

A Study of Socio-Economic Disparities in Haryana: An Inter District Analysis

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Abstract - Over the last three-decade, Haryana has witnessed remarkable growth. The growth has been highly concentrated in the National capital region (NCR). Therefore, inter-district income disparity in Haryana has increased substantially. In this Paper we will try analyse the dimensions of Economics, Education, and Health Inequalities within Haryana. It has found a significant level of inequality in the Haryana, which requires urgent attention. Following are the policy recommendations that come out of the study.

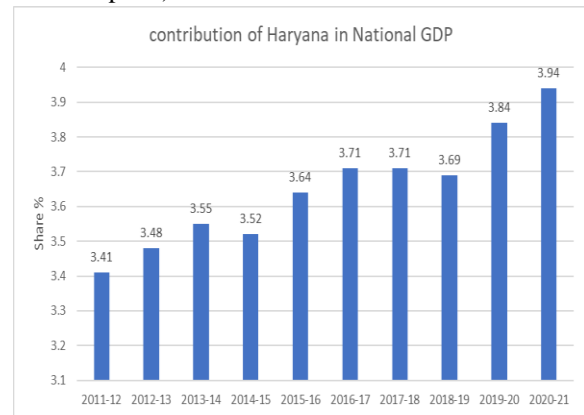
1. INTRODUCTION

Haryana is one of the states of India that came into existence on November 1, 1966, from Punjab state. The geographical area of the state is located between 27°37' to 30°35' N latitude and 74° 28' to 77° 36' E longitude with a total area of 44,122 sq. km which is about 1.3% of the total geographical area of India. Haryana is surrounded by other Indian states like Uttar Pradesh on the East, Punjab on the West, Himachal Pradesh, Uttaranchal, Shivalik hills on the North and Delhi, Rajasthan and Aravalli hills on the south side. Haryana is primarily an alluvial plain. Besides, it shares the Siwalik foothills in the north and Aravalli hills in the south. In 1975-76 there were 7 districts and at present, there are 22 Districts in Haryana.

The economy of Haryana is predominantly agrarian. In 1967, 69.7% of its population was engaged in the Primary sector, mainly focused on Agriculture and it composes 65% of its domestic product in 1970-71. Data presented in table 1 shows three sectors that represent the structural composition of Haryana's contribution to GSDP/GDP. It reveals that the primary sector (56.6%) contributing more to GSDP/GDP in 1966-1967 but the Manufacturing sector contribution was low (20.5%). Later, the contribution of the primary sector shows a decline in 1993-94 (from 56.6% to 42.6%) respectively. While tertiary sector

indicates the growth from 1966 to 2020 from 22.9% to 51% respectively.

Figure 1. Contribution of Haryana in national GDP (at constant price)



Source: Economic survey of Haryana 2019-20

The contribution of Haryana in National GDP has increased moderately with the progress of time. The share of GSDP of Haryana State in National GDP at constant price (2011-12) which was recorded as 3.41% has now increased to 3.94% as advanced estimates of 2020-21 (Fig. 1). For achieving the national Target of US\$ 5 trillion by 2024-25, the contribution of Haryana state has been projected as Rs12.90 lakh crore.

Table 1. Structural Composition of the Economy-contribution to GSDP/GDP of Haryana (in percentage)

Sector/ year	1966-67	1993-94	2004-05	2013-14	2019-20
Primary	56.6	42.6	23.3	15.3	16
Secondary	20.5	26.2	32.7	27.7	33
Tertiary	22.9	31.3	44.0	57.0	51

Source: Department of Economic & Statistical Analysis, Haryana

2. REVIEW OF LITERATURE

As compared to voluminous literature available on urbanisation in India and abroad, the studies dealing

with various aspects of urbanization in Haryana are only of Krishan and Chandna (1973), Chandna (1982), Bhagat (1992) and Sangwan (2008).

Goel and Ahlawat (1993) analyzed growth of health expenditure, existing infrastructure for health, medical staff and patients treated in hospitals and dispensaries in Haryana (India). It was emphasized to invest in health sector for creating health culture in the country. They concluded that better health and medical care services for the rural and poor people can be provided through proper health planning.

Filmer et al. (1997) emphasized the importance of understanding the health seeking behavior of individuals, as well as the incentives facing health care providers in order to design health programs that are efficient and effective. Barro and Sala-i-Martin (1995) said that to understand the process of growth one needs to go beyond the aggregate and distant relationships and to uncover the mechanisms through which various factors shape aggregate performance. Structural relationships behind aggregate growth are particularly needed when one tries to identify the source of growth and reach policy conclusions. Aschauer (1989) has sought to quantify the contribution of infrastructure to income and growth.

Canning (1999) followed a rapidly expanding literature on the distributive impact of infrastructure provision and reform, which arose largely as a result of the worldwide trend toward increased private sector participation in infrastructure. Canning and Pedroni (1999) showed that infrastructure may affect productivity and output while economic growth also tends to influence the demand and supply of infrastructure services. Bergara et al. (1998) has examined infrastructure investment from different perspectives, ranging from public finance concerns to institutional considerations and combinations of the two. These studies identify a host of variables that may affect infrastructure capital formation, but take economic growth essentially as given. This may seem a pragmatic simplification, but it is likely to be problematic because of the simultaneity between GDP and infrastructure. Easterly and Levine (1997), with the help of regression, showed that weak institutions and poor infrastructure at the start of a decade slow down economic growth during the decade.

Guillaumont (2011) proposed that conditionality based on progress towards achieving the Millennium Development Goals be substituted for conditionality

based on the implementation of specific economic policy measures. M. Andrews (2010) showed that the reforms have been slow, showing only de jure progress, namely relating to the relevant texts, as opposed to de facto progress, or actual progress on the ground and in practices. In other words, while it is important to improve legal texts, the reforms have not gone beyond that stage, and do not have actual impact where expected, that is in practice. In a study Prakash and Cabezon (2008) noted challenges in public financial management improvement.

Brenneman and Kerf (2002) highlighted some of the relationships identified in the literature between health and transport and electricity. They find evidence reported in various studies that better transport contributes to easier access to health care as well as easier staffing and operation of clinics. Moreover, improved transport policy can reduce emissions of carbon dioxide which affect acute respiratory infections (ARI) and lead pollution, both of which are particularly harmful to children. He also showed that electricity allows for more studying, transport promotes easier establishment of schools and higher attendance because of reduced transit time and safer passage to schools, and access to piped water, frees girls to go to school and contributes both to higher achievement and attendance by promoting better health. Galiani et al. (2002) found, using the variation in ownership of water provision (and the associated increase in coverage and improvement in quality of water services), that child mortality fell 5 to 9 percent in areas that privatized their water services. The effect was largest in poorer areas.

Wang (2002) combined DHS and World Development Indicators data for a sample of 41 developing countries finds that the child mortality rate decreases with higher GDP per capita, higher rural share of the population in vaccination, and greater access to electricity. For infant mortality rates, public expenditure on health and access to improved sanitation were also found to be significant. The work of Wang suffers from several limitations however, including the small sample size and the absence of income or inequality variables. Milanovic (2000) calculated the share of industry and services in the economy's total value added. Again, infrastructure stocks and quality are measured by the summary indices derived from principal components analysis. Rutstein (2000) found the strongest determinants of child mortality to be, in decreasing

order of importance, the percentage of births that are the mother’s fourth or more, the percentage of children born to mothers younger than 18, the percentage of children born to underweight mothers and the percentage of households with drinking water from a surface source. The regressions do not include income variables however.

3. OBJECTIVES OF THE STUDY

The study has the following objectives:

1. To study the structural transformation in the economic growth of Haryana.
2. To compare the economy and per capita income of the various districts of Haryana .
3. To analyse the trend of urbanization in Haryana among various Districts.
4. To examine the availability of education facilities in different regions of Haryana.
5. To Study the inter-regional comparison of health facilities in Haryana.

4. RESEARCH METHODOLOGY

The universal features of economic development mainly revolve around the three indicators i.e. income either gross or per capita, health and education. Here, in this study, we focused only on these indicators. Further, these three indicators disaggregated into various relevant variables. In this paper we relied upon the recent secondary data sources like Statistical Abstracts of Haryana, data of NSSO of various rounds, Census data, and many other published data sources.

5. ASSESSMENT OF INTER-DISTRICT DISPARITIES: DEVELOPMENT INDICATORS

5.1 Economic indicator

5.1.1 Inter-District Variation in Economic Growth

Haryana has witnessed healthy growth during the last three decades. However, the question is: has the economic growth in Haryana been uniformly distributed across districts? In order to answer this, we calculated the growth rate of all districts of Haryana and compared it with the state average. The exercise shows that the economic growth in Haryana has not been uniform across districts. While the aggregate, Haryana has grown at an average annual growth rate of 8.8 per cent during 2000-01 to 2011-12, there are

districts that have grown at a much higher and much lower rate than this (Figure 1). For example, districts such as Gurgaon, Faridabad and Panipat have grown at high average annual growth rates of 12.1 per cent, 10.6 per cent and 10.3 per cent, respectively during 2000-01 to 2011-12. Whereas, districts such as Kaithal and Fatehabad have grown at even less than 6 per cent per annum during the same period. Thus, the growth in slow-growing districts of Haryana is even less than half of the fast-growing districts. Of the seven districts that have grown at a higher rate than the state average. ie. Gurgaon, Faridabad, Panipat, Panchkula, Sonipat, Ambala, Jhajjar and Rewari, a majority fall in the South-East region and are closer to the national capital Delhi. Whereas, the districts that lag behind i.e. Kaithal, Sirsa, Fatehabad, Hisar etc., are mostly in the Western region and are located far from the national capital. The inter-district variation in economic growth clearly reflects that Haryana has two growth centres. One growth centre is located around the national capital and another growth centre is concentrated around the state capital.

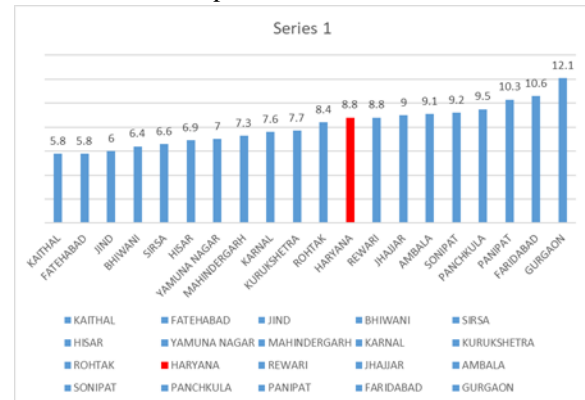


Figure 2: Inter District Variation in Economic Growth (2000-01 to 2011-12)

Source: Authors calculation based on data from the Statistical Department of Haryana

Note: Figure shows the average annual growth rate of district domestic products form 2000-01 to 2011-12

Table 2 shows the district wise growth rate of three main economic sectors. It is evident from the table that the growth rates of all three key economic sectors vary substantially across districts. However, the extent of variation is lowest in the case of agriculture. Surprisingly, the agriculture sector has done extremely well in Gurgaon and Faridabad, which are known for industries and services. The agriculture in these districts has grown at an average annual growth rate of

more than 5 per cent per annum during 2000-01 to 2011-12. This is almost double of agriculture growth recorded in Kaithal, Fatehabad and Jind where it has grown by just around 3 per cent during the same period.

The inter-district variation in growth rate is much higher in the case of the industrial and service sector. Interestingly, Rewari, Panipat and Jhajjar have witnessed double-digit growth in the industrial sector during 2000-01 to 2011-12. This is much higher as compared to Panchkula and Yamuna Nagar, where the industrial sector has grown at an annual rate of 4.9 per cent and 5.4 per cent, respectively during the same period. The extent of inter-district variation in growth is even higher in the case of the service sector, which has been serving as the main driver of economic growth in Haryana. The service sector growth in Haryana has been mainly concentrated in districts falling in the National Capital Region (NCR) i.e. Gurgaon, Faridabad and Sonipat. Gurgaon has seen the highest, 16.45 per cent per annum, rate of growth in the service sector from 2000-01 to 2011-12 and has rapidly emerged as the hub of knowledge and knowledge-based industry in India. In Faridabad services sector has grown at an average annual growth rate of 14.3 per cent during the same period. In contrast, in districts such as Fatehabad, it has grown at even less than 9 per cent per annum.

Table 2: Inter District Variation in Sectoral Growth Rate: 2000-01 to 2011-12

DISTRICTS	AGRICULTURE	INDUSTRY	SERVICE
Haryana	3.76	7.83	12.16
Gurgaon	5.72	8.06	16.45
Panipat	4.80	10.51	11.97
Faridabad	5.04	7.09	14.32
Panchkula	5.57	4.86	13.04
Rewari	3.37	10.52	9.94
Ambala	4.43	7.62	10.68
Sonipat	3.54	8.96	13.07
Kamal	4.09	7.84	10.53
Yamuna nagar	4.62	5.38	10.09
Hisar	3.29	8.97	10.00
Fatehabad	3.06	9.46	8.93
Sirsa	4.88	8.50	9.11
Kurukshetra	4.35	9.80	10.20
Jhajjar	3.78	10.05	11.40
Rohtak	4.78	7.22	10.99
Bhiwani	3.58	7.32	9.44
Kaithal	2.47	8.72	9.20
Jind	3.13	8.57	9.22
Mahindargarh	4.60	8.74	9.70
Palwal	-	-	-
Mewat	-	-	-
Dadari	-	-	-

Source: Authors calculation based on data from the Statistical Department of Haryana

It is evident from the section above that economic growth in Haryana has been concentrated around the national capital region. However, the magnitude of this concentration becomes more visible when we look at the contribution of different districts in total GSDP growth in Haryana. It is astonishing to see that more than one-fourth of total GSDP growth during 2000-01 to 2011-12 has come only from one district Gurgaon (Figure 3). Similarly, Faridabad, the other adjacent district to Delhi, has also contributed 15.3 percent to total GSDP growth. Interestingly, both these districts put together accounts for less than 15 percent of the total population of Haryana. In contrast, the contribution of western districts in total GSDP growth has remained extremely low. Four western districts (Bhiwani, Hisar, Sirsa, and Fatehabad), with a population share of more than 23 percent have contributed only around 13.2 percent to total GSDP growth. This mismatch between share in population and contribution to GSDP growth clearly shows that the benefit of economic booms in Haryana has remained confined to few people residing in National Capital Region (NCR).

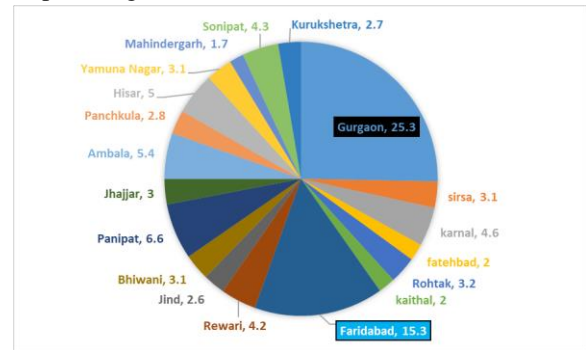


Figure 3 : Contribution of Different Districts in GSDP Growth

Source: Authors calculation based on data from the statistical department of Haryana. The uneven economic growth across districts in Haryana has aggravated the existing economic imbalance in Haryana. In 1999-00, Gurgaon had around 15.05 percent share in total GSDP of state, which increased to more than 20.55 percent in 2011-12. Similarly, the share of Panipat and Faridabad in total GSDP also went up by two and one percentage points respectively during the same period. Besides these districts, Ambala, Sonipat, Rewari, and Panchkula have also witnessed a minuscule increase in

their shares in total state GSDP. In contrast, the combined share of four western districts (Hisar, Sirsa, Fatehabad, and Bhiwani) in total GDSP has declined by more than four percentage points.

5.2. Education Indicators

The expansion of human functioning or capabilities is a key requirement for integrated socio-economic growth of the country (Sen, 1999). A healthy and skilled human mind can contribute more effectively to economic development and growth. From this point, all it requires larger investment on social sector indicators as Education and Health. But within the social development sector, education plays an important role. It makes a positive and most widespread impact on society.

Education is one of the most important constituents of the human development index (HDI) and Haryana ranked 5th in HDI. In the previous section of the economic indicator, it is clearly shown that Haryana ranks 3rd position in terms of PCI (per capita income) and GDP has recorded 9% over the last few decades. Now the question arises that has the development of the educational sector of the state provided the requisite back-up for the same growth as other sectors? In order to answer this question, this section is devoted to studying the growth of the educational sector in the state of Haryana and the performance of districts in this regard.

5.2.1 Growth of Education in Haryana (1966 to 2011)

Table 4 Shows the growth of educational sector on various aspects such as

- (i) Number of education institutes in the state
- (ii) Enrolment of students in educational institutes and
- (iii) Number of teachers during the period of 1966 to 2011.

Table 4: Growth in Educational Institutions

Educational sector of Haryana	1966	2011	CAGR
(I) Number of Education Institutes			
Primary Schools	4449	13073	+4.30
Middle Schools	735	3439	+8.17
Higher/Sr. Secondary Schools	597	6671	+22.60
(II) Enrolments in Education Institutes			
Primary Schools	534764	1694900	+4.82
Middle Schools	250673	877767	+5.56
Higher/Sr. Secondary Schools	376080	2405479	+11.99
(III) Number of Teachers			
Primary Schools	12960	31574	+3.19
Middle Schools	7701	20128	+3.58
Higher/ Sr. Secondary Schools	11813	91406	+14.97

Source:

1. Govt. of Haryana, Statistical Abstract of Haryana and Economic Survey, 2012-13.

2. 13237965/DISPARITIES_IN_EDUCATION_IN_THE_STATE_OF_HARYANA

Method: Compound Annual Growth Rate (CAGR)
Formula would be used-

$$V_n = V_0 (1+r)^n$$

$$r = (V_n/V_0)^{1/n} - 1$$

Where V_n = value of the variable in final or nth year

V_0 = value of the variable in the initial year

n = number of years

r = rate of growth

Further to decipher the disparities of the state (Haryana) in the spread of Education by using the data of the 2011 Census, a composite index is constructed by applying the following formula:

$$C = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

Where C = the factor of the score for each district in the index

Min and Max value. Values are maximum and minimum goal posts selected for the indicator. Equal weight is given to all the indicators in the composite index. For the analysis of the pattern of disparity in Education facilities, the following indicators are selected:

- 1. Literacy rate of the total, Female and male
- 2. Number of Educational institutions per lakh population
- 3. Density of Educational institutions per sq. km of area
- 4. Enrolment of students per institutions

An aggregate composite index is prepared as:

Literacy rate of Female, male and total	1/4 of these indicators
Density of Educational institutions per sq.km of area	
Number of Educational institutions per lakh population	
Enrolment of students per institutions	

5.2.2 Findings/Results

Part (i) shows that there is an increase in the number of schools from 1966 to 2011, as primary schools from 4449 to 13073, middle schools from 735 to 597, and sr. secondary schools from 597 to 6671 respectively.

Part (ii) shows the Enrolment of students in educational institutions. Which has increased from 534764 to 1694900 in primary schools, from 250673 to 877767 in middle schools from 376080 to 2405479

in Sr. secondary school during the period of the study 1966 to 2011.

Part (iii) shows the number of teachers in educational institutions. Which has increased from 12960 to 31574 in primary schools. From 7701 to 20128 in middle schools and from 11813 to 91406 in higher/ Sr. secondary school during the period of 1966 to 2011.

The CAGR resulted that in the (i) number of educational institutions is lowest for primary schools (4.30 percent) and highest for SR. secondary schools (22.6 percent). In the table, section (ii) in case of enrolment of students again lowest for primary schools (4.82 percent) and highest for Sr. secondary schools (11.99). Followed by (iii) section the CAGR for the number of teachers in educational institutions has been lowest for primary schools (3.19 percent) and highest for Sr. secondary schools (14.97 percent). The above table reflects that during 1966 the main focus was on primary schoolings or primary level of education but by 2011 the time trend reveals that the share of Sr. secondary schools has increased drastically.

5.2.3 Inter-District Education Disparities in Haryana

In this section District, wise literacy rate of Haryana is shown. The pattern of disparities with indexation and constructing an aggregate composite index for all indicators to find out best-performing district and which district is lagging behind in literacy rate or in the progress of education.

5.2.4 Trends in Literacy rates among Districts

Trends in Literacy rates among different districts of the state are represented in table 5. Haryana's literacy rate was 76.6% during 2011 as compared to the national average of 74% approx. In the same census year 2011, the female literacy rate was 65.9% and the male literacy rate was 84% as against 65.5% and 82.1% respectively at the national level. At the district level of Haryana, the highest female and male total literacy rates were recorded in Gurgaon (84.70%) followed by Panchkula (81.88%), Ambala (81.75%), Faridabad (81.70%), and Rewari (80.99%). While the Mewat district was recorded the lowest female and male literacy rate (54.08%) where (36.6% female literacy rate) and (69.94% of male literacy rate) respectively. It shows that the overall female and male literacy rates of Haryana are slightly higher than the national average as nearly 6 districts namely Yamunanagar, Sonipat, Kurukshetra, Rohtak, Jhajjar, Mahendragarh have registered more than 75% literacy rate.

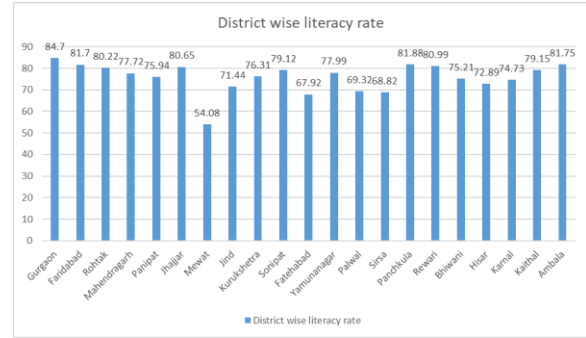


Figure 4. Total literacy rate of Haryana District wise (in percent)

Source: Series-7, Provisional Population Totals Paper-1 of Census, 2011

Table 5. Literacy index of Haryana District wise (2011)

Districts	Total	Index	Female	Index	Male	Index
Gurgaon	84.70	1	77.98	1	90.46	0.954
Faridabad	81.70	0.902	73.84	0.899	88.61	0.868
Rohtak	80.22	0.853	71.72	0.848	87.65	0.823
Mahendragarh	77.72	0.772	64.57	0.675	89.72	0.92
Panipat	75.94	0.713	67	0.734	83.71	0.640
Jhajjar	80.65	0.867	70.73	0.824	89.31	0.9
Mewat	54.08	0	36.6	0	69.94	0
Jind	71.44	0.566	60.76	0.583	80.81	0.505
Kurukshetra	76.31	0.726	68.84	0.779	83.02	0.608
Sonipat	79.12	0.817	69.8	0.802	87.18	0.801
Fatehabad	67.92	0.451	58.87	0.538	76.14	0.288
Yamunanagar	77.99	0.780	71.38	0.840	83.84	0.646
Palwal	69.32	0.497	54.23	0.426	82.66	0.301
Sirsa	68.82	0.481	60.4	0.575	76.43	0.373
Panchkula	81.88	0.907	75.99	0.951	87.04	0.795
Rewari	80.99	0.878	69.57	0.796	91.44	1
Bhiwani	75.21	0.690	63.54	0.651	85.65	0.730
Hisar	72.89	0.614	62.25	0.619	82.2	0.570
Karnal	74.73	0.674	66.82	0.730	81.82	0.552
Kaithal	79.15	0.499	59.24	0.547	77.98	0.591
Ambala	81.75	0.903	75.5	0.940	87.34	0.809

Haryana	75.55 %		84.06 %		65.94 %	
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Source:

<https://www.census2011.co.in/census/state/districtlist/haryana.html>

In terms of overall female and male index values, the best performing districts of the state are Gurgaon, Panchkula, Rewari, Faridabad, and Ambala. While in the category of lagged behind districts in the respective values are Mewat, Fatehabad, Palwal, and Sirsa. Even Mewat and Palwal are some of the backward areas of the state.

But in terms of Female literacy rate, Haryana represents a picture of the wider gap. Female literacy rate of the state lag behind the male literacy rate. This gap between female and male literacy rate is 18.12 percent while at the national level it is 16.6%. This means that Haryana is still lag behind in terms of education gender equality. Therefore, the state has to work out on female education-related policies with a special focus more on backward districts of the state like Mewat and Palwal.

5.3. HEALTH INDICATOR

Haryana has been notified as one of the developed and wealthy states of India. Its achievements in different sectors like economic, education, nutrition and etc. have remained far from satisfactory. In terms of overall human development and health achievements, it ranks under the lower middle. This rank indicates that economic development has not been able to translate into a high social and human development index (HDI) in the state. In this section, we analyze the status of disparities in healthcare facilities and outcomes across districts.

5.3.1 Comparison of Haryana with other states

India has a total of 25778 govt. hospitals. The state of Uttar Pradesh in India had around 4635 public hospitals as of 2018. Haryana had 668 govt. hospitals only. It ranks on 14th number among states. According to the WHO report 2011, for a population of over a billion, the country had 0.7 hospital beds for every 1,000 Indians. This shows that Haryana has not in a good position in terms of govt. hospitals as compared to the other States.

Table 6. Number of Government hospitals across India (2017-2018), by states

States	Number of Hospitals
Total	25778

Uttar Pradesh	4635
Rajasthan	2850
Karnataka	2842
Odisha	1806
West Bengal	1566
Kerala	1280
Assam	1226
Tamil Nadu	1217
Bihar	1147
Telangana	863
Himachal Pradesh	801
Maharashtra	711
Punjab	682
Haryana	668
Jharkhand	555
Madhya Pradesh	465
Uttarakhand	460
Gujarat	438
Andhra Pradesh	258
Arunachal Pradesh	218
Chhattisgarh	214
Meghalaya	157
Tripura	156
Jammu & Kashmir	143
Delhi	109
Mizoram	90
Goa	43
Nagaland	36
Sikkim	33
Manipur	30
Andaman and Nicobar	30
Puducherry	14
Dadra & Nagar Haveli	12
Chandigarh	9
Lakshadweep	9
Daman & Diu	5

Source:

- i. National Health Profile 2019, page 266
- ii. Ministry of health and family welfare (India)

5.3.2 Variation in Availability of Health Infrastructure across Districts

There exist high disparities across districts of Haryana in the availability of hospitals and beds (2011-12). As far as the number of beds per lakh population is concerned, a vast disparity /variations recorded across districts. The number of health institutions per lakh population was found to be quite low in the developed districts too like Gurgaon and Faridabad compared to the states (Table 7). Similarly, some districts recorded poor health facilities such as Mewat (only about 19beds are available over per lakh of the population) in 2011-12. While in Rohtak highest number of beds were available (150 per lakh Population) in table1. Similarly, the highest number of beds per health hospital were also recorded in Rohtak i.e. 11, and the majority of districts lie between 2 to 3. Indoor and

outdoor patients treated per hospital is again high in Rohtak.

Table 7: Health Institutions Availability of Beds and Patients Treated Per Institution

Districts	No. of Beds per lakh Population	Health Institution per lakh Population	Bed per Hospital	Indoor patients treated per hospital	Outdoor patients treated per hospital
Gurgaon	40	9	5.0	357	7578
Faridabad	37	6	6.0	526	7693
Rohtak	150	14	11.0	735	11355
Mahendragarh	33	14	2.0	228	3746
Panipat	25	10	3.0	165	3648
Jhajjar	32	15	2.0	110	3130
Mewat	19	11	2.0	179	3282
Jind	35	14	2.0	166	4126
Kurukshetra	31	14	2.0	177	3750
Sonapat	26	14	2.0	147	4267
Fatehabad	28	14	3.0	256	3709
Yamunagar	36	13	3.0	208	4945
Palwal	23	10	2.0	177	2944
Sirsa	28	14	2.0	126	2530
Panchkula	54	14	4.0	454	9061
Rewari	37	15	3.0	197	3710
Bhiwani	55	17	3.0	187	3051
Hisar	42	14	3.0	170	4051
Karnal	31	12	3.0	251	4410
Kaithal	27	15	2.0	125	3443
Ambala	44	11	4.0	273	4679

Source:

- i. <http://esaharyana.gov.in>
- ii. Statistical Abstract of Haryana, 2012-13.

The poor districts of Haryana have lagged behind in health infrastructure facilities such as Mewat, Fatehabad. Hospital availability in some districts is high but lacking in availability of beds and vice-versa, indicating hospitals without beds or beds with no or low hospital's shows poor status of the state in Health indicator.

5.3.3 Status and Variation in Health Outcomes

A comparative profile of selected health outcomes parameters shows that achievement in most of the mortalities indicators like a child (age 0-4years), under 5years, infant, neo-natal, early neo-natal, post-neo-natal, pre-natal, maternal mortalities rates of Haryana more or less equal to the national average mortalities indicators.

Maternal mortality rate defined as the number of maternal deaths of women in the ages 15-49 per 100,000 women in the age group found around 12.4 in Haryana and 11.6 in India (Table 8). While the maternal mortality ratio which refers to the number of women who die as a result of complications of pregnancy or childbearing in a given year per 100,000 live births in that year were found to be around 153 in the state (Haryana) and 212 in India. The important indicators to judge women status in society are child sex ratio, which remained low at 877 and 830 in Haryana respectively as against 940 and 914 at the national level respectively

Table 8. Comparison of Selected Health Outcome Parameters of Haryana and India (2012)

Indicators	India			Haryana		
	Total	Rural	Urban	Total	Rural	Urban
Child mortality rate (age 0-4years)	11	13	7	11	12	8
Under-five mortality rate	52	58	32	48	52	39
Infant mortality rate	42	46	28	42	46	33
Infant Mortality Rate (low-high) range	43-46	47-50	27-31	38-51	40-56	26-43
Neo-natal mortality rate	29	33	16	28	31	20
Early neo-natal mortality rate	23	25	12	21	24	13
Late neo-natal mortality rate	6	7	4	7	7	7
Post neo-natal mortality rate	13	14	12	14	15	13
Peri-natal mortality rate	28	31	17	30	34	19
Still birth rate	5	5	5	9	10	6
Maternal Mortality Rate	12.4	?	?	11.6	?	?
Maternal Mortality Ratio (SRS 2007-09)	212	?	?	153	?	?
Total Fertility Rate	2.4	2.6	1.8	2.3	2.4	2
Crude Birth Rate	21.6	23.1	17.4	21.6	22.6	19.2
Crude Death Rate	7	7.6	5.6	6.4	6.9	5.4
Sex Ratio (Census 2011)	940	?	?	877	?	?
Child Sex Ratio (Census 2011)	914	?	?	830	?	?

SOURCE: SRS-2012, Census, 2011

The urban-rural gaps in these Mortalities indicators in the state are however noticed to be low as those compared to the urban rural gaps at the National level, but it is a cause of serious worry.

6.FINDINGS, SUGGESTIONS AND CONCLUSIONS

Over the last three-decade, Haryana has witnessed remarkable growth. The growth has been highly concentrated in the National capital region (NCR). Therefore, inter-district income disparity in Haryana has increased substantially. Our Analysis suggests that there exists a consequential level of disparities in income as well as in the other non-income attainments among the districts of the state. In the economic indicator, the inequality happens to be very high as the ratio of income of the three richest districts of the state to the three poorest states is 4.38. Now, this is a cause of considerable concern. The poorest districts of the state are Mewat, Fatehabad, Palwal, Sirsa, and Bhiwani in every aspect of the economic indicator. These districts need special attention from policymakers. The poor districts are characterized by a low percentage of urbanization level, low percentage of income in district domestic products. These indicators can be improved by the industrialization of this area. Similarly, based on geographical locations, the eastern part of the state is more developed as compared to the western districts of the state.

The economic growth in the state has been primarily driven by the Tertiary sector/service sector. Since this sector generates income and employment for skilled and educated labor. Educational development is the key and essential indicator of economic growth it can make the growth more inclusive and reduced the poverty and inequality. Though Haryana has made significant growth in the education sector still western part districts of the state are lagging behind. Hence, it is important to improve the level of Education in the western districts are needed urgently. The cost of the education sector is significantly higher compared to the National average but still lagging behind in educational gender equality. Government should try to reduce this literacy inequality across the districts. Female literacy rates among districts are significantly low. To improve the literacy rate and to reduce inequality policymakers try to reduce the cost of education to make it affordable for the weaker section

of the society. Reduction in the cost of education and increase in the number of educational institutes will help bridge the east-west gap and also improve the participation of weaker sections in the society.

Haryana has very high rural-urban disparities in health infrastructure. This resulted in disparities in health outcomes and health urbanization indicators across the rural areas in the districts of Haryana. Hence immediate steps are needed to be taken to correct the imbalance in health infrastructure across the districts. It is important for policymakers to note the fund allocation for the health infrastructure across districts should be strictly based upon requirement-based distribution criteria.

The study recommends three suggestions/policy measures to reduce the Intraregional inequalities in Haryana

First, there is an urgent need to develop a state growth in the western part of Haryana to reduce the inequalities across districts. Investment in roads, schools, and other industrial infrastructure in the western area of the state could be useful to develop a growth center in western districts.

Second, policymakers needed to correct the inter-district disparities in the education sector. Reduction in the cost of education through government policies and subsidies could help in the reduction of inequality and become an effective step in this direction.

Third, inter-district and urban-rural disparity in health infrastructure needs to be corrected in order to remove the disparities in health outcomes and health utilization across the districts of the state.

This study has analyzed the dimensions of Economics, Education, and Health Inequalities within Haryana. It has found a significant level of inequality in the Haryana, which requires urgent attention.

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