

ORIGINAL ARTICLE

Health and Socio-Economic Development in Chhattisgarh: A Comprehensive Analysis of Infrastructure, Demographics, and Cultural Dynamics

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ABSTRACT

This research paper explores the historical evolution, geographical significance, socio-economic structure, and cultural heritage of Chhattisgarh, a state in central India. Formed in 2000, Chhattisgarh has a rich historical background, with its origins tracing back to ancient times when it was part of the Dakshin Koshal and Dandakaranya regions. The paper delves into the various dynasties that ruled the region, from the Satavahanas to the Marathas, and examines its eventual incorporation into British India. Geographically, Chhattisgarh is characterized by its diverse terrain, rich mineral resources, and a significant portion of its land covered by forests. Its economy is predominantly agriculture based, with paddy being the primary crop, earning it the title “Bowl of Paddy.”

The study also highlights the demographic diversity, with a focus on the tribal population, and discusses the state’s literacy rates, health indicators, and administrative divisions. Using secondary data from government reports, historical

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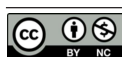
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records, and cultural research, this paper employs content and comparative analysis to assess the state's development relative to national statistics. Despite significant progress in education and infrastructure, challenges remain, particularly in healthcare and rural development.

KEYWORDS

• Chhattisgarh • Tribal culture • Geography • Socio-economic development
Agriculture

INTRODUCTION

Chhattisgarh, a state in central India, was officially formed on November 1, 2000, following the reorganization of Madhya Pradesh. With 27 districts, Chhattisgarh has emerged as an important state due to its geographical uniqueness, rich cultural heritage, and socio-economic significance. This paper explores the history, geography, economy, social fabric, and health infrastructure of Chhattisgarh, focusing on its journey from historical roots to its current socio-economic status.

RESEARCH METHODOLOGY

This research paper employs a multi-dimensional qualitative research approach, focusing on secondary data analysis to examine the socio-economic, health, and cultural aspects of Chhattisgarh. The methodology is divided into the following key components:

1. Secondary Data Collection

The research is based primarily on secondary data obtained from reliable and verified sources. The data was sourced from government reports, census documents, health bulletins, and academic studies, including:

- **Census Data (2011):** Population demographics, literacy rates, sex ratios, and tribal populations were extracted from the Census of India reports.
- **Health Statistics:** Health indicators such as the Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), and health infrastructure data were gathered from the *Sample Registration System (SRS)* reports and *RHS Bulletin* (March 2012), published by the Ministry of Health and Family Welfare, Government of India.
- **Cultural and Historical Sources:** Historical and cultural insights were

derived from academic papers, books, and official government publications that document the state's rich cultural heritage and historical background.

2. Descriptive Analysis

A descriptive research approach was employed to provide a detailed narrative of Chhattisgarh's history, geography, socio-economic structure, and cultural landscape. The description covers the origin of Chhattisgarh, its dynastic history, geographical features, economic composition, and cultural diversity. The state's health infrastructure is also analyzed, focusing on available facilities and workforce shortages.

3. Comparative Analysis

A comparative analysis was undertaken to contrast the key socio-economic and health indicators of Chhattisgarh with national averages. This method helped in identifying areas where Chhattisgarh lags behind or excels relative to the broader Indian context. Indicators such as the Total Fertility Rate (TFR), literacy rates, health infrastructure gaps, and population growth were benchmarked against national figures.

4. Statistical Data Interpretation

Statistical data provided in tables (Table 1 and Table 2) was analyzed to interpret the health and demographic conditions in Chhattisgarh. Comparative tables allowed for the interpretation of data such as birth and death rates, literacy rates, and health infrastructure, providing insights into the areas where the state faces critical challenges.

- Table 1 was used to analyze health indicators such as IMR, MMR, and sex ratios, comparing Chhattisgarh's performance against national averages.
- Table 2 was employed to assess the shortfalls in health infrastructure, such as the availability of healthcare professionals

and health centers, highlighting gaps in service delivery.

5. Thematic Analysis

Thematic analysis was used to identify and explore key themes related to Chhattisgarh's socio-cultural diversity, health challenges, and economic structure. Themes such as the state's agriculture-based economy, tribal culture, healthcare shortcomings, and educational disparities were critically examined to present a holistic understanding of the region's development trajectory.

6. Limitations

- **Dependence on Secondary Data:** The research relies entirely on secondary data sources, which may limit the depth of analysis in certain areas. No primary data or fieldwork was conducted for this study, and it uses the most recent available data up to 2013.
- **Time Constraints of Data:** As some of the data (such as Census 2011) may no longer reflect current trends, there could be discrepancies between the data used and the current socio-economic and health conditions in Chhattisgarh.

7. Ethical Considerations

All sources of information have been properly cited and acknowledged, ensuring academic integrity and transparency. Data from government sources, academic research, and publications are used responsibly, with proper attribution to the original authors and institutions.

History of Chhattisgarh

The name "Chhattisgarh" gained prominence during the Maratha rule in the 17th century and was first officially used in 1795. There are several theories about its origin; the most widely accepted one is that the term evolved from "Chedisgarh," referring to the forts of the local rulers, the Chedis. However, another narrative suggests that Chhattisgarh was named after 36 (Chhattis) forts in the region. Although these forts remain unidentified, the region has been known for its rich historical significance, with evidence dating back to ancient times.

Historically, Chhattisgarh, once known as Dakshin Koshal and Dandakaranya, played a crucial role in India's early civilization.

Archaeological evidence, such as tools, burnt charcoal, and paintings from districts like Bastar and Raigarh, attests to its early human settlement. The region witnessed various dynasties, from the Satavahanas (2nd-4th centuries AD) to the Kalachuris in the 11th century. The Kalachuri dynasty established Ratanpur as its capital, which later became a prominent kingdom. The Marathas ruled Chhattisgarh in the 18th century before it was annexed by the British after the Anglo-Maratha War of 1818. During British rule, Chhattisgarh was incorporated into the Central Provinces, with Raipur as the administrative center.

Geography of Chhattisgarh

Chhattisgarh's geographical diversity is noteworthy, featuring ancient rocks such as the Archaean granites and gneisses, as well as formations from the Gondwana period that date back 250-300 million years. Rich in natural resources like coal, limestone, and forests, the state has a strategic location in the fertile basin of the Mahanadi River.

The region is bounded by the Chhotanagpur Plateau to the north and the Maikal Hills to the west, creating a varied topography. The Maikal Hills, which link the Vindhya and Satpura ranges, include the highest peak, Lafagarh (1,067 meters). Forests cover 44% of the state's area, with diverse species such as teak, sal, and tendu, contributing significantly to the state's economy and ecology. Major rivers include the Mahanadi, Jonk, Rihand, and Indravati.

Economy of Chhattisgarh

Chhattisgarh's economy is primarily agriculture-based, with paddy being the main crop. Due to its abundant paddy production, the state is often called the "Bowl of Paddy." Other important crops include wheat, maize, sugarcane, and a variety of pulses and oilseeds. The state is also rich in minerals and industrial resources, with major industrial establishments like the Bhilai Steel Plant, BALCO, NTPC, and SECL playing a key role in its economic development. Forest-based products are the mainstay of tribal economies, contributing to livelihoods in the state's remote areas.

Education and Literacy

The literacy rate in Chhattisgarh, according to the 2011 census, stands at 74.04%, with a male literacy rate of 80.27% and a female literacy rate of 60.24%. Over the last two

decades, significant strides have been made in education, with increased infrastructure and resources aimed at vulnerable groups. Despite these efforts, literacy rates in tribal and rural areas remain a concern.

Demography and People

Chhattisgarh is home to a diverse population, with more than 40% belonging to Scheduled Tribes (30.6%) and Scheduled Castes (12%). The state has 42 recognized tribes, five of which are categorized as Particularly Vulnerable Tribal Groups (PVTGs). The tribal population, concentrated in regions such as Bastar, follows unique cultural practices and a traditional lifestyle deeply rooted in agriculture and forest-based livelihoods. Tribals worship "Dharti Mata" (Mother Earth) and their economic activities revolve around hunting, fishing, and gathering forest produce.

Culture and Arts

The cultural richness of Chhattisgarh is manifested through its art, craft, music, and festivals. Tribal art forms dominate the cultural landscape, with vibrant handicrafts such as bell metal, iron craft, and terracotta being well-known. Festivals like Hareli, Dashera, and local tribal celebrations are integral to the socio-cultural life of Chhattisgarh. Tribal dances like Kaksar, Panthi, and Saila, along with musical traditions such as Pandvani, reflect the diversity of the region's cultural heritage.

Health Infrastructure and Indicators

Chhattisgarh has been striving to improve its health infrastructure, but challenges persist. The state's health indicators reveal higher than national averages in key metrics such as Infant Mortality Rate (46) and Maternal Mortality Rate (269). The Sex Ratio in Chhattisgarh is favorable at 991, compared to the national average of 940 (Census 2011). However, the state faces a significant shortfall in healthcare facilities and staff, with gaps in primary healthcare centers and specialized medical professionals.

Table 1 provides a comparative overview of key health and demographic indicators between the state of Chhattisgarh and the national averages for India, based on data from the Census of 2011 and the Sample Registration System (SRS) reports from 2013.

- **Population and Growth:** Chhattisgarh's total population in 2011 was 2.55 crore, a fraction of India's overall population of 121.01 crore. The state experienced a decadal growth rate of 22.59%, higher than India's national rate of 17.64%.
- **Birth and Death Rates:** Chhattisgarh had a Crude Birth Rate of 24.4 per 1,000 people, which exceeded the national average of 21.4. The Crude Death Rate was also slightly higher at 7.9 compared to India's 7.0. Consequently, the state's Natural Growth Rate (16.5%) was higher than the national figure of 14.4%.
- **Infant and Maternal Mortality:** The Infant Mortality Rate (IMR) in Chhattisgarh was significantly higher at 46 deaths per 1,000 live births, compared to India's average of 40. Similarly, the Maternal Mortality Rate (MMR) was alarmingly high at 269 deaths per 100,000 live births, compared to the national rate of 178.
- **Fertility Rate:** The Total Fertility Rate (TFR) in Chhattisgarh stood at 2.7, which was higher than India's average of 2.4, indicating higher birth rates in the state.
- **Sex Ratio:** Chhattisgarh had a more favorable Sex Ratio of 991 females per 1,000 males, as opposed to the national average of 940. The Child Sex Ratio (for children under six) in Chhattisgarh was also better, at 964 compared to India's 914.
- **Caste and Tribe Population:** Scheduled Caste (SC) and Scheduled Tribe (ST) populations were significant in Chhattisgarh, with 0.24 crore SCs and 0.66 crore STs, whereas India had much larger SC (16.6 crore) and ST (8.4 crore) populations due to its size.
- **Literacy Rates:** The overall literacy rate in Chhattisgarh was slightly lower at 71.04%, compared to India's 74.04%. However, a gender gap in literacy is evident, with male literacy at 81.45% in Chhattisgarh (close to the national figure of 82.14%), and female literacy at 60.59%, which lags behind India's average of 65.46%.

Table 2 provides a detailed comparison of the required, actual, and shortfall in the health infrastructure in Chhattisgarh, based on data from the *RHS Bulletin*, March 2012.

- **Sub-Centres:** Chhattisgarh has 5,111 Sub-Centres in position, exceeding the required 4,904. This indicates that the state has managed to set up more Sub-Centres than required, meaning no shortfall in this aspect.
- **Primary Health Centres (PHCs):** The state requires 776 PHCs but has only 755 in place, leading to a shortfall of 21 PHCs.
- **Community Health Centres (CHCs):** The state needs 194 CHCs but currently has only 149 operational, resulting in a significant shortfall of 45 CHCs.
- **Health Workers (Female)/ANM:** The number of Female Health Workers (Auxiliary Nurse Midwives, ANMs) is remarkably higher than required. The state requires 5,866 but has 16,943 in position, indicating a surplus of ANMs.
- **Health Workers (Male):** There is a substantial shortfall of Male Health Workers at Sub-Centres. Out of the required 5,111, only 2,514 are in position, leaving a gap of 2,597.
- **Health Assistants (Female)/Lady Health Visitors (LHV):** The shortfall in Female Health Assistants is minimal, with 749 available against a requirement of 755, resulting in a shortfall of just 6.
- **Health Assistants (Male):** There is a significant shortfall of Male Health Assistants, with only 153 in position out of the required 755, leaving a gap of 602.
- **Doctors at PHCs:** The state faces a considerable shortage of doctors at PHCs, with 435 in place against a requirement of 755, leading to a shortfall of 302.
- **Obstetricians & Gynecologists at CHCs:** The state requires 149 Obstetricians and Gynecologists but has only 18 in place, resulting in a severe shortfall of 131 specialists.
- **Pediatricians at CHCs:** Similarly, there is a significant shortage of Pediatricians, with only 19 available out of the required 149, leading to a shortfall of 130.
- **Total Specialists at CHCs:** There is an overwhelming shortage of specialists at CHCs, with only 71 specialists in place out of a required 596, leaving a gap of 525 specialists.
- **Radiographers at CHCs:** There is a shortage of 62 Radiographers, with 87 in position against the required 149.
- **Pharmacists at PHCs & CHCs:** There is a shortfall of 293 Pharmacists, with 611 in position compared to the required 904.
- **Laboratory Technicians at PHCs & CHCs:** The state faces a shortage of 460 Laboratory Technicians, with only 444 in position against a requirement of 904.
- **Nursing Staff at PHCs & CHCs:** There is a significant shortage of Nursing Staff, with only 552 in position out of the required 1,798, leading to a gap of 1,246.

Table 1: Health Indicator of Chhattisgarh and India

Indicators	Chhattisgarh	India
Total population (In crore) (Census 2011)	2.55	121.01
Decadal Growth (%) (Census 2011)	22.59	17.64
Crude Birth Rate (SRS 2013)	24.4	21.4
Crude Death Rate (SRS 2013)	7.9	7
Natural Growth Rate (SRS 2013)	16.5	14.4
Infant Mortality Rate (SRS 2013)	46	40
Maternal Mortality Rate (SRS 2010-12)	269	178
Total Fertility Rate (SRS 2012)	2.7	2.4
Sex Ratio (Census 2011)	991	940
Child Sex Ratio (Census 2011)	964	914
Schedule Caste population (in crores)	0.24	16.6
Schedule Tribe population (in crores)	0.66	8.4
Total Literacy Rate (%) (Census 2011)	71.04	74.04
Male Literacy Rate (%) (Census 2011)	81.45	82.14
Female Literacy Rate (%) (Census 2011)	60.59	65.46

Source: RHS Bulletin, March 2012, M/O Health & F.W., GOI

Table 2: Health Infrastructure of Chhattisgarh

Particulars	Required	In position	Shortfall
Sub-centre	4904	5111	NA
Primary Health Centre	776	755	21
Community Health Centre	194	149	45
Health worker (Female)/ ANM at Sub Centres & PHCs	5866	16943	NA
Health Worker (Male) at Sub Centres	5111	2514	2597
Health Assistant (Female)/LHV at PHCs	755	749	6
Health Assistant (Male) at PHCs	755	153	602
Doctor at PHCs	755	435	302
Obstetricians & Gynecologists at CHC	149	18	131
Pediatricians at CHCs	149	19	130
Total Specialists at CHCs	596	71	525
Radiographers at CHCs	149	87	62
Pharmacist at PHCs & CHCs	904	611	293
Laboratory Technicians at PHCs & CHCs	904	444	460
Nursing Staff at PHCs & CHCs	1798	552	1246

Source: RHS Bulletin, March 2012, M/O Health & F.W., GOI.

Despite these challenges, the state government is working to improve health services, especially in rural and tribal areas, by expanding healthcare facilities and personnel.

CONCLUSION

Chhattisgarh, a state rich in history, geography, and cultural diversity, has made significant strides in development since its formation. However, it continues to face challenges in education, healthcare, and tribal welfare. The state's abundant natural resources, agricultural base, and cultural richness provide a strong foundation for future growth. With focused efforts on infrastructure development, healthcare, and literacy, Chhattisgarh has the potential to emerge as a leading state in India's socio-economic landscape.

REFERENCES

1. Census of India. (2011). *Chhattisgarh population census data 2011*. Office of the Registrar General & Census Commissioner, India. <https://censusindia.gov.in>
2. Government of India, Ministry of Health and Family Welfare. (2012). *RHS Bulletin: March 2012*. <https://main.mohfw.gov.in>
3. Mitra, S. (2008). *Tribal traditions and cultural practices in Chhattisgarh*. *Journal of Tribal Studies*, 15(2), 34-48.
4. Registrar General of India. (2013). *Sample Registration System (SRS) Statistical Report 2013*. Ministry of Home Affairs, Government of India. https://censusindia.gov.in/vital_statistics/SRS_Report.html
5. Survey of India. (2017). *Administrative map of Chhattisgarh*. Government of India. <https://surveyofindia.gov.in>
6. Official Website of the Government of Chhattisgarh. (2017). *Chhattisgarh administrative divisions and districts*. <https://cgstate.gov.in>

