Some Aspect of Inter- District Disparities in Haryana

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SOME ASPECTS OF INTER DISTRICT DISPARITIES IN HARYANA

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Policy makers, political leaders, development analysts and other concerned citizens are increasingly focusing attention on the disparities in levels of development between different sections in India. There are glaring inter-state disparities in India (Bhattacharya & Sakthivel, 2004, Nirvikar el.el, 2003, Kurien, 2001).Such disparities have important political, social, economic and law and order implications. Not only there are wide inter-state disparities but there are disparities between the various regions of the states also. Studies pertaining to Tamil Nadu (Chelliah & Shanmugam, 2001) Karnataka (Devaraj, K. & Gopalakrishna) and Meghalaya (Nayak & Ray, 2009) reveals existence of considerable inter-district disparities in these states.

Haryana is one state which has shown considerable progress since its inception in 1966. With a splendid economic growth, one of the highest per capita income index, sound industrial infrastructure, strong manufacturing base, advanced agriculture sector and vibrant service sector, Haryana is one of the highly economically developed and industrialised States of India. Today, it enjoys the unique distinction in India of having provided electricity, metalled roads and potable drinking water to all its villages within record time. Haryana has also done very well in terms of human development. The performance of the state as a whole is commendable. Given this background, it is interesting to analyse whether, the benefits of the state progress have been distributed equally or they are concentrated in few pockets of the state. The present paper makes an attempt to analyse some aspects of the inter-district disparities in Haryana

METHODOLOGY

Inter District Disparities in Haryana are analysed with the help of various indicators mainly grouped as Economic Indicators, Educational Indicators and Health Indicators The main source of the data is Statistical Abstract of Haryana but data has also been obtained from Planning Commission of India, Economic Survey of Haryana and CSO. The data has been examined at district level and the latest available data has been used. The data is represented through tables. Principal Component Analysis (*hereafter referred as PCA*) has been used to group the district with similar characteristics. PCA has been used to group the districts having similar characteristics. Principal component analysis is a multivariate technique for transforming a set of related (correlated) variables

into a set of unrelated (uncorrelated) variables that account for decreasing proportions of the variation of the original observations. The rationale behind the method is an attempt to reduce the complexity of the data by decreasing the number of variables that need to be considered. If the first few of the derived variables (the principal components) among them account for a large proportion of the total variance of the observed variables, they can be used both to provide a convenient summary of the data and to simplify subsequent analysis (Landou and Everiit, 2004, p. 283). The Principal Component analysis was conducted using SPSS 17.0 with varimax rotation. Initially seven variables namely (i) Per Capita Gross District Domestic Product (ii) Percentage of Non-farm workers in working population (iii) Metalled roads per 100 sq km Area (iv) Share of non-primary sector in GDDP (v) Schools per lakh population (vi) Rate of Urbanisation and (vii) Literacy rate were included in the analysis. But Keyser-Meyer-Oklin(KMO) statistics was found to be 0.491 which is unacceptable. The analysis of correlation matrix revealed that the variable Schools per lakh population could be dropped from the analysis. The dropping of Schools per lakh population have improved KMO-statistic to 0.641 and Barlett test was also significant indicating that the variables is correlated high enough to undertake principal component analysis. The extraction criterion was fixed according to eigen values and value over one was considered for extraction. Factor loading with small coefficient having value less than 0.5 were suppressed. In final analyses only two components with eigen value greater then one were extracted.

STATE PROFILE

Haryana came into existence on November 1, 1966 from the Punjab state. Geographically the state is located between 27° 37' to 30° 35' N latitudes and 74° 28' to 77° 36' E longitude. Its total area is 44,122 sq. km which is about 1.3% of the total geographical area of the country. Haryana is surrounded by Uttar Pradesh on the east, Punjab on the west, Uttaranchal, Himachal Pradesh & Shivalik Hills on the north and Delhi, Rajasthan and Aravalli Hills on the south. Presently there are 21[1] districts in Haryana as against 11 in 1975-76. Haryana is primarily an alluvial plain. Soils constitute its major natural resource and agriculture is its main-stay. Besides, it shares the Siwalik foothills in the north and Aravalli hills in the south.

The state came into existence at the onset of green revolution in the country. Economy of Haryana is predominantly agrarian. At the start 69.7%(1967) of its population was enganged in primary activites and it constituted 65% of its domestic product in 1970-71. Data presented in table-1 reveals that majority of its working population is still engaged in primary actitvies (57.7% in 2001). Although over the period the percentage share of its working population has shown upward trend, increasing from 18.2% in 1967 to 22.8% in 1981 and 28.2% in 2001.

[1]The study pertains to 20 districts as the data pertaining to Palwal (Carved out of Faridabad on 13.8.2008) are not available.

TABLE 1:
Occupational Distribution in Haryana (% of Working Population)

Sector/Year	1967	1981	1991	2001
Primary	69.7	61.7	58.7	57.7
Secondary	12.1	15.4	13.2	14.1
Tertiary	18.2	22.8	28.0	28.2

Source: Singh & Kaur (2004).

Although table-1 shows that 57.7% of its population works in agriculture but the percentage distribution shows that the share of agriculture in state domestic product is only 21.0% at current prices in 2009-10. Main constituent of its state domestic product is tertiary sector, its share increasing from 39.5% in 1999-2000 to 48.7% in 2009-10. Manufacturing contributed remaining 30.3% in 2009-10.

Table-2:
Haryana Gross State Domestic Product by Industry of Origin

(Rs. Lac at Current Prices)

	1999-2000	**2004-05**	**2009-10**
Agriculture	1630210 ***(31.7)***	2145020***(22.9)***	4390490***(21.0)***
Manufacturing	1476282***(28.7)***	2981616***(31.9)***	6354093***(30.3)***
Services	2030998***(39.5)***	4229510***(45.2)***	10206372**(48.7)**
Haryana SDP	5137490***(100.0)***	9356146***(100.0)***	20950955***(100.0)***
% Share in India's GDP	2.63	2.97	3.36

Source: Based on the data extracted from CSO, State Domestic Product Series.

Note: Data in Parenthesis denotes percentage of the total.

ASSESMENT OF INTER-DISTRICT DISPARITIES: DEVELOPMENT INDICATORS

In order to analyze the disparities in levels of development among the districts in Haryana, the paper used following economic and social indicators.

- ***Economic Indicators***
  - (a) The per capita gross district domestic product (GDDP) in rupees in 2005-06
  - (b) The share of non-primary sector in GDDP in per cent.
  - (c) Degree of Urbanisation
- ***Education Indicators***
  - (d) Literacy Rate
  - (e) Number of primary schools per one lakh population.
  - (f) Number of middle schools per one lakh population.
  - (g) Gross Enrolment ratio (GER) in 6-11 and 11-14 age groups
- ***Health Indicators***
  - (h) Number of Beds per lakh of population

District Level Disparities in Economic Indicators

Per Capita Income is the most widely used measure of relative regional economic development. The latest available district level data reveals that among the 20 districts, three richest districts were Gurgoan (Rs. 155855), Panipat (Rs. 50230) and Faridabad (Rs. 45555. Whereas Mewat (Rs 15788), Mahindergarh (Rs. 19176) and Bhiwani (Rs. 22345) were three poorest Districts.

Table-3:
Selected Economic Indicators of Development for Districts in Haryana

	NDDP per Capita (1999-00 Prices)		Sectoral Distribution (2005-06)			Urbanisation Rate
	1999-00	2005-06	Primary	Secondary	Tertiary	
Ambala	27191	39072(6)	17.3	16.8	65.9	35.2(06)
Bhiwani	17999	22435(18)	38.7	25.7	35.7	18.97(16)
Faridabad	29461	45555(3)	7.0	38.8	54.3	60.8(01)
Fatehabad	24816	27074(13)	49.8	22.6	27.6	17.63(18)
Gurgaon	48972	155855(1)	2.8	39.5	57.6	35.58(05)
Hisar	24521	29364 (9)	29.1	38.0	32.9	25.9(11)
Jhajjar	18364	27314 (12)	22.8	38.1	39.2	22.17(13)
Jind	20554	22815 (17)	43.2	22.7	34.1	20.3(14)
Kaithal	19565	23016 (16)	43.9	21.9	34.2	19.39(15)
Karnal	23843	30560 (7)	32.2	24.6	43.1	26.51(08)
Kurukshetra	20636	26725 (14)	38.9	21.0	40.1	26.11(10)
Mahindergarh	14103	19176 (19)	33.9	25.8	40.3	13.49(19)
Mewat	…	15788 (20)	35.4	29.2	35.4	7.07(20)
Panchkula	28007	41641 (4)	19.9	21.4	58.7	44.49(02)
Panipat	29572	50230 (2)	13.0	22.9	64.2	40.53(03)
Rewari	25754	39761 (5)	16.0	45.7	38.3	17.79(17)
Rohtak	19448	25869 (15)	25.1	26.1	48.8	35.06(07)
Sirsa	23632	28811 (10)	50.4	22.0	27.7	26.28(09)
Sonipat	20864	28678 (11)	24.8	29.5	45.7	25.12(12)
Yamuna Nagar	24682	30368 (8)	26.3	32.9	40.9	37.73(04)

Source: Col 2 and 3: Economic Survey of Haryana 2007-08; Col. 4-6 from Planning Commission: *Sector wise Gross District Domestic Product (GDDP) for the year: 2005-06* and last column from Statistical abstract Haryana 2007-08.

Note: Values in Parenthesis denotes the rank of the states in that indicator.

The data presented in the table shows that the ratio of richest state per capita income to the poorest district per capita income is 6.97 which indicates high income inequalities. The ratio of income of the three richest districts to three poorest districts is 4.38 which points to wide inter-district disparities in the state.

Another important economic indicator of inter-state disparities is the percentage contribution of primary and non-primary sectors in generation of district domestic product. Data presented in table-3 shows that the secondary and tertiary contribution of

97.2 in GDDP in Gurgoan is around double of the share of Sirsa at 49.6%. The share of non-primary sector in total income of the state for the corresponding period was 71.8%. As can be seen from the table the districts with highest per capita income are the district with highest percentage share of non-primary sector in GDDP. The rank correlation between per capita GDDP and share of non-primary sector in GDDP is 0.7473 also indicates close association between GDDP and the share of non-primary sector in its GDDP. Another significant indicator explaining inter-district disparities is the rate of urbanization. The study found that urbanization is closely associated with the per capita income. Mewat ranked last in rate of urbanization as well as in GDDP. The rank correlation between GDDP and rate of urbanization is a high of 0.7654.

District Level Disparities in Education Indicators

Table-4 shows the indicators of educational attainment in the districts of Haryana.

Table-4:
Selected Educational Indicators of Development for Districts in Haryana

	Literacy rate (2001 census)			Schools Per Lakh Population		Gross Enrolment Ratio	
	Male	Female	Total	Primary	Middle	6-11 yrs	11-14 yrs
Ambala	82.3	67.4	75.3(1)	10.4	31.6	64.4	93.32
Bhiwani	80.3	53.0	67.5(13)	13.5	23.2	102.2	77.58
Faridabad	81.5	56.3	70.0(8)	13.4	22.9	119.7	80.28
Fatehabad	68.2	46.5	58.0(19)	6.9	24.0	71.4	63.09
Gurgaon	76.2	47.8	62.9(15)	12.1	48.0	102.2	85.47
Hisar	76.6	51.1	64.8(14)	8.6	39.7	69.1	82.08
Jhajjar	83.3	59.7	72.4(6)	9.7	17.3	94.2	71.24
Jind	73.8	48.5	62.1(16)	9.7	12.8	102.8	85.64
Kaithal	69.2	47.3	59.0(18)	12.5	25.8	104.4	60.85
Karnal	76.3	58.0	67.7(12)	9.9	27.3	87.7	78.44
Kurukshetra	78.1	60.6	69.9(9)	12.8	53.9	87.1	70.83
Mahindergarh	84.7	54.1	69.9(10)	16.7	43.5	109.8	68.54
Mewat	46.3	18.1	33.1(20)	12.3	59.4	64.5	75.86
Panchkula	80.9	65.7	74.0(3)	13.2	42.7	59.1	59.27
Panipat	78.5	58.0	69.2(11)	5.5	17.1	79.0	77.43
Rewari	88.5	60.8	75.3(2)	13.0	33.7	69.2	61.13
Rohtak	83.2	62.6	73.7(4)	8.4	8.5	77.6	71.52
Sirsa	70.1	49.9	60.6(17)	11.2	22.0	110.6	145.8
Sonipat	83.1	60.7	72.8(5)	9.4	17.9	70.9	62.34
Yamuna Nagar	78.8	63.4	71.6(7)	12.7	46.0	64.4	93.32

Source: Statistical Abstract, Haryana(2007-08)
Note: Values in Parenthesis denotes the rank of the states in that indicator.

The main measures of educational attainment are the literacy rate and the availability of educational infrastructure indicated by availability of the number of schools. In terms of literacy rate, three rich districts of Gurgoan, Panipat and Faridabad

are ranked at 15th, 11th and 08th place respectively whereas three top ranked districts are Ambala, Rewari and Panchkulla. In terms of number of recognized primary schools per lakh of population, Mahindergarh and Bhiwani ranked first and second respectively but in terms of income they were placed in the bottom half. District Panipat and Fatehabad are at the lowest. In terms of number of middle schools per lakh of population also, Mewat(poorest) is having highest number of middle schools per lakh of population. Gross Enrolment Ratio(GER) is another important indicator measuring educational attainment. GER at the Primary (6-11 years) level is highest in Faridabad, followed by Sirsa and Mahindergarh whereas it is lowest for Panchkulla and Ambala. In case of GER at middle level, it is highest for Sirsa and Yamuna Nagar and lowest for Punchkulla and Kaithal. The rank correlation between GDDP and literacy rate is very low (38.94) indicating that high literacy is not associated with greater per capita output.

District Level Disparities in Health and Other Indicators

District level disparities in the health indicators are shown in table-5.

Table-5:
Selected Health and other Indicators for Districts in Haryana

	Beds per lakh (2007-08)	Working Force as % of total population	Non-Agricultural Workers(%)	Metalled roads per 100^2 km area (in Kms)
Ambala	46(4)	31.99(19)	70.64(02)	77.06(02)
Bhiwani	58(2)	42.76(07)	36.1(16)	45.37(18)
Faridabad	32(14)	35.8(16)	65.82(04)	60.22(9)
Fatehabad	29(15)	45.03(01)	32.69(19)	61.58(7)
Gurgaon	41(6)	37.92(14)	59.71(06)	59.89(10)
Hisar	45(5)	43.3(06)	41.33(13)	49.11(15)
Jhajjar	34(11)	44.17(02)	42.83(11)	51.53(14)
Jind	35(8)	43.87(03)	33.55(18)	45.19(19)
Kaithal	28(17)	39.32(12)	37.16(15)	54.55(12)
Karnal	33(12)	35.74(17)	49.73(08)	46.43(17)
Kurukshetra	33(13)	37.36(15)	53.57(07)	67.65(4)
Mahindergarh	35(9)	43.31(05)	34.2(17)	53.08(13)
Mewat	20(20)	n.a.	n.a.	60.62(8)
Panchkula	57(3)	38.13(13)	77.03(01)	71.38(3)
Panipat	27(18)	39.57(10)	62.24(05)	79.34(01)
Rewari	39(7)	43.59(04)	42.25(12)	65.75(5)
Rohtak	156(1)	39.47(11)	49.13(09)	47.97(16)
Sirsa	29(16)	42.59(08)	38.74(14)	40.54(20)
Sonipat	27(19)	40.89(09)	47.03(10)	57.45(11)
Yamuna Nagar	35(10)	32.31(18)	66.37(03)	64.03(6)

Source: Statistical Abstract, Haryana(2007-08)
Note: Values in Parenthesis denotes the rank of the states in that indicator.

As the district level data on infant mortality rate and Maternal Mortality rates were not reliable, we have taken availabity of beds per lakh of population to rank the districts on health front[2]. The other important indicators showing occupational structure are the percentage of working force in total population and the share of non-farm workers in the working force. Fatehabad(45.03%) has highest percentage of working force in total population followed by Jhajjar(44.17%) and Jind(43.87) whereas Ambala (31.99%), Yamuna Nagar(32.31%) and Karnal(35.74%) are three states having low percentage of working force in total population .Panchkulla (77.03%) is having highest percentage of non-farm workers in its working population followed by Ambala(70.64%) whereas Fatehabad(32.69%) followed by Jind(33.5%) has lowest percentage of non-farm workers

The select demographic and other indicators presented in table-5 show the area, population and density of the population in various districts. Column-4 of the table shows that Faridabad (1136) is the most densely populated district in Haryana followed by Panipat (763) and Gurgoan (694) whereas Sirsa (261) followed by Bhiwani (298) and Fatehabad (318) are least densely populated. In terms of sex ratio (females per thousand males), Mahindergarh has highest sex ratio (918) followed by Rewari (899) and Mewat (893) whereas the lowest sex ratio is in Panchkulla (823) followed by Panipat (829) and Faridabad (836).

Table-5
Selected Demographic Features for Districts of Haryana

	Area (Sq. Km)	Population (Lakhs)	Density	Sex Ratio
Ambala	1574(16)	10.14(9)	644(4)	868(07)
Bhiwani	4778(01)	14.25(3)	298(19)	879(06)
Faridabad	1752(13)	19.91(1)	1136(1)	836(18)
Fatehabad	2538(05)	8.6(16)	318(18)	884(04)
Gurgaon	1254(19)	8.71(15)	694(3)	850(14)
Hisar	3983(03)	15.37(2)	386(17)	851(13)
Jhajjar	1834(11)	8.8(14)	480(13)	847(16)
Jind	2702(04)	11.9(6)	440(14)	852(12)
Kaithal	2317(07)	9.46(12)	408(16)	853(11)
Karnal	2520(06)	12.74(5)	506(11)	865(09)
Kurukshetra	1530(17)	8.25(17)	540(07	866(08)
Mahendragarh	1899(10)	8.13(18)	428(15)	918(01)
Mewat	1859(10)	9.94(10)	534(09)	893(03)
Panchkula	898(20)	4.68(20)	522(10)	823(20)
Panipat	1268(18)	9.67(11)	763(02)	829(19)
Rewari	1594(15)	7.65(19)	480(12)	899(02)
Rohtak	1745(14)	9.4(13)	539(08)	847(15)
Sirsa	4277(02)	11.17(7)	261(20)	882(05)
Sonipat	2122(08)	12.79(4)	603(05)	839(17)
Yamunanagar	1768(12)	10.41(8)	589(06)	862(10)

Source: Statistical Abstract, Haryana(2007-08)
Note: Values in Parenthesis denotes the rank of the states in that indicator.

[2] In true sense, this measure does not reveal the true picture of health development of the District. At the most it reveals the availability of health infrastructure in place.

Correlation of Per Capita Income with other Development Indicators

The correlation matrix showing correlation between per capita income and various indicators is given in table-6. The matrix shows that per capita income of the district is poorly correlated with other development indicators. Highest correlation (0.626) was observed with the share of non-primary sector in total GDDP. The correlation coefficient with non-farm workers is 0.407. The low correlation with literacy rate indicates that rate of literacy is uncorrelated with the economic growth and the negative correlation with sex ratio indicates that rich districts have lower sex-ratio then the poor states.

Table-6: Correlation Matrix between different Indicators

	PCI	*LR*	W_NF	*RL_Y*	S_NPS	*Density*	*URB*	*SPL*	Sex
PCI	1.000								
LR	0.074	1.000							
W_NF	0.407	0.608	1.000						
RL	0.228	0.195	0.615	1.000					
S_NPS	0.626	0.428	0.682	0.512	1.000				
Density	0.379	0.215	0.625	0.492	0.774	1.000			
URB	0.144	0.542	0.850	0.375	0.536	0.685	1.000		
SPL	0.193	-0.304	0.075	0.292	0.075	0.016	-0.226	1.000	
Sex Ratio	-0.265	-0.312	-0.604	-0.211	-0.440	-0.485	-0.689	0.380	1.000

Source: Based on the data presented in table 3-6.

Note: **PCI** - *Per Capita GDDP* ; **W_NF**– *Percentage of Non-farm workers in working population*, **RL -** *Metalled roads per 100² km Area*, **S_NPS** - *Share of non-primary sector in GDDP*, **SPL-** *Schools per lakh population;* **URB -** *Urbanisation rate,* **LR** – *Literacy rate*

Results of Principal Component Analysis

The analysis so far has shown wide inter-districts disparities in terms of various development indicators but in order to asses the over all level of development of a district, a composite index is required. One such method of obtaining composite index is Principal Component Analysis. According PCA was used to obtain single measure of development and to classify districts according to common characteristics. As explained in methodology, only two components have been extracted and they explained 74.98% of the total variance. The eigen values and cumulative variance are presented in table-7.

Table-7: Total Variance Explained

Components	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.382	56.361	56.361	2.489	41.483	41.483
2	1.117	18.617	74.978	2.010	33.495	74.978
3	.755	12.576	87.554			
4	.446	7.437	94.991			
5	.241	4.020	99.011			
6	.059	.989	100.000			

Source: Compiled by Author from SPSS output.

Table-8 presents the loadings of each of the two components on the selected variables in the original data sets. It is observed that the first component has high positive correlation with literacy rate, urbanization rate and percentage of non-farm workers in total workforce. On the whole, the first component represents demographic development. The second factor is highly correlated with per capita income, Share of non-primary sector in GDDP and Metalled roads per 100 sq km Area. This component, thus relates to income related aspects of economic development.

Table-8:
Component Loading for Rotated Components

Variable	Component Loading		Communality
	1	2	
Literacy rate	.816		.820
Per Capita Gross District Domestic Product		.913	.666
Metalled roads per 100 sq km Area		.521	.456
Share of non-primary sector in GDDP		.779	.914
Urbanisation rate	.873		.839
Percentage of Non-farm workers in working population	.811	.506	.804

Source: Compiled by Author from SPSS output

Note: Loadings < 0.5 are omitted.

Table 9 reveals the scores of each component with overall scores for the 20 observations. The scores of individual components indicate the direction and extent to which an observation is associated with the respective components.. In some cases, the scores work out to be positive, while in the remaining others they are negative. A high and positive score indicate that a particular district is more developed than others with lower scores. The data presented in table-9 reveals that on the first component representing demographic development the highest score is attained by Panchkula(1.49669) followed by Faridabad(1.31438), Ambala (1.29342), Yamuna Nagar(1.03643) and Panipat(0.78141) while lowest score is of Mewat(-2.62596) followed by Gurgaon(-1.08529), Fatehabad(-0.97548), Kaithal(-0.77078) and Jind(-0.71008). On the second component representing income related aspects Gurgoan scored highest with score of 3.46013 followed by Panipat (1.06621) and Faridabad(0.83462) while Bhiwani scored lowest with -0.89908 closely followed by Sirsa (-0.85228), Mahindergarh(-0.82882) and Jind(-0.81618).

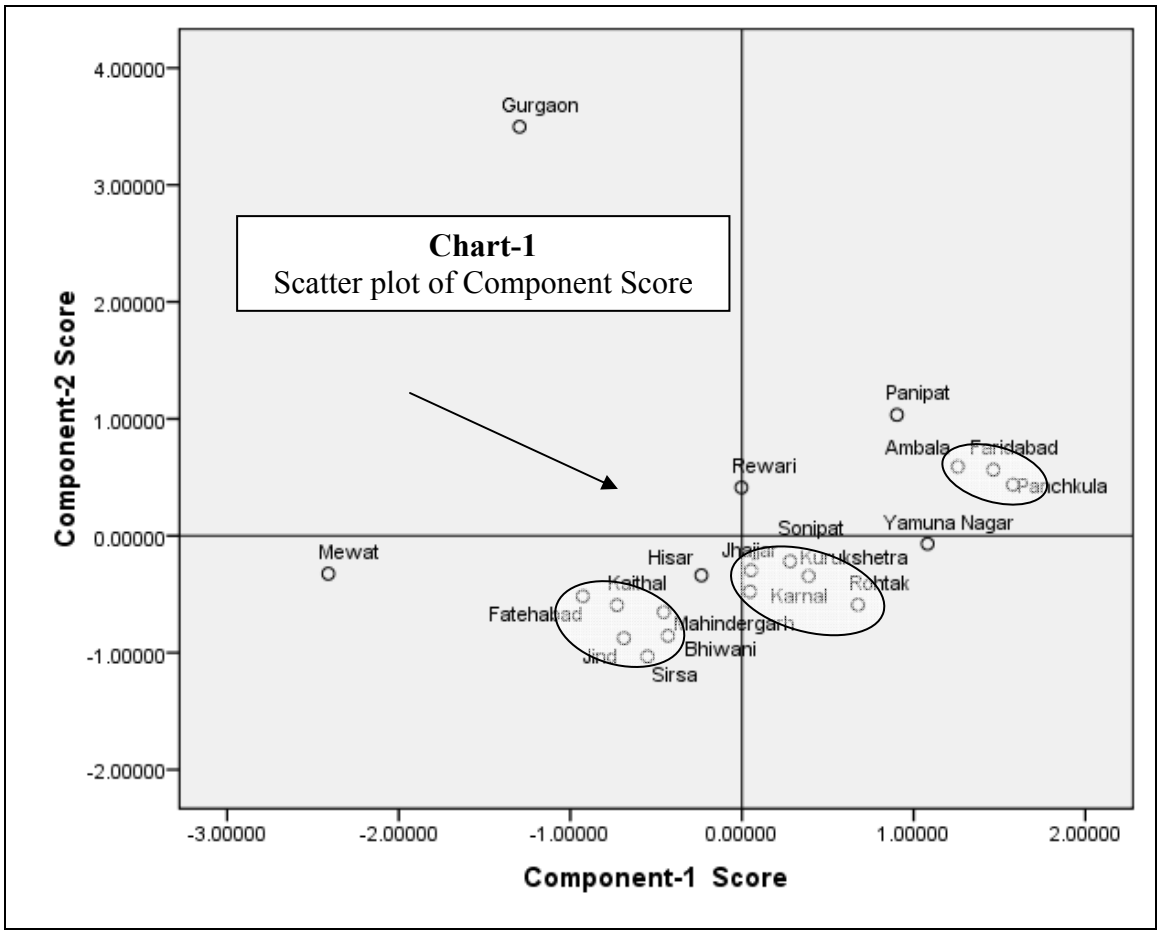
Table-9:
Component Scores

District	C_1	C_2	Overall Score
Ambala	1.25757	0.59185	3.92736
Bhiwani	-0.43147	-0.85625	-1.77
Faridabad	1.46480	0.56410	0.89621
Fatehabad	-0.92686	-0.51733	-3.90831
Gurgaon	-1.29613	3.49782	4.26646
Hisar	-0.23637	-0.33838	-0.98113

Jhajjar	0.05237	-0.29611	0.33861
Jind	-0.68778	-0.87540	-2.89459
Kaithal	-0.72866	-0.59317	-2.51201
Karnal	0.04660	-0.47741	0.56171
Kurukshetra	0.38805	-0.34486	0.09162
Mahindergarh	-0.45615	-0.65227	-1.32898
Mewat	-2.41055	-0.32414	-2.98205
Panchkula	1.57867	0.43639	3.98747
Panipat	0.90234	1.03449	1.71426
Rewari	-0.00328	0.41267	0.96192
Rohtak	0.67549	-0.59046	-0.15394
Sirsa	-0.55054	-1.03252	-2.98802
Sonipat	0.28070	-0.21888	0.42454
Yamuna Nagar	1.08119	-0.06842	2.34889

Source: Compiled by Author from SPSS output

We have plotted the scores of each district on both components to classify the Districts with similar characteristics.



Source-Plotted from the data presented in Table-9.

The data plotted in chart-1 shows that four districts Faridabad, Panchkula, Ambala and Panipat have reasonably high score on both components indicating high degree of economic development whereas districts of Mewat, Bhiwani, Jind, Fatehabad, Mahindergarh, Sirsa, Kaithal and Hisar have negative score on both components. Districts of Gurgoan and Mewat differ considerably from other districts due to their different characteristics. The study has also calculated composite score of each district on all six included indicators. On the basis of overall score, the districts are regionalized in following five categories.

Table-10:
Classification of Districts according to overall score

Category	No. of Districts	Name of Districts (in order of decreasing score)
Very High(above 03)	03	Gurgaon , Panchkula and Ambala
High(1 to 3)	02	Yamuna Nagar and Panipat
Medium (0 to 1)	06	Rewari, Faridabad, Karnal, Sonipat, Jhajjar and Kurukshetra
Low(0 to -2)	04	Rohtak, Hisar, Mahindergarh and Bhiwani
Very Low	05	Kaithal, Jind, Mewat, Sirsa and Fatehabad

Source: Compiled by Author from SPSS output
Note: Overall score is computed by summation of six components extraction.

According to the data presented in table-10 showing composite index, the north-eastern part of the state comprising Panchkula, Ambala, Yamuna Nagar and Panipat are highly developed parts of the state. These districts have scored positively on both components. Gurgoan district also has high composite score but it has scored low on componenet-1. The western parts of the state comprising Kaithal, Jind, Sirsa and Fatehabad have very low level of development. This belt extends to southern part of Haryana with Hisar, Bhiwani and Mahindergarh also scoring poorly. The spatial distribution of districts by composite score is given in map placed at annexture-1.

Summary and Policy Implications

In this paper an attempt was made to assess the extent of inter district disparities in Haryana in terms of various development indicators. There exists a significant level of disparity both in income as well as in the other non-income attainments among the districts. The inequality in economic indicators happens to be very high as the ratio of income of three richest states to three poorest states is 4.38. This is a cause of considerable concern. The districts of Mahindergarh, Mewat, Fatehabad, Sirsa and Bhiwani need special attention by the policy makers. Although in the absence of availability of reliable data, we could not construct the District Human Development Index, still various indicators also points to wide inter-district disparities across the states. The poor states are characterised by low percentage of non-farm income in district domestic product, low rate of urbanization and low percentage of non-farm workers in total working population. These indicators can be improved by industrialization of these areas. The composite score by PCA shows similarities based on the geographical location of the districts. With few exceptions we can generalize that eastern part of the state is more developed as compared to western part.

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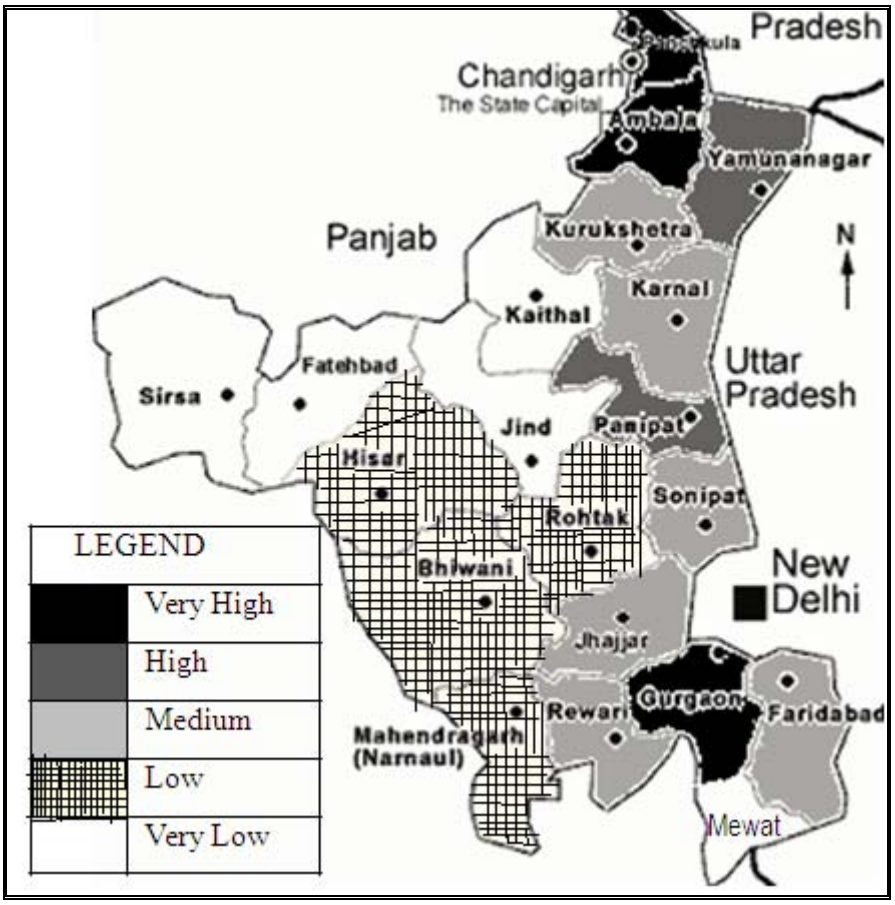
Annexture-1:

Spatial Distribution by Composite Score



Source: Plotted by author based on composite score.