

An Analysis of Human Development Determinants: A Case Study of Haryana

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Abstract – The prime aim of the study is to analyze and compare the Human Development Determinants in terms of Education, Health and Per Capita Income. Based on Agenda 2030, NITI Aayog has also started its own SDG (Sustainable Development Goals) Index to rank the various states and union territories as per their performance on the various parameters or set goals. The SDG India Index was developed in collaboration with the Ministry of Statistics & Programme Implementation (MoSPI), Global Green Growth Institute and United Nations in India. These goals include 13 out of the 17 SDGs set by UN under Agenda 2030, and these all are targeting at uprooting of poverty and other deprivations for improving health and education, diminishing inequality, and accelerating the economic growth. The area of this study is all the districts in Haryana which include Ambala, Kurukshetra, Panchkula, Yamuna Nagar, Faridabad, Palwal, Nuh, Gurugram, Mahendragarh, Rewari, Fatehabad, Jind, Hisar, Sirsa, Jhajjar, CharkhiDadri, Rohtak, Sonapat, bhiwani, Karnal, Panipat, Kaithal. Haryana is ranked 22nd (with 76.64% literacy rate) among all the states and union territories in case of literacy rate. Overall literacy rate of Haryana is above the national literacy rate. Gurgaon district has the highest literacy rate, 84.70% in the state, followed by Faridabad, Panchkula, Ambala and Rohtak while Mewat is at the bottom with 54.08%. In case of sex ratio Haryana is at 31st rank (with total of 879 females per 1000 males) among all states and union territories. The sex ratio of Sonapat and Gurugram is lowest at 853 and highest for Mewat at 906. In case of Income Per Capita, Haryana is ranked 13th with Rs. 199,612. Gurgaon is at the top of per capita income tally with PCI of Rs.4.46 lakh followed by Panipat with PCI of Rs. 1.64 lakh. Mewat has the lowest PCI of Rs. 45,934 followed by Mohindergarh with Rs. 54,835 and Palwal with Rs. 65,009.

Keywords: Human Development Index; Agenda 2030; Sex Ratio; Literacy rate; Per Capita Income; Unemployment.

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1. INTRODUCTION

Human Development Index was developed by the Dr. Mahbub-Ul-Haq, a renowned economist from Pakistan in 1990. HDI is a comprehensive tool used by the United Nations for measuring the levels of social and economic developments of the different countries and ranking them as per their performance.

Agenda 2030, was proposed by UN in 2015 and it was followed by its 177 member nations. It is aiming at removal of poverty from world by 2030. It has finalized 17 Sustainable Development Goals which include end poverty and hunger, realize the human rights of all, achieve gender equality and the empowerment of all women and girls, and ensure the lasting protection of the planet and its natural resources.

“Human development is concerned with what I take to be the basic development idea: namely, advancing

the richness of human life, rather than the richness of the economy in which human beings live, which is only a part of it. Human development is a concept within the scope of the study of the human condition, specifically international development, relating to international and economic development”. (Amartya Sen, Nobel Laureate, 1998)

Haryana is a North Indian state, with less than 1.4% (44,212 km²(17,070 sq mi)) of India's land area, ranked 22nd among 29 states in terms of area. It came into emergence as a separate state on 1st of November 1966.

2. OBJECTIVES OF THE STUDY

Keeping in view the above, the main aim of this study is to analyze the trend of human

development in the district of Haryana in terms of Per Capita Income, Health and Education

3. RESEARCH METHODOLOGY

The study is based on secondary data. The secondary data have been collected from various sources like Research papers, Books, Periodicals, Various Government Publications and websites etc. To analyze the collected data various statistical and mathematical tools have been used. The study is conducted in Haryana. The Haryana state is divided into 22 districts. These are Ambala, Kurukshetra, Panchkula, Yamuna Nagar, Faridabad, Palwal, Nuh, Gurugram, Mahendragarh, Rewari, Fatehabad, Jind, Hisar, Sirsa, Jhajjar, Rohtak, Sonapat, Bhiwani, Karnal, Panipat, Kaithal and Charkhi Dadri. The Human Development Indicators are considered Per Capita Income, Health and Education.

4. RESULTS AND DISCUSSION

4.1 Education

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. It is a discipline that is concerned with methods of teaching and learning in schools or school-like environments. It is most powerful driver of development and one of the strongest instruments for reducing poverty and improving health, gender equality, peace, and stability. Table 1 gives the detailed information of literacy rate in India in 2011 and also shows the % change in literacy from 1999-00.

Table 1 Literacy Rate in India(2011)

Sr. NO.	States	Total (%)	Male (%)	Female (%)	% change
1	India	74.04	82.14	65.46	8.66
2	Kerala	94	96.11	92.07	3.14
3	Lakshadweep	91.85	95.56	87.95	5.19
4	Mizoram	91.33	93.35	89.27	2.53
5	Goa	88.7	92.65	84.66	6.69
6	Tripura	87.22	91.53	82.73	14.03
7	Daman and Diu	87.1	91.54	79.55	8.92
8	Andaman and Nicobar Islands	86.63	90.27	82.43	5.33

9	Delhi	86.21	90.94	80.76	4.54
10	Chandigarh	86.05	89.99	81.19	4.11
11	Puducherry	85.85	91.26	80.67	4.61
12	Himachal Pradesh	82.8	89.53	75.93	6.32
13	Maharashtra	82.34	88.38	75.87	5.46
14	Sikkim	81.42	86.55	75.61	12.61
15	Tamil Nadu	80.09	86.77	73.44	6.64
16	Nagaland	79.55	82.75	76.11	12.96
17	Uttarakhand	78.82	87.4	70.01	7.2
18	Gujarat	78.03	85.75	69.68	8.89

19	Manipur	76.94	83.58	70.26	10.33
20	West Bengal	76.26	81.69	70.54	7.62
21	Dadra and Nagar Haveli	76.24	85.17	64.32	18.61
22	Punjab	75.84	80.44	70.73	6.19
23	Haryana	75.55	84.06	65.94	7.64
24	Karnataka	75.36	82.47	68.08	8.72
25	Meghalaya	74.43	75.95	72.89	11.87
26	Orissa	72.87	81.59	64.01	9.79
27	Assam	72.19	77.85	66.27	8.94

28	Chhattisgarh	70.28	80.27	60.24	5.62
29	Madhya Pradesh	69.32	78.73	59.24	5.58
30	Uttar Pradesh	67.68	77.28	57.18	11.41

31	Jammu and Kashmir	67.16	76.75	56.43	11.64
32	Andhra Pradesh	67.02	74.88	59.15	6.55

33	Jharkhand	66.41	76.84	55.42	12.85
34	Rajasthan	66.11	79.19	52.12	5.7
35	Arunachal Pradesh	65.38	72.55	57.7	11.04
36	Bihar	61.8	71.2	51.5	14.8

Source: data.gov.in

Table 1 indicates the following:

- The total literacy rate of India is 74.04%. For male population literacy rate is 82.14%, while for females its 65.46%. The overall growth rate in literacy rate from 1999-00 to 2011-12 is 8.66%.
- Haryana stands 22nd in total literacy among all the states and union territories with literacy rate 75.55%.
- However, this is above the average literacy rate of the country. Male literacy rate percentage is 84.06%, while for female its 65.94%. The growth rate in literacy rate of Haryana from 1999-00 to 2011-12 is 7.46%.

District wise literacy rate in Haryana for the year 2011-12 is presented in Table 2

Table 2 Literacy Rate in Haryana (District Wise)

Districts	Total Literacy %	Male Literacy %	Female Literacy %
Haryana	76.64	85.4	66.8
Panchkula	83.4	88.6	77.5
Ambala	82.9	88.5	76.6

Yamunanagar	78.9	85.1	72
Kurukshetra	76.7	83.5	69.2
Kaithal	70.6	79.3	60.7
Karnal	76.4	83.7	68.3
Panipat	77.5	85.4	68.2
Sonapat	80.8	89.4	70.9
Jind	72.7	82.5	61.6
Fatehabad	69.1	78.1	59.3
Sirsa	70.4	78.6	61.2

Bhiwani	76.7	87.4	64.8
Rohtak	80.4	88.4	71.2
Jhajjar	80.8	89.4	71
Mahendragarh	78.9	91.3	65.3
Rewari	82.2	92.9	70.5
Gurgaon	84.4	90.3	77.6
Mewat	56.1	73	37.6
Faridabad	83	89.9	75.2
Palwal	70.3	82.6	56.4

Hisar	73.2	82.8	62.3
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Source:

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

Table 2 concludes the following:

- In Haryana, total literacy rate is highest in Gurgaon (84.4%), followed by Panchkula and Ambala while its lowest in Mewat (56.1%) followed by Palwal and Sirsa.
- Male literacy rate is highest for Rewari (92.9%) followed by Mahendergarh and Gurgaon, while its lowest for Mewat (73%), followed by Fatehabad and Sirsa.
- For females, the literacy rate is highest in Gurgaon (77.6%), followed by Panchkula and Ambala, while its lowest in Mewat (37.6%), followed by Palwal and Fatehabad.

4.2 Health

In the words of WHO (World Health Organisation), Health can be defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (1948).

Table 3 gives account of the sex ratio in India for the year 2011-12.

Table 3 Sex Ratio

State/ Union Territory	Sex Ratio (2011)
Kerala	1084
Puducherry	1037
Tamil Nadu	996
Andhra Pradesh	993
Chhattisgarh	991
Meghalaya	989
Manipur	985
Telangana	985
Odisha	979
Mizoram	976
Goa	973
Karnataka	973
Himachal Pradesh	972
Uttarakhand	963
Tripura	960
Assam	958
West Bengal	950
Jharkhand	948
Lakshadweep	946
Arunachal Pradesh	938
Nagaland	931
Madhya Pradesh	931
Maharashtra	929
Rajasthan	928
Gujarat	919
Bihar	918
Uttar Pradesh	912
Punjab	895
Sikkim	890
Jammu and Kashmir	889
Haryana	879
Andaman and Nicobar Islands	876
Delhi	868
Chandigarh	818
Dadra and Nagar Haveli	774
Daman and Diu	618
Total average (India)	943

Source: data.gov.in

Table 3 explains the following:

- Average Sex Ratio of India is 943.
- Kerala has highest number of females per thousand males i.e. 1084, followed by Pondicherry with 1037.
- Among states, Haryana occupies the bottom place with sex ratio of 879 while in Union Territories, Daman and Diu is at bottom with 618.

Table 4 Sex Ratio in Haryana District Wise (2011)

Ambala	882
Bhiwani	884
Faridabad	871
Fatehabad	903
Gurgaon	853
Hisar	871
Jhajjar	861
Jind	870
Kaithal	880
Karnal	886
Kurukshetra	889
Mahendragarh	894
Mewat	906
Palwal	879
Panchkula	870
Panipat	861
Rewari	898
Rohtak	868
Sirsa	896
Sonipat	853
Yamunanagar	877

Source:

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

Table 4 concludes the following:

- Total number of females per 1000 males in Haryana is 879 which is least among the states in India.
- In Haryana, Mewat has the maximum number of females per 1000 males i.e. 906, followed by Fatehabad.
- While Gurugram and Sonipat have least sex ratio i.e. 853 each, followed by Panipat and Jhajjar together at 861.

INFRASTRUCTURE AVAILABILITY

The availability of health infrastructure in Haryana (district wise) is figured out in the table 5. We have included total number of Sub Centers, Primary Health Centers, Community Health Centers and Sub District Hospitals.

Table 5 Infrastructure Availability (2014)

Districts	District Wise Availability of Health Centers In Haryana			
	No. of Sub- Centre	No. of PHCs	No. of CHC	No. of SDH
Ambala	18	4	2	1
Bhiwani	42	9	4	1
Faridabad	13	2	1	1
Fatehabad	18	4	1	1
Gurgaon	13	3	2	1
Hisar	35	8	2	1
Jhajjar	27	6	2	1
Jind	28	7	1	1
Kaithal	23	6	0	1
Karnal	25	6	1	0
Kurukshetra	21	5	0	1
Mahendragarh	24	7	1	1
Mewat	13	3	0	1
Palwal	13	4	0	1
Panchkula	10	2	0	1
Panipat	16	3	0	1
Rewari	18	5	1	1
Rohtak	22	5	0	1
Sirsa	25	8	0	1
Sonapat	32	6	1	1
Yamunanagar	18	6	1	1
Haryana	2542	454	109	20

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

The table 5 indicates the following:

- The number of Sub Center in Haryana is 2542, of which maximum 42 are in Bhiwani. Panchkula has a minimum of 10 sub centers.
- Total number of PHCs in Haryana is 454. Bhiwani has maximum of 9 PHCs while Panchkula and Faridabad have 2 PHCs each.
- The no. of CHCs in Haryana is 109. Of which maximum 4 are in Bhiwani and Kaithal, Kurukshetra, Mewat, Palwal, Panipat, Rohtak and Sirsa have no CHCs.
- The number of SDHs in Haryana is 20 and all the districts except Karnal have 1 SDH.

PER CAPITA INCOME

Per capita income (PCI) or average income measures the average income earned per person in a given area (city, region, country, etc.) in a specified year. It is calculated by dividing the area's total income by its total population. Table 6 includes the data regarding Per Capita Income of India (state wise) for the year 2011.

Table 6 Per Capita Income in India (2011)

States	Per Capita Income(in Rs.) 2011
Andhra Pradesh	69000
Arunachal	73068
Assam	41142
Bihar	21750
Chhattisgarh	55177
Goa	259444
Gujarat	87481
Haryana	106085
Himachal Pr.	87721
J & K	53173
Jharkhand	41254
Karnataka	90263
Kerala	97912
Madhya Pradesh	38551
Maharashtra	99173
Manipur	39762
Meghalaya	60013
Mizoram	57654
Nagaland	53010
Odisha	48370
Punjab	85577
Rajasthan	57192
Sikkim	158667
Tamil Nadu	92984

Telangana	91121
Tripura	47079
Uttar Pradesh	32002
Uttarakhand	100305
West Bengal	NA
A & N islands	88183
Chandigarh	159116
Delhi	185361
Puducherry	119649
All India GDP	63462

Source: data.gov.in

From the above data it is observed that

- Per Capita income of India is Rs. 63462.
- Goa is at the top with per capita income of Rs. 259444.
- Bihar is at the bottom with per capita income of Rs.21750.
- Haryana stands 4th among states and 7th overall with per capita income of Rs. 106085.

Table 7 can be studied to understand the level of disparity among districts in Haryana in terms of Per Capita Income. It gives an account of Per Capita Income for various districts for 1999-00 and 2011-12, their ranks and the growth rate (%) for the decade.

Table 7 PCI in Haryana (District Wise) (1999-00 and 2011-12)

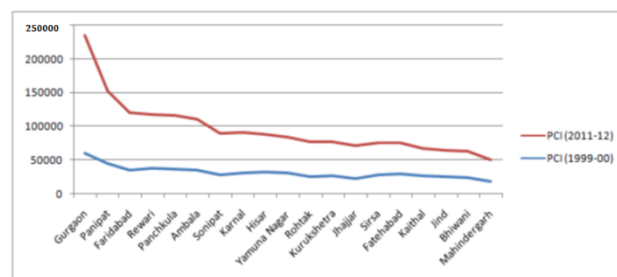
Districts	PCI (1999-00)	Rank	PCI (2011-12)	Rank	Growth Rate
Gurgaon	59463	1	175825	1	9.5
Panipat	43811	2	109230	2	8.1
Faridabad	34511	5	86320	3	8.3
Rewari	37146	3	81165	4	6.8
Panchkula	35532	4	80581	5	7.2
Ambala	34069	6	76784	6	7
Sonapat	27156	12	62152	7	7.2
Karnal	31140	8	59765	8	5.6
Hisar	32172	7	56494	9	4.9
Yamuna Nagar	30130	9	54371	10	5.1
Rohtak	24902	16	52126	11	6.4
Kurukshetra	26100	14	50706	12	5.7
Jhajjar	22471	18	49754	13	6.9
Sirsa	28321	11	47828	14	4.6
Fatehabad	29626	10	46318	15	3.9
Kaithal	26502	13	41777	16	3.9
Jind	25190	15	40260	17	4
Bhiwani	23739	17	39807	18	4.5
Mahendergarh	18027	19	32864	19	5.3

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

It is observed that

- In Haryana, Gurgaon is at the top with per capita income of Rs. 175825, followed by Panipat at Rs. 109230.
- Mahendergarh is at the bottom with per capita income of Rs. 32864, followed by Bhiwani at Rs. 39807.
- PCI growth rate % is higher for Gurgaon and Faridabad while it is quite low for Fatehabad and Kaithal.

The above illustration can be clearly understood with help of line graph given below-



- It is easily seen that Gurgaon, Panipat and Faridabad have shown higher growth rate than those of others.
- While Bhiwani and Mahendergarh are growing at very slow pace.

2. CONCLUSION AND SUGGESTIONS

On the basis of above discussion, it is clear that Haryana is performing well in country. It is among the top 5 GDPs in India, Literacy rate is also quite higher than that of average literacy rate of the country, no matter whether its case of male literacy rate or female literacy rate. In terms of health, Haryana is at the bottom place in sex ratio among 29 states. It is a matter of serious concern and need to be addressed shortly to avoid the bitter outcomes. Although it has massive health infrastructure as compared to other states but still it needs to be further developed. Schemes like "BetiBachao, BetiPadhao", "Sukanya Samridhi Yojana" have started giving some positive results. More such schemes and programmes can help overcome this situation. In state, a lot of disparities have been seen at district level. Some districts like Gurgaon, Faridabad and Panipat are at far better place as compared with the other districts. There is a need to give equitable treatment, instead of equal treatment. The growing pace is quite well and the need is to maintain it to ascertain the top position in NITI Aayog SDGs Index as well as in Human Development Ranking.

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