by various health services. for providing best health facilities to all community efficient health care delivery systems are applied. It also includes health planning in which improved health services are to be planned and executed. Bhandara district has 33 primary health centres, which are spreaded in seven tahsils of bhandara district of eastern vidarbha. The Present Research paper is attempted to study the health care facilities in bhandara district.

**Study Area :-**

Bhandara district lies on the Eastern part of Maharashtra. It also located on the Nagpur Administrative division. Bhandara districts lies entirely in the vainaganga River basin. In the Extreme north-east of Maharashtra state. Geographically, Bhandara district extends between 20° 35' and 21° 40' north latitude and 79° 25' and 80° 10' east longitude. The total Geographical area of the district is 4087 Sq.Km. The district stands 1.3 % in terms of area in the Maharashtra state. The total population of the district was 1,200,334 with 12 towns and 864 villages as per 2011 census. There are 07 tahsils in bhandara district. The district is surrounded by Madhya Pradesh state to the north. The study region is North-Eastern Part of Maharashtra bounded by Balaghat (M.P.) district in the north, Nagpur district in the west, Chandrapur district in the south and Gondia district in the east.

LOCATION MAP NO. 1.1



**Objective :-**

To Examine the health care facilities and health index in Bhandara district is the main objective of the present research paper.

**Database and Research Methodology :-**

Secondary data is used for calculating of Health care facilities and purpose of analysis and interpretation. The Secondary data are referred from DCHB-2011, Socio – Economic abstract of Bhandara district, district industrial Centre report, Economic Survey of Maharashtra and journals, books,articles,government published annual Reports, websites.etc.

The collected data have been computed by recent research techniques and the results were brought through maps. Tahsil wise data is used for calculating Health facilities and Health Index of Bhandara district of Eastern Vidarbha. Indicators of Health Index are following.

- 1) Health Centres.
- 2) Number of Beds.
- 3) Number of doctors.
- 4) Number of Family Welfare Centres.

Health Index is depends upon the average value of all above four Indicators.

Life Expectancy at birth is the main parameter to measure the health condition of the study area. so here health index is calculated from four realistic indicators of the district.

**1) Health Care Density :- (Health Centres)**

Health Centres were started in all over india (including Union Territories of India.) Mainly to meet medical needs of the areas where medical facilities were not available. According to national health plan every primary health centres is expected to provide health care services to population of 30000 in the plain areas and 20000 in the hilly and tribal community. It acts as referral units for six sub centres that act as contact points between PHC and the community Primary Health Care is expected to provide both preventive and curative health and family welfare services. Health Care facility means Government Hospitals, Health Centres, Sub – Centres & Private Clinics. P.Density of this district forced to count them per 10 Sq.Km. basis. 271 public Centres are spreaded in different tahsils of Bhandara district.

**2) Availability of Beds in Hospitals :-**

In Bhandara district 1412 beds are available in various hospitals. Index number of availability of beds in Bhandara district to measure as per 1000 population. The following Table No. 1.1 indicated that index of the high number 530 of availability beds in PHC are found in Bhandara tahsils. The moderate number of availability of beds in PHC are found in Tumsar (206) and Lakhani (166) tahsils. While low number of beds are noticed in Pavani (150), Sakoli (150), Mohadi (110) and Lakhandur (100) tahsils.

**3) Availability of Doctors :-**

In Bhandara district no.of doctors appointed was only 208 in 2022- 23, the Table No. 1.1 Indicates that the index of high number of doctors in PHC is recorded in Bhandara (80) tahsil. The Moderate Index number of doctors in PHC is recorded in Tumsar (27) and Lakhani (23) tahsils. while low number of doctors is noticed in Pavani (22), Sakoli (21), Mohadi (19) and Lakhandur (16) tahsils.

**4) Family Welfare Centres :-**

The number of family welfare centres is 44 in Bhandara district. The Number of family welfare centres as per 1000 population is calculated. The Following Table No. 1.1 indicates that the index of high number of family welfare centres is recorded in Tumsar (08) and Lakhani (07) tahsils. The

moderate number of family welfare centres are found in Mohadi (06), Bhandara (06), Sakoli (06) and Pavani (06) tahsils. While low number of family welfare centres index are noticed in Lakhandur (05) tahsil. as on the above information we can say, combined health index determined for different tahsils of Bhandara district is very Poor. The tahsils of Bhandara district can be divided into Four categories. These are following.

**Table No. 1.1 Health Facilities & Index of Bhandara district**

Sr.No.	Tahasils	Health Centres	No. of Doctors	No. of Beds	No. of Family Welfare Centres	Health Index (H.I)
1.	Tumsar	46	27	206	08	0.3462
2.	Mohadi	34	19	110	06	0.2414
3.	Bhandara	40	80	530	06	0.8341
4.	Sakoli	35	21	150	06	0.3371
5.	Lakhani	40	23	166	07	0.4067
6.	Pavani	39	22	150	06	0.3526
7.	Lakhandur	37	16	100	05	0.2665
Total District		271	208	1412	44	0.3631

(Source : Socio - Economic Abstract of Bhandara district, 2022-23 )

**Table No. 1.2 Health Index of Bhandara district**

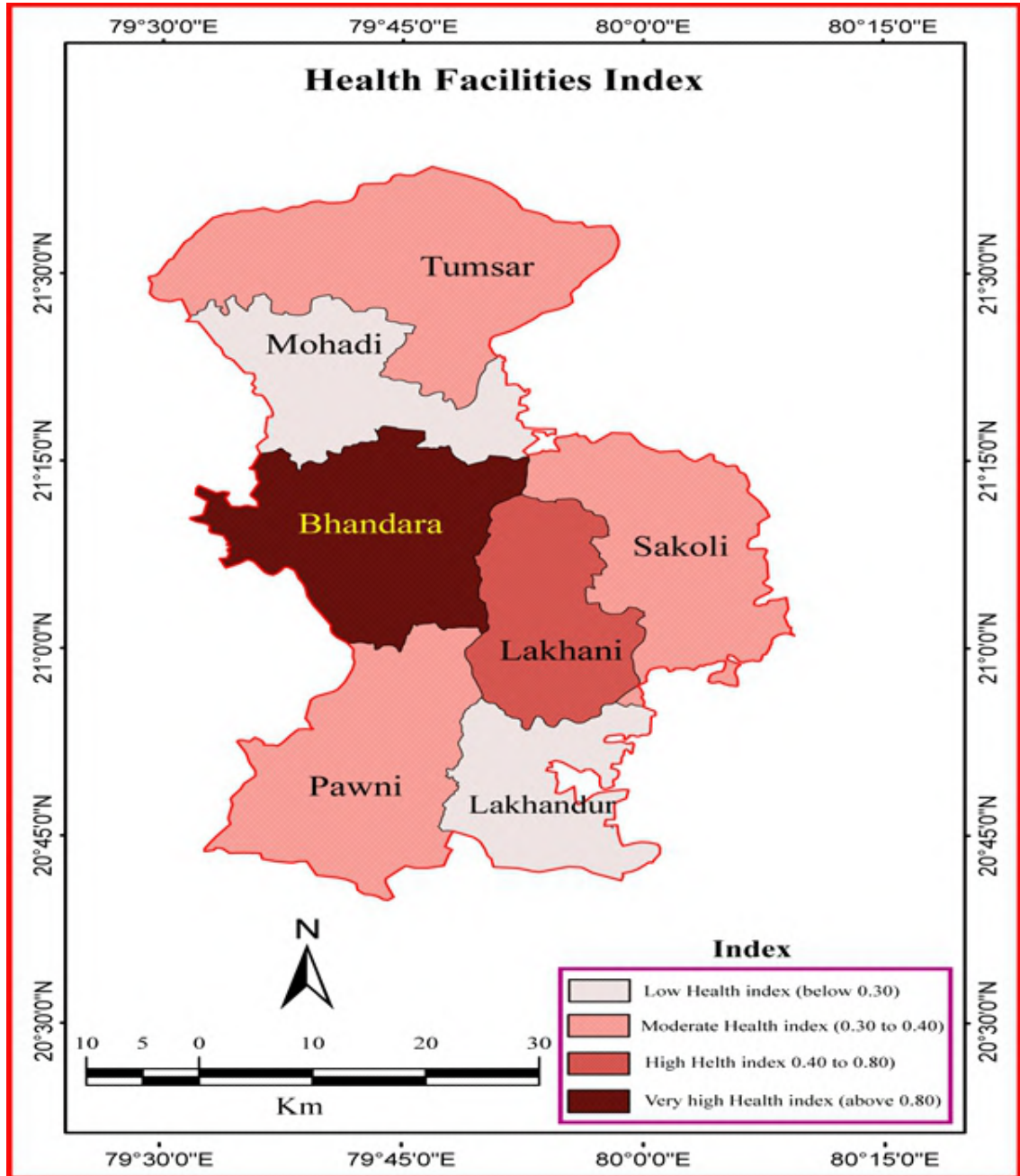
Sr.No.	Tahasils	Health Centres/ 10. Sq.km	No. of Doctors/ 1000 Population	No. of Beds/ 1000 Population	No. of Family Welfare Centres/ 1000 Population	Health Index (H.I)
1.	Tumsar	0.0554	0.1489	1.1366	0.0441	0.3462
2.	Mohadi	0.0695	0.1261	0.7303	0.0398	0.2414
3.	Bhandara	0.0632	0.4251	2.8163	0.0318	0.8341
4.	Sakoli	0.0552	0.1534	1.0959	0.0438	0.3371
5.	Lakhani	0.1022	0.1789	1.2913	0.0544	0.4067
6.	Pavani	0.0596	0.1669	1.1383	0.0455	0.3526
7.	Lakhandur	0.0871	0.1294	0.8092	0.0404	0.2665
Total District		0.0663	0.1732	1.1763	0.0366	0.3631

(Source : Socio - Economic Abstract of Bhandara district, 2022-23 )

- 1) **Very High Health Index :-**  
Above Table No. 1.2 and Following Map No. 1.2 Indicate that the very high Health Index was recorded in Bhandara (0.8341) tahsils.
- 2) **High Health Index :-**  
Above Table No. 1.2 and Following Map No. 1.2 Shows that the high Health Index was recorded in Lakhani (0.4067) tahsils.
- 3) **Moderate/Middle Health Index:-**  
Middle Class /moderate Health Index was found in Pavani (0.3526),Tumsar (0.3462) and Sakoli (0.3371) tahsils.

- 4) **Low Health Index :-**  
Low Health Index was recorded in Lakhandur (0.2665) and Mohadi (0.2414) tahsils.

MAP NO. 1.2





**Conclusion :-**

The Forgoing analysis reveals that there is uneven distribution of health care facilities in Bhandara district. The above maps No. 1.2 study shows that the health Index of all tahsils in Bhandara district is low. Some of the Geographical and Socio- Economical factors are responsible for such low health Index (like what ?) In the Bhandara district very high health Index are recorded in Bhandara (0.8341) tahsil and high health Index are recorded in Lakhani (0.4067) tahsils.

Thus, low Health Index is recorded in Lakhandur (0.2665) and Mohadi (0.2414) tahsils. while moderate Health Index was observed in Pavani (0.3526), Tumsar (0.3462) and Sakoli (0.3371) tahsil. The health service centres are very important for the people as per the health is concern. There are many problems in the health care services like less availability of medicine and beds, absence of doctors, nurses, ward boy. overall, the primary health service centres are not sufficient in the study region. Therefore, the people suffer from the health problems.

**References :-**

- 1) District Census Handbook (2011).
- 2) Bhandara District Gazetteer, (2011). Govt of M.S
- 3) Socio- Economic Abstract of Bhandara -2022-23
- 4) Economic Survey of Maharashtra 2022-23
- 5) Nilesh Kale, Jyotiram More: Morphometric Analysis of Upper Ghod Bhima Using GIS Techniques Impact Factor 2.243 Online International Research Journal Volume-IV, Issue-V, Sep-Oct 2014, PP-152-158 ISSN-2249-9598, <http://www.oijrj.org/oijrj/sept-oct2014/21.pdf>
- 6) Jyotiram More: The Evaluation of Scarcity Relief Work of Mangi Irrigation Medium Project Impact Factor 2.243, Online International Interdisciplinary Research Journal, Nov-Dec 2014. Volume-IV, Issue-VI, PP-90-93 ISSN2249-9598. <http://www.oijrj.org/oijrj/Nov-Dec2014/16.pdf>
- 7) Shivram Korade, Jyotiram More, Subhash More: A Spatio Temporal Study of Rainfall Distribution in Ahmednagar District Impact Factor 0.23 Indian Stream Research Journal Vol- 3, Issue 1, PP-1-4 Feb 2013, ISSN-2230-7850, <http://www.isrj.net/ArticleDetails.aspx?id>
4. Ganesh Dhavale, Dr. Jyotiram More, , Nitin Munde: Analysis of Chemical Properties & Soil Nutrients of Shrigonda Tahsil, Ahmednagar District Impact Factor 2.134 (IJIF), Current Global Reviewer, Vol. 1 (1), Feb 2018, PP. 93-97, UGC Approval Sr. No. 64310, ISSN, 2319-8648, PP, 93-97
- 5) Kashid N.D. "Geographical Study of Health facilities in Ratnagiri District of Maharashtra. ISSN-0971-6785 vol.38, No.1, Jan-Jun-2021 pp.64-67

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