

## **INTER-DISTRICT VARIATIONS IN THE LEVELS OF LIVING IN PUNJAB**

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**Abstract.** The study examines the extent and sources of variations in the levels of living in the districts of Punjab state. Punjab is a prosperous state and, on the face, it seems that districts must be enjoying equal levels of living but the present study found otherwise. Large disparities are found in education, health and medical and general facilities in the districts of the state. Different regions of the state have different growth potentials.

### **I. INTRODUCTION**

Human resources constitute the ultimate basis for wealth of nations. It is the human resources of a nation, not its physical capital or its natural resources, that ultimately determine the character and pace of its economic and social development. Country, which is unable to develop skills and knowledge of its people and utilize them effectively in the national economy, will be unable to develop anything else (Harbison and Myers, 1970). Income is one of the options which people prefer to have but it is not the sum total of their lives. The purpose of development is to enlarge all human choices not income alone. It is not very correct to judge the standard of living by GNP per capita and the supply of particular goods. The better approach may be through analyzing people's capacities and capabilities of what they can achieve or not. These capabilities may include being free from starvation, hunger and malnutrition. These capabilities reflect freedom of choice (Sen, 1989). Thus, economic development is concerned with changes in the levels

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of living attained in any physical environment. The level of living is the level assured by the flow of goods and services in a unit of time. Levels of flow of goods and services can be enhanced if people can be provided with better education, proper health and medical facilities and better nutrition to make them more skillful and productive. More years of schooling is perceived as the only avenue of hope for children to escape from poverty and because of this, poor nations have invested large sum of money in education. In many developing countries formal education is the largest industry and the greatest consumer of public revenue. Similarly governments have been spending huge amount on providing health and medical facilities to its people.

The problem of regional disparities in the levels of living is a serious phenomenon. In a large country like India, it is not surprising that there are extreme variations in levels of living between the regions and within the regions. Geographically Punjab is a small state and it is believed that there should be almost same level of human development in all districts and regions. The reality is something different. Some districts enjoy higher level of living while other districts have poor conditions in this respect in the state. The causes of these variations can be many. Different regions of the state have different growth potential because of differences in educational and health facilities, availability of infrastructural facilities etc. These causes if identified can be helpful in removing the inter-district variations in the levels of living. Therefore, an analysis of district differentials in performance of levels of living assumes special significance. In this paper, attempt has been made to study the extent and sources of variations in the levels of living in the districts of Punjab state. For this purpose, the paper has been divided into five sections. Section II briefly explains the performance of social sector in Punjab state. Database and methodology is explained in Section III. Section IV presents the results and discussion about differentials in the level of living in the state and conclusions are presented in Section V.

## **II. PERFORMANCE OF SOCIAL SECTOR IN PUNJAB**

In the state of Punjab much effort has been made by the government to provide good education and health facilities to its people. In spite of the fact that Punjab is one of the prosperous states but still these facilities are not comparable to the best in the country. The state lacks behind when compared with other states like Kerala, Tamilnadu, Delhi and Goa in social sector achievements. Social sector development and expenditure on education and health are the relative weak areas of the state as compared with other states. The position of Punjab state is not very comfortable when the individual indicators representing education and health are compared with other states.

According to National Human Development Report 2001, Punjab ranks 12<sup>th</sup> amongst all the states and union territories in Human Development Index (HDI) and 19<sup>th</sup> in Gender Disparities for the year 1991. State's position has deteriorated over time in respect of HDI (9<sup>th</sup> rank in 1981). In spite of state having the highest per capita expenditure on education (Rs. 33.3) — more than Kerala (Rs. 25.9) — state ranks 16<sup>th</sup> among the Indian states and union territories in case of literacy rate (70%) for the year 2001 and is behind Kerala (91%), Mizoram (88%), Delhi (82%), Himachal Pradesh (77%), Maharashtra (77%), Tripura (74%), Tamilnadu (74%), Uttaranchal (72%) and other small states and union territories. Female literacy rate is still lower at 63% with Kerala achieving 90%. Measure of continuing education (77.8%) — ratio of secondary enrolment to primary enrolment (which shows that drop out rate from primary to secondary is very high at 22%) — is also far less than Kerala (103.5), Maharashtra (94.6), Goa (94.4), Delhi (92.8), Tamilnadu (85.4), West Bengal (84.1), Himachal Pradesh (83.5) and Jammu and Kashmir (82) (Planning Commission, 2003). There is primary school in almost every village (now being upgraded to elementary, *i.e.* 8<sup>th</sup> standard) and high/ senior secondary school for every three villages. The quality of education being provided at these schools is very poor. The condition of the state-run schools has deteriorated at very fast rate. Though education facilities exist but what concerns the most is quality of education being provided by these schools.

Health facilities are another area which is very crucial for productivity of labour force. No doubt the state has about 2230 hospitals, primary health centres and dispensaries in rural and urban areas but per capita expenditure on medical facilities (Rs. 37.60) is less than Kerala (Rs. 53.30) and Maharashtra (Rs. 38.7). State ranks 15<sup>th</sup> in infant mortality rate (52/100) for the year 2001 behind Kerala (11), Goa (14), Maharashtra (45), Tamilnadu (49) and West Bengal (51). Another area of concern is falling expenditure on education and health over the years.

### III. DATA BASE AND METHODOLOGY

For the purpose of examining disparities in the levels of living among the districts of Punjab state, composite index based on per capita net district domestic product, education facilities, health and medical facilities and general facilities like banks, roads, motor vehicles, electricity connections, entertainment places etc. has been developed along with education index, health and medical index and index of general facilities. Following 20 indicators of level of living have been used in the present study.

**Economic Indicator**

1. Per Capita Net District Domestic Product ( $X_1$ )

**Education Indicators**

2. Number of Primary Schools Per Lakh of Population ( $X_2$ )
3. Number of Secondary Schools Per Lakh of Population ( $X_3$ )
4. Number of Arts, Science Colleges Per Lakh of Population ( $X_4$ )
5. Teacher-Pupil Ratio in Primary Schools ( $X_5$ )
6. Teacher-Pupil Ratio in High Schools ( $X_6$ )
7. Literacy Rate ( $X_7$ )

**Health and Medical Indicators**

8. Number of Medical Colleges Per Lakh of Population ( $X_8$ )
9. Number of Doctors Per Lakh of Population ( $X_9$ )
10. Number of Nurses Per Lakh of Population ( $X_{10}$ )
11. Number of Beds Per Lakh of Population ( $X_{11}$ )
12. Percentage of Villages with Water Schemes to Total Number of Water Scarcity Villages ( $X_{12}$ )

**General Indicators**

13. Number of Banking Offices Per Lakh of Population ( $X_{13}$ )
14. Total Road Length in Kilometers Per Lakh of Population ( $X_{14}$ )
15. Number of Different Types of Motor Vehicles Registered Per Lakh of Population ( $X_{15}$ )
16. Density of Population Per Square Kilometre ( $X_{16}$ )
17. Domestic Per Capita Consumption of Electricity ( $X_{17}$ )
18. Domestic Consumption of Power as a Percentage of Total Power ( $X_{18}$ )
19. Percentage of Households Having Domestic Connection ( $X_{19}$ )
20. Number of Entertainment Places Per Lakh of Population ( $X_{20}$ )

The data for these indicators were obtained from published secondary sources like Statistical Abstract of Punjab and District Diaries and from office of Economic and Statistical Organization of Punjab.

### Composite Index

To study the inter-district disparities/variations in the levels of living, different indices like education index (6 indicators), health and medical index (5 indicators), index of general facilities (8 indicators) and overall composite index based on all these 20 indicators including per capita income have been developed for each district of the state. Effort was also made to rank various districts on the basis of these indices. In order to examine the change over time, analysis has been carried out at three points of time, *i.e.* 1980-81, 1990-91 and 2000-01. These indices were developed by including various indicators whose implicit weights were determined through Principal Component Analysis popularly known as 'Factor Analysis'. It is a statistical technique based on the hypothesis that a set of related variables can be adequately described by a set of factors less in numbers than the set of original variables (Hagood, 1943; Harman, 1967).

The statistical technique employed to develop the weighted composite index consists in finding out the Principal Components of the group consisting of various variables and derive the implicit weights based thereon. The Principal Component Analysis (Factor Analysis) produces components (factors) in descending order of their importance and gives factor loadings, which explain the relative importance of different variables in explaining variance in the phenomenon. The relative weight for the variables is worked out as follows:

$$W_i = F_{ik} \lambda_k$$

$W_i$  = Weight of  $i^{\text{th}}$  variable

$F_{ik}$  = Factor loading of  $i^{\text{th}}$  variable and  $k^{\text{th}}$  factor which reflects the highest correlation between  $i^{\text{th}}$  variable ( $X_i$ ) and  $k^{\text{th}}$  factor ( $F_k$ )

$\lambda_k$  = Variation explained by  $k^{\text{th}}$  factor

The values of variables were standardized by equalizing their variance as under:

$$Z_{ij} = \frac{X_{ij}}{\sigma_i}$$

$Z_{ij}$  = Standardized value of  $i^{\text{th}}$  variable for  $j^{\text{th}}$  district

$X_{ij}$  = Original value of  $i^{\text{th}}$  variable for  $j^{\text{th}}$  district

$\sigma_i$  = Standard deviation for variable  $X_i$

Composite index for development is calculated as under:

$$I_{jt} = \frac{\sum_{i=1}^n W_i Z_{ij}}{\sum_{i=1}^n W_i}$$

$I_{jt}$  = Composite index of  $j^{\text{th}}$  district for  $t$  period of time

$Z_{ij}$  = Standardized value of  $i^{\text{th}}$  variable for  $j^{\text{th}}$  district

$W_i$  = Weights of  $i^{\text{th}}$  variable

In order to make comparison the indices for various districts were rationalized by setting the values of state indices equal to 100.

#### IV. RESULTS AND DISCUSSION

##### Factor Analysis and Relative Weights

Factor loading of different variables for the year 1980-81, 1990-91 and 2000-01 are presented in Table 1, 2 and 3, respectively. Table 1 shows that factor loading related with 4 factors derived from 20 indicators under consideration for the year 1980-81 explains 82% inter-district variation in levels of living in the state. It is observed that communalities for all indicators varied between 82.14% to 98.55% indicating that 4 factors are sufficient to account for most of variations in selected indicators. Table 1 shows that first factor ( $F_1$ ) explains 35.1% of variations in the variable set. The most important indicators in the first factor ( $F_1$ ) are density of population ( $X_{16}$ ), banking offices ( $X_{13}$ ), percentage of households having domestic connections ( $X_{19}$ ), literacy rate ( $X_7$ ) and number of beds ( $X_{11}$ ). The other indicators which are also included in this factor are high school teacher-pupil ratio ( $X_6$ ), number of doctors per lakh of population ( $X_9$ ), number of nurses ( $X_{10}$ ), motor vehicles ( $X_{15}$ ), domestic per capita consumption of electricity ( $X_{17}$ ), domestic consumption of power as percentage of total power ( $X_{18}$ ) and number of entertainment places ( $X_{20}$ ).

The second factor ( $F_2$ ) explains 23.7% variations in variable set. The important indicators in the second factor are number of primary schools per lakh of population ( $X_2$ ), number of secondary schools per lakh of population ( $X_3$ ), percentage of villages with water schemes ( $X_{12}$ ) and number of arts, science colleges ( $X_4$ ).

The third factor ( $F_3$ ) explains 12.2% variations in variable set. The indicators in this factor are per capita net district domestic product ( $X_1$ ) and primary teacher-pupil ratio ( $X_5$ ).

The fourth factor ( $F_4$ ) explains 10.5% variations in variable set. The indicators included in it are number of medical colleges per lakh of population ( $X_8$ ) and road length per lakh of population ( $X_{14}$ ). The last two columns of Table 1 show the relative weights of the selected variables. The population density has the highest relative weight followed by number of banking offices and literacy rate. Primary teacher-pupil ratio has the lowest weight (1.27%).

Table 2 shows the factor loadings related to 5 factors derived from 20 indicators under consideration for the year 1990-91. The five factors taken together explain 88.8% of inter-district variations in the levels of living. Communalities for all the indicators varied between 73.22% to 98.49% indicating that five factors are sufficient to account for most of variations in selected indicators.

Table 2 further shows that first factor ( $F_1$ ) explains 39.7% of variations in the variable set. Density of population per square kilometre ( $X_{16}$ ) turned out to be the most important variable in the 1990-91 also. Number of motor vehicles per lakh of population ( $X_{15}$ ) and domestic consumption of power as a percent of the total power ( $X_{18}$ ), domestic per capita consumption of electricity ( $X_{17}$ ), number of doctors per lakh of population ( $X_9$ ), percentage of households holding domestic connections ( $X_{19}$ ), literacy rate ( $X_7$ ), number of banking offices per lakh of population ( $X_{13}$ ), number of beds per lakh of population ( $X_{11}$ ), teacher-pupil ratio in high school ( $X_6$ ) and number of nurses per lakh of population ( $X_{10}$ ) are other indicators included in this factor in order of their importance.

The second factor ( $F_2$ ) explains 23.3% variations in the variable set. The most important indicator in  $F_2$  is number of entertainment places ( $X_{20}$ ) followed by number of medical colleges per lakh of population ( $X_8$ ) and primary teacher-pupil ratio ( $X_5$ ). The third factor ( $F_3$ ) explains 10.4% variations in the variable set. The most important indicator in this is number of secondary schools per lakh of population ( $X_3$ ) followed by number of arts, science colleges per lakh of population ( $X_4$ ) and road length in kilometres per lakh of population ( $X_{14}$ ). The fourth factor ( $F_4$ ) explains 9.6% variations in the variable set. The most significant indicator is per capita net district domestic product ( $X_1$ ) followed by number of primary schools per lakh of population ( $X_2$ ). The fifth factor ( $F_5$ ) explains 5.8% variations in the variable set and percentage of villages with water schemes ( $X_{12}$ ) is the only indicator included in this factor.

Table 3 shows the factor loadings related to 5 factors derived from 20 indicators under consideration for the year 2000-01. The five factors taken

together explain 82% of inter-district variations. The communalities varied between 62.93% to 94.79% indicating that five factors are sufficient to account for most of the variations in selected indicators. Furthermore, Table 3 shows that first factor ( $F_1$ ) explains 31.8% of variations in variable set. Density of population ( $X_{16}$ ) again turned out to be the most important indicator. The other indicators included in the first factor in order of their importance are number of motor vehicles per lakh of population ( $X_{15}$ ), domestic consumption of power as a percentage of total ( $X_{18}$ ), number of doctors per lakh of population ( $X_9$ ), number of nurses per lakh of population ( $X_{10}$ ), number of beds per lakh of population ( $X_{11}$ ), domestic per capita consumption of electricity ( $X_{17}$ ) and number of medical colleges per lakh of population ( $X_8$ ).

The second factor ( $F_2$ ) explains 23.9% variations in the variable set. The most significant indicator is percentage of households having domestic electricity connections ( $X_{19}$ ) followed by number of primary schools per lakh of population ( $X_2$ ), number of banking offices per lakh of population ( $X_{13}$ ), literacy rate ( $X_7$ ), number of secondary schools per lakh of population ( $X_3$ ) and number of arts, science colleges per lakh of population ( $X_4$ ).

The third factor ( $F_3$ ) explains 10.2% of variations in the variable set. The most significant indicator is number of entertainment places per lakh of population ( $X_{20}$ ) followed by road length in kilometre per lakh of population ( $X_{14}$ ) and percentage of villages with water schemes ( $X_{12}$ ).

The fourth factor ( $F_4$ ) explains 9.6% variations in the variable set. The most important indicators in the fourth factor are per capita income ( $X_4$ ) and primary teacher-pupil ratio ( $X_5$ ). The fifth factor ( $F_5$ ) explains 6.4% variations in the variable set with one variable (teacher-pupil ratio in secondary schools ( $X_6$ )).

The above discussion shows that density of population has highest weight in all the three years, *viz.* 1980-81, 1990-91 and 2000-01.

### **Inter-District Variations in Levels of Living**

Inter-district variations in the levels of living are explained through various indices like education index, health and medical index, index of general facilities and composite index.

#### **Education Index**

Education index has been prepared on the basis of six indicators representing education at three points of time, *i.e.* 1980-81, 1990-91 and 2000-01. The



study found that during 1980-81 (Table 4) Hoshiarpur district was at the top followed by Kapurthala, Rupnagar and Ludhiana whereas district of Ferozpur was at the bottom with Bhatinda having slightly better position. Value of education index for the districts of Patiala (95.39), Amritsar (95.21), Faridkot (92.17), Sangrur (87.24), Bhatinda (81.13) and Ferozpur (78.05) was less than the value of education index of the state (100). The inequality in the education facilities has been measured through coefficient of variation (14.71) and coefficient of range (0.2112). Table 4 shows that inter-district variations exist in the state in respect of education facilities. During the year 1990-91 (Table 5), Jalandhar occupied the top slot whereas Hoshiarpur slipped to the third position. Gurdaspur improved its position from sixth to second after Jalandhar while position of Rupnagar worsened to seventh slot. The position of Faridkot also worsened. There was little improvement in the position of Sangrur and Patiala. The position of Ludhiana and Ferozpur remained the same. In the year 1990-91, Rupnagar (97.57) was another district which had index value less than the state value along with districts of Patiala (98.92), Sangrur (95.29), Amritsar (95.45), Faridkot (95.23), Bhatinda (88.92) and Ferozpur (87.57). The value of coefficient of variation and coefficient of range has reduced to 8.14 and 0.1506, respectively, as compared to what was in 1980-81, which shows that inequalities in the education facilities has reduced to some extent. In late 1990s five more districts were created taking the total number of districts to 17. In 2000-01, Hoshiarpur and Kapurthala regained their position of 1980-81 by occupying first and second position, respectively. Third position was occupied by the new district of Nawan Shehar and fourth position by Rupnagar. Mansa, which was one of the new districts carved out of Sangrur, was at the bottom. Gurdaspur again slipped from second to sixth position in 2000-01 with index value above the value of state education index. The districts of Jalandhar (97.02), Bhatinda (95.63), Muktsar (95.2), Patiala (94.57), Sangrur (94.55), Ludhiana (93.95), Ferozpur (93.62), Amritsar (92.46), Faridkot (90.67) and Mansa (86.95) had the value of education index less than overall value of state education index (100). In 2000-01 coefficient of variation was 12.49 and coefficient of range was 0.1942, which shows that though inequalities have risen as compared with 1990-91 but these inequalities were less as compared with 1980-81.

### ***Health and Medical Index***

Investment in health is another significant form of investment that is helpful in the human capital formation. The health of human beings is vital from the point of economic welfare and level of living. Health index has been

constructed by taking 5 indicators representing health and medical facilities. The study found that Patiala was at the top followed by Ludhiana and Amritsar whereas Sangrur was at the bottom with Bhatinda little ahead of it in the year 1980-81 (Table 4). Patiala, Ludhiana and Amritsar occupy the first three positions due to the presence of medical colleges. Except Jalandhar, Rupnagar and the districts, which occupied top three positions, remaining districts had the value of health index below the state index. In the year 1990-91 (Table 5), the position in respect of health index was more or less the same with top three districts interchanging their position. Gurdaspur showed improvement in its rank but Rupnagar's position worsened. In 2000-01, Faridkot occupied the first position pushing behind Ludhiana, Amritsar and Patiala and it was due to the opening up of Medical University in the district. The district of Muktsar was at the bottom followed by Fatehgarh Sahib, Mansa and Nawan Shehar. Wide variations were found among various districts in case of health and medical index as indicated by coefficient of variation and coefficient of range. The coefficient of variation and coefficient of range in 1980-81 was 36.01 and 0.4942 and 36.66 and 0.4385 in 1990-91, respectively. The inequalities further increased in the year 2000-01 as coefficient of variation and coefficient of range increased to 47.82 and 0.6052, respectively.

The opening of super specialty hospitals in the private sector and medical colleges in Amritsar, Jalandhar, Ludhiana and Patiala and medical university in Faridkot has widened the inequalities in the health and medical facilities in the state.

#### ***Index of General Facilities/Services***

Index of general facilities/services has been constructed on the basis of 8 indicators representing these facilities/services. The general index for the year 1980-81 is presented in Table 5. Table 5 shows that Jalandhar was at the top followed by Ludhiana and Amritsar whereas district of Sangrur and Bhatinda were at the bottom. In the year 1990-91 also Jalandhar was at the top (Table 5) whereas Ferozpur was at the bottom and position of Gurdaspur slipped to 12 from 9 in 1980-81. Furthermore, similar position was found in the year 2000-01 with only difference that Kapurthala got third rank and new district of Mansa was at the bottom. The study found that in the year 1980-81 majority of the districts excluding Jalandhar, Ludhiana, Amritsar and Kapurthala were having value of general index less than the state and in the year 1990-91 even the value of index in case of Kapurthala was less than the state value. In the year 2000-01 the situation still worsened with only Jalandhar and Ludhiana having value of general index higher than the state

and all the remaining 15 districts had the value index less than the state. Furthermore, the study found that inequalities in the general facilities exists in the state of Punjab with value of coefficient of variation and range at 20.79 and 0.2788 for the year 1980-81, 19.16 and 0.2654 for 1990-91 and 20.38 and 0.3467 for 2000-01, respectively. Furthermore, it is seen that these inequalities have not been reduced over time with coefficient of variation at almost the same level. There was only minor change in the position of middle level districts.

#### ***Per Capita Net District Domestic Product***

Per capita income is one of the most familiar criteria used by various economists for measuring development of different regions. Though it has been criticized by Bauer (1973) and others still it gives a rough idea of levels of living of people.

On the basis of this criterion the study found that in 1980-81 (Table 1) Ludhiana was at the top position followed by Patiala, Kapurthala and Ferozpur. Gurdaspur was at the bottom with Hoshiarpur slightly at a better position. In 1990-91, Ludhiana maintained its position followed by Kapurthala and the district of Patiala was relegated to 9<sup>th</sup> slot from 2<sup>nd</sup> position in 1980-81. Gurdaspur and Hoshiarpur once again were at the bottom with minor variations in the position of other districts. In 2000-01, the three newly created districts of Fatehgarh Sahib, Moga and Nawan Shehar occupied top three positions. Kapurthala was at the fourth slot and Ludhiana slipped to 5<sup>th</sup> position. Hoshiarpur and Gurdaspur were again at the bottom. Muktsar, Mansa and Rupnagar were closed to Hoshiarpur and Gurdaspur.

#### ***Composite Index***

Composite index has been formulated on the basis of all 20 indicators representing per capita income, education, health, medical and general facilities. In 1980-81 (Table 4), Ludhiana was at the top followed by Jalandhar, Amritsar and Kapurthala. Bhatinda and Sangrur were at the bottom. The districts of Ferozpur (81.23), Faridkot (85.17), Gurdaspur (87.56), Hoshiarpur (97.98) and Rupnagar (98.15) had a lower composite index than the state index (100). In 1990-91 (Table 5), districts of Ludhiana, Jalandhar and Amritsar occupied the top three positions. The districts of Patiala and Kapurthala interchanged their positions as compared to 1980-81. The districts of Bhatinda and Ferozpur occupied bottom positions while districts of Sangrur and Gurdaspur were slightly in a better position. In 2000-01 (Table 6), Ludhiana and Jalandhar once again occupied the top position while Faridkot took third position. The districts of Mansa, Muktsar and Ferozpur were at the bottom.

It is clear from the above analysis that Ludhiana and Jalandhar were the most developed districts of all the districts since 1980-81. The overall composite index showed that there were wide range of inequalities among various districts in 1980-81 as indicated by coefficient of variation (16.85) and coefficient of range (0.2391). Over the years these inequalities have neither decreased nor increased as indicated by values of coefficient of range and coefficient of variation which remained more or less at the same level.

### **Relative Position of Districts with vis-à-vis Different Indices**

The study found that in 1980-81 (Table 4), Ludhiana was at the top position on account of per capita income and at 2<sup>nd</sup> position on the basis of health and general facilities index. On the basis of education index it was at 4<sup>th</sup> position but the overall composite index showed that it was leading all the districts. The district of Jalandhar occupied 9<sup>th</sup> position on the basis of per capita income and 5<sup>th</sup> position on the basis of education and health index. In general facilities it was the top lot and the overall composite index showed it behind Ludhiana. The district of Amritsar was at 8<sup>th</sup> position on the basis of per capita income and education index. However, health index and general facilities index showed it on 3<sup>rd</sup> position thus taking its position on the basis of overall composite index to 3<sup>rd</sup> slot.

The study further found that districts of Bhatinda, Sangrur and Ferozpur were at the bottom. Bhatinda was placed at 10<sup>th</sup> slot on the basis of per capita income and 11<sup>th</sup> on the basis of other three indices taking it to 12<sup>th</sup> position on the basis of overall composite index. Though on the basis of per capita income Sangrur was placed higher at 5<sup>th</sup> position but in case of education index it was at 10<sup>th</sup> position and 12<sup>th</sup> on the basis of health index and general facilities index. Its ranking on the basis of composite index was 11<sup>th</sup>. The district of Ferozpur though placed 4<sup>th</sup> and 8<sup>th</sup> on the basis of per capita income and health index, respectively, but was very lowly placed on the basis of education index (12<sup>th</sup>) and general facilities index (10<sup>th</sup>) dragging its overall position on the basis of composite index to 10<sup>th</sup>.

The districts of Kapurthala (4<sup>th</sup>), Patiala (5<sup>th</sup>), Rupnagar (6<sup>th</sup>), Hoshiarpur (7<sup>th</sup>), Gurdaspur (8<sup>th</sup>) and Faridkot (9<sup>th</sup>) on the basis of composite index could be labeled as mediocre districts. District of Patiala was at 1<sup>st</sup> and 2<sup>nd</sup> slot on the basis of health index and per capita income, respectively, but 7<sup>th</sup> on the basis of education index. Similarly, Hoshiarpur (1<sup>st</sup>) and Rupnagar (3<sup>rd</sup>) enjoyed good position on the basis of education index but their position was at very low level in case of other indices.

In 1990-91, Table 5 shows that Ludhiana was at the top position on the basis of per capita income, health index and overall composite index but it was on 2<sup>nd</sup> and 4<sup>th</sup> position on the basis of general facilities index and education index, respectively. The district of Kapurthala occupied 2<sup>nd</sup> position on the basis of per capita district domestic product. In case of general facilities index and composite index it was placed at 5<sup>th</sup> slot and health index showed its position on the 8<sup>th</sup> slot. The district of Jalandhar occupied top position on the basis of education index and general index. Its position on the basis of composite index, health index and per capita income was 2<sup>nd</sup>, 4<sup>th</sup> and 8<sup>th</sup>, respectively. The district of Patiala occupied 4<sup>th</sup> position on the basis of general facilities index and composite index and 3<sup>rd</sup> on the basis of health index. But education index (6<sup>th</sup>) and per capita income (9<sup>th</sup>) showed it to be lowly placed. The district of Bhatinda was found to be the most backward. It was placed at 12<sup>th</sup> position on the basis of health index and overall composite index and was at 10<sup>th</sup>, 11<sup>th</sup> and 6<sup>th</sup> place on the basis of general facilities index, education index and per capita income, respectively. The district of Ferozpur though occupied lowest position on the basis of education index (12<sup>th</sup>), general index and composite index (11<sup>th</sup>), health index (7<sup>th</sup>) but on the basis of per capita district domestic product it was placed quite high at 3<sup>rd</sup> slot.

In 2000-01 (Table 6), Fatehgarh Sahib was at the first position on the basis of per capita income and 5<sup>th</sup> on the basis of education index but other indices showed its position at much lower level, *i.e.* health index (16<sup>th</sup>), general facilities index and composite index (10<sup>th</sup>). Hoshiarpur was at the top position on the basis of education index but it was on the bottom on the basis of per capita income. It was placed 6<sup>th</sup>, 8<sup>th</sup> and 7<sup>th</sup> on the basis of health index, general index and overall composite index, respectively. The district of Faridkot occupied the top position on the basis of health index and 3<sup>rd</sup> in case of composite index but it was lowly placed at 16<sup>th</sup> on the basis of education index. Its position on the basis of per capita income and general facilities index was 8<sup>th</sup> and 9<sup>th</sup>, respectively. The district of Jalandhar occupied 1<sup>st</sup>, 2<sup>nd</sup> and 5<sup>th</sup> position on the basis of general facilities index, overall composite index and health index, respectively. It was lowly placed on the basis of per capita income (10<sup>th</sup>) and education index (8<sup>th</sup>). The district of Ludhiana was leading on the basis of composite index. It was placed 2<sup>nd</sup> and 5<sup>th</sup> on the basis of health index and per capita income, respectively, but its position was quite low on the basis of education index (13<sup>th</sup>). The district of Mansa was placed at the bottom (17<sup>th</sup>) on the basis of education index, general facilities index and composite index, however, on the basis of per capita index and health index it was at 14<sup>th</sup> and 15<sup>th</sup> position, respectively.

The above discussion clearly shows that all the regions were not enjoying same position in all the facilities. Some districts were advanced in some facilities and lacking in others.

## V. CONCLUSIONS

We have examined inter-district disparities in the levels of living in Punjab. Punjab is a prosperous state and, on the face, it seems that all its districts must be enjoying equal levels of living but study found otherwise. Large disparities were found in education and health and medical facilities in different districts of the state. Variations are also found in per capita net district domestic product with Fatehgarh Sahib (Rs. 29101) at the top and Hoshiarpur (Rs. 18927) at the bottom in 2000-01. Similarly variations are found in general facilities also. Some districts enjoy advantage in one area may be education or per capita income or health and medical facilities or general facilities and are backward in other facilities.

Education facilities exist in the state but lack in quality of education being provided through the state-owned schools. Drop out rate is also very high in the state. Though teacher-pupil ratio is fairly good but type of product produced in the form of students is of poor quality. The conditions of state-run schools have deteriorated at a very fast rate. Although there are schools in rural areas but type of education provided in these schools is not comparable to the one in urban private schools. Quality of education can be gauged from the high failure rate, mass coping in board examinations and the fact that the 5<sup>th</sup> standard students cannot even write properly in Punjabi (mother tongue). Reasons for this can be many. Absenteeism and lack of dedication on the part of teachers, non-academic work being performed by school teachers (this gives them excuse not to perform teaching duties properly), illiterate parents, mushroom growth of so-called 'English Schools' in rural areas (in many cases run by government teachers) and non-seriousness on the part of political leadership about education are some of the reasons for poor quality of education in the state-run schools. Schools are there, teachers are there and students are there but there is no education. The question is how to make teachers teach and students study? It seems to be a difficult task. It is a serious question and state must find answer to this otherwise state will be a loser in the long-run. The state will have a large mass of population, who will be educated in formal sense but in reality uneducated — 'educated illiterates'. They will not be in a position to take any worthwhile employment. Falling standard of education is also responsible for 'foreign craze' among Punjabi youth and, thus, exploitation by treacherous travel agents. Majority of those who opt for illegal means for

migrating to foreign countries are school drop outs without much education. They are not willing to do manual work here in the state, which they do in the foreign lands. Similar type of situation prevails in case of health and medical facilities. Hospitals are provided with doctors and paramedical staff. Due to absenteeism of the staff, poor medical facilities are available to the people particular in rural areas. There is mushroom growth of private clinics/hospitals in cities and small towns. Majority of these are run by doctors working in government hospitals who also get non-practicing allowance (NPA). This calls for change in the system so that proper health and medical facilities can be provided to the needy and poor at affordable price. The social returns in the form of education and health of the people are not in commensuration with the expenditure incurred by the government on these facilities. The gap between the facilities in different districts is due to the fact that districts with developed urban areas are ahead of other districts which have not reaped the benefits of urbanization. Many district headquarters are small towns with very meager educational and health facilities. Districts like Ludhiana, Jalandhar, Amritsar and Patiala are big cities compared to other district headquarters with good education centres and hospitals in public and private sector. They also cater to the needs of rural areas close to these cities. This has created wide disparities in facilities available to the people of other areas. These disparities can be reduced by providing education, health and medical and other facilities in the regions lacking in these facilities. State government should give immediate attention to improve education, health and medical facilities in the state so that it can be brought at par with other states like Kerala. Once a prosperous state, now it has started sliding down the path of progress economically (with not much industry and agriculture already at saturation point) as well as in social sector facilities.

In the days of globalization, quality human capital is required to compete in national and international markets, which may not be available due to poor education and health facilities. State is definitely going to lag behind other states if serious efforts are not made to improve education and health standards in the earnest manner.

To correct the phenomenon of inter-district variations, the government must provide infrastructural facilities in a more equitable manner by giving weightage to backward districts. The process of planning should be decentralized in the real sense and priorities as well as sectoral proposals should be made with village as the unit and later integrated into district and state plans.

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TABLE 1  
Results of Factor Analysis and Relative Weights of Indicators: 1980-81

S. No.	Indicators	Factor Loadings				Commun- alities $ht^2 = \sum d^2 ij$	Weights	Weight (in %)
		Factor 1	Factor 2	Factor 3	Factor 4			
1	Teacher-pupil ratio in high school ( $X_6$ )	<b>0.34198</b>	0.28070	-0.81441	0.04857	0.98281	0.12003	3.12
2	Literacy rate ( $X_7$ )	<b>0.78912</b>	0.52305	-0.15576	-0.02456	0.97859	0.27698	7.21
3	Number of doctors ( $X_9$ )	<b>0.71257</b>	-0.48652	-0.09298	0.40616	0.95524	0.25011	6.51
4	Number of nurses ( $X_{10}$ )	<b>0.65667</b>	-0.46200	-0.29182	0.02077	0.94597	0.23049	6.00
5	Number of beds ( $X_{11}$ )	<b>0.76563</b>	-0.42594	-0.11616	0.36489	0.95103	0.26874	6.99
6	Number of banking offices ( $X_{13}$ )	<b>0.81010</b>	0.20788	0.35838	-0.29992	0.98556	0.28434	7.40
7	Number of motor vehicles ( $X_{13}$ )	<b>0.60297</b>	-0.53846	0.38113	-0.07698	0.92905	0.21164	5.51
8	Density of population per square kilometre ( $X_{16}$ )	<b>0.85385</b>	0.06941	-0.23531	-0.24502	0.91809	0.29970	7.80
9	Domestic per capita consumption of power ( $X_{17}$ )	<b>0.58606</b>	0.38705	0.16387	0.41372	0.89125	0.20571	5.35
10	Domestic cons. of power as % of total power ( $X_{18}$ )	<b>0.73590</b>	-0.42480	-0.30594	-0.05855	0.93271	0.02583	6.72
11	% of h.hold holding domestic connections ( $X_{19}$ )	<b>0.80540</b>	0.44036	0.26932	0.09856	0.94568	0.28269	7.36
12	Number of entertainment places ( $X_{20}$ )	<b>0.67089</b>	-0.48257	0.18650	-0.32215	0.90495	0.23548	6.13
13	Number of primary schools ( $X_2$ )	0.22306	<b>0.82435</b>	-0.28973	0.27207	0.99214	0.19537	5.08
14	Number of secondary schools ( $X_3$ )	0.11169	<b>0.76815</b>	0.41214	-0.16415	0.82149	0.18205	4.74
15	Number of arts, science colleges ( $X_4$ )	0.46175	<b>0.52900</b>	0.44863	-0.07211	0.85859	0.12537	3.26
16	% of villages with water schemes ( $X_{12}$ )	0.09497	<b>0.59447</b>	0.29105	0.39181	0.83292	0.14089	3.66
17	Teacher-pupil ratio in primary school ( $X_5$ )	-0.52283	-0.71306	<b>0.40155</b>	0.02258	0.95005	0.04899	1.27
18	Per capita net district domestic product ( $X_1$ )	0.33211	-0.31620	<b>0.61532</b>	0.41372	0.91387	0.07507	1.95
19	Number of medical colleges ( $X_8$ )	0.13830	-0.23670	-0.00849	<b>0.88720</b>	0.96444	0.09315	2.32
20	Total road length in kilometre ( $X_{14}$ )	-0.58687	0.31718	-0.01137	<b>0.52333</b>	0.95235	0.05495	1.43
	Eigen value	7.02917	4.74688	2.4315	2.10297			
	Percentage of variance	35.1	23.7	12.2	10.5	Total	3.93277	100
	Cum. Percentage	35.1	58.8	71.1	81.6	CV %	42.78	

TABLE 2  
Results of Factor Analysis and Relative Weights of Indicators: 1990-91

S. No.	Indicators	Factor Loadings					Communalities $hf^2 = \sum a^2_{ij}$	Weights	Weight (in %)
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5			
1	Teacher-pupil ratio in high school ( $X_6$ )	<b>0.62251</b>	-0.20839	-0.28876	-0.64114	-0.03547	0.92664	0.24714	6.28
2	Literacy rate ( $X_7$ )	<b>0.68565</b>	-0.56990	-0.20124	0.27742	0.24716	0.97345	0.27220	6.92
3	Number of doctors ( $X_9$ )	<b>0.73444</b>	0.41421	-0.08500	0.08678	-0.08084	0.73226	0.29157	7.41
4	Number of nurses ( $X_{10}$ )	<b>0.58364</b>	0.32832	-0.54071	0.28956	0.12794	0.84102	0.23170	5.89
5	Number of beds ( $X_{11}$ )	<b>0.65524</b>	0.40377	0.00758	0.25924	-0.33238	0.77010	0.26013	6.61
6	Number of banking offices ( $X_{13}$ )	<b>0.66482</b>	-0.50042	0.28043	-0.10645	-0.41359	0.95343	0.26393	6.71
7	Number of motor vehicles ( $X_{15}$ )	<b>0.90205</b>	0.19460	0.18092	-0.00914	-0.13065	0.90145	0.35811	9.10
8	Density of population per square kilometre ( $X_{16}$ )	<b>0.90497</b>	-0.03229	-0.26809	-0.01893	0.13416	0.91024	0.35927	9.13
9	Domestic per capita consumption of power ( $X_{17}$ )	<b>0.79164</b>	-0.05803	0.37527	0.05039	0.38813	0.92407	0.31428	7.99
10	Dom. cons. of power as % of total power ( $X_{18}$ )	<b>0.81342</b>	0.46201	0.04944	-0.12802	0.30162	0.98490	0.32293	8.21
11	% of h.hold holding domestic connections ( $X_{19}$ )	<b>0.70226</b>	-0.43353	0.37822	-0.06803	0.28992	0.91285	0.27879	7.08
12	Teacher-pupil ratio in primary school ( $X_5$ )	-0.37756	<b>0.63780</b>	0.43948	-0.48563	0.02050	0.97874	0.14861	3.77
13	Number of medical colleges ( $X_8$ )	0.44135	<b>0.67455</b>	0.21225	0.38193	0.26065	0.90867	0.15717	3.99
14	Number of entertainment places ( $X_{30}$ )	0.31044	<b>0.69748</b>	0.39447	0.12362	-0.10546	0.76485	0.16251	4.13
15	Number of secondary schools ( $X_3$ )	0.14335	-0.75770	<b>0.47382</b>	-0.11370	0.21805	0.87963	0.04927	1.25
16	Number of arts, science colleges ( $X_4$ )	0.32722	-0.55649	<b>0.44865</b>	0.28214	-0.37603	0.83905	0.04666	1.86
17	Total road length in kilometre ( $X_{14}$ )	-0.59294	-0.38386	<b>0.42324</b>	0.30786	0.20537	0.81501	0.04402	1.12
18	Number of primary schools ( $X_2$ )	-0.12742	-0.76180	-0.39928	<b>0.39780</b>	0.07369	0.91968	0.03818	0.97
19	Per capita net district domestic product ( $X_1$ )	-0.50358	0.38048	0.16309	<b>0.68675</b>	-0.03627	0.89789	0.06593	1.67
20	% of villages with water schemes ( $X_{12}$ )	-0.85295	0.22832	0.00219	-0.14914	<b>0.35122</b>	0.92526	0.02037	0.51
Eigen value		7.93343	4.66136	2.07785	1.91834	1.16822			
Percentage of variance		39.7	23.3	10.4	9.6	5.8	Total	3.93277	100
Cum. percentage		39.7	63.0	73.4	83.0	88.8	CV %	59.7	

TABLE 3  
Results of Factor Analysis and Relative Weights of Indicators: 2000-01

S. No.	Indicators	Factor Loadings					Commun- alities $h_i^2 = \sum a^2_{ij}$	Weights	Weight (in %)
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5			
1	Number of medical colleges ( $X_8$ )	<b>0.64382</b>	-0.36440	0.00321	0.07610	-0.58018	0.88971	0.20473	6.48
2	Number of doctors ( $X_9$ )	<b>0.73146</b>	-0.40676	0.28877	0.00272	0.40498	0.94790	0.23260	7.36
3	Number of nurses ( $X_{10}$ )	<b>0.72547</b>	-0.34978	0.08833	-0.26195	0.05535	0.72815	0.23069	7.30
4	Number of beds ( $X_{11}$ )	<b>0.72121</b>	-0.29343	0.21079	0.09311	0.35751	0.78715	0.22934	7.26
5	Number of motor vehicles ( $X_{13}$ )	<b>0.84973</b>	-0.26352	0.21530	0.13354	0.20361	0.89712	0.27021	8.55
6	Density of population per square kilometre ( $X_{16}$ )	<b>0.87438</b>	0.17222	-0.26584	-0.06845	-0.17114	0.89885	0.27805	8.81
7	Domestic per capita consumption of power ( $X_{17}$ )	<b>0.71546</b>	0.41698	0.09484	0.35413	-0.17431	0.85054	0.22752	7.21
8	Dom. cons. of power as % of total power ( $X_{18}$ )	<b>0.81509</b>	-0.15761	-0.24658	-0.03611	-0.28590	0.83305	0.25919	8.21
9	Number of primary schools ( $X_2$ )	-0.13371	<b>0.69557</b>	0.03553	-0.59171	0.12733	0.86929	0.16624	5.26
10	Number of secondary schools ( $X_3$ )	-0.28852	<b>0.61075</b>	0.56810	0.10911	0.08422	0.79799	0.14596	4.62
11	Number of arts, science colleges ( $X_4$ )	-0.01867	<b>0.54815</b>	0.31567	-0.10574	-0.46538	0.63454	0.13101	4.15
12	Literacy rate ( $X_7$ )	0.64058	<b>0.67079</b>	-0.01766	-0.20605	0.04282	0.90491	0.16032	5.07
13	Number of banking offices ( $X_{13}$ )	0.43111	<b>0.69444</b>	0.20838	0.41382	0.08751	0.89043	0.16597	5.25
14	% of h.hold holding domestic connections ( $X_{19}$ )	0.22806	<b>0.79973</b>	0.08121	0.31504	0.29006	0.88157	0.19113	6.05
15	Total road length in kilometre ( $X_{14}$ )	-0.69216	0.19693	<b>0.39530</b>	0.25615	-0.09400	0.74857	0.04032	1.27
16	% of villages with water schemes ( $X_{12}$ )	-0.39887	-0.73248	<b>0.22948</b>	0.02742	0.10060	0.75915	0.02341	0.74
17	Number of entertainment places ( $X_{30}$ )	0.16950	-0.61719	<b>0.55615</b>	0.17239	-0.08465	0.75584	0.05672	1.79
18	Teacher-pupil ratio in primary school ( $X_5$ )	-0.51643	-0.45337	-0.23558	<b>0.56666</b>	0.29715	0.84896	0.05439	1.72
19	Per capita net district domestic product ( $X_1$ )	0.10292	0.20869	-0.14325	<b>0.73299</b>	-0.13577	0.62935	0.07029	2.23
20	Teacher-pupil ratio in high school ( $X_6$ )	-0.01801	0.18558	-0.81065	0.21590	<b>0.29715</b>	0.82683	0.01902	0.60
	Eigen value	6.35935	4.77335	2.04781	1.91852	1.28085			
	Percentage of variance	31.8	23.9	10.2	9.6	6.4	Total	3.15711	100
	Cum. percentage	31.8	55.7	65.9	75.5	81.9	CV %	54.81	

TABLE 4  
Different Indices of Living in Districts of Punjab: 1980-81

S. No.	Districts	Per Capita Net Dist. Domestic Product	Rank	Education Index	Rank	Health Index	Rank	General Index	Rank	Composite Index	Rank
1	Gurdaspur	1747 (73.99)*	12	102.86	6	72.73	9	83.6	9	87.56	8
2	Amritsar	2322 (98.77)	8	95.21	8	139.51	3	117.37	3	112.89	3
3	Kapurthala	2645 (112.03)	3	119.46	2	86.56	6	107.09	4	108.09	4
4	Jalandhar	2318 (98.17)	9	108.86	5	110.66	5	131.43	1	119.65	2
5	Hoshiarpur	2021 (85.59)	11	119.84	1	83.53	7	89.55	7	97.98	7
6	Rupnagar	2347 (99.41)	7	118.53	3	120.59	4	91.49	5	98.15	6
7	Ludhiana	2724 (115.37)	1	110.83	4	143.59	2	127.07	2	123.94	1
8	Ferozpur	2529 (107.11)	4	78.05	12	80.05	8	78.24	10	81.23	10
9	Faridkot	2406 (101.9)	6	92.17	9	67.54	10	85.05	8	85.17	9
10	Bhatinda	2203 (93.31)	10	81.13	11	61.11	11	75.9	11	76.11	12
11	Sangrur	2461 (104.23)	5	87.24	10	56.17	12	74.12	12	76.94	11
12	Patiala	2692 (114.02)	2	95.39	7	165.91	1	89.74	6	104.17	5
Punjab State		2361 (100)		100		100		100		100	
Coeff. of range		0.2185		0.2112		0.4942		0.2788		0.2391	
Coeff. of variation		11.95		14.71		36.01		20.79		16.85	

\*Figures in brackets are index values with per capita net state domestic product as 100.

TABLE 5  
Different Indices of Living in Districts of Punjab: 1990-91

S. No.	Districts	Per Capita Net Dist. Domestic Product	Rank	Education Index	Rank	Health Index	Rank	General Index	Rank	Composite Index	Rank
1	Gurdaspur	5678 (73.99)*	12	103.75	2	79.94	5	75.94	12	85.07	9
2	Amritsar	7411 (96.57)	7	95.45	8	146.35	2	101.92	3	106.15	3
3	Kapurthala	7984 (104.04)	2	100.99	5	75.73	8	98.76	5	96.28	5
4	Jalandhar	7297 (95.08)	8	118.62	1	100.16	4	130.81	1	122.25	2
5	Hoshiarpur	6607 (86.09)	11	103.61	3	78.41	6	90.56	7	92.82	6
6	Rupnagar	7200 (92.82)	10	97.57	7	64.79	10	94.38	6	91.20	7
7	Ludhiana	8263 (107.67)	1	101.49	4	149.73	1	129.50	2	123.41	1
8	Ferozpur	7942 (103.49)	3	87.57	12	77.13	7	76.89	11	80.59	11
9	Faridkot	7925 (103.27)	4	95.23	10	70.61	9	86.80	8	87.36	8
10	Bhatinda	7471 (97.35)	6	88.92	11	58.44	12	80.12	10	80.02	12
11	Sangrur	7899 (102.93)	5	95.29	9	61.12	11	82.79	9	83.86	10
12	Patiala	7281 (94.88)	9	98.92	6	136.19	3	99.74	4	104.6	4
	Punjab State	7674 (100)		100		100		100		100	
	Coeff. of range	0.1854		0.1506		0.4385		0.2654		0.2133	
	Coeff. of variation	9.59		8.14		36.66		19.16		15.63	

\*Figures in brackets are index values with per capita net state domestic product as 100.

TABLE 6  
Different Indices of Levels of Living in Districts of Punjab: 2000-01

S. No.	Districts	Per Capita Net Dist. Domestic Product	Rank	Education Index	Rank	Health Index	Rank	General Index	Rank	Composite Index	Rank
1	Gurdaspur	20603 (85.45)*	16	108.55	6	86.73	7	73.08	13	85.34	11
2	Amritsar	24071 (99.83)	9	92.46	15	141.47	3	90.18	4	98.85	5
3	Kapurthala	26347 (109.27)	4	123.15	2	77.15	9	92.25	3	99.29	4
4	Jalandhar	24059 (99.78)	10	97.02	8	114.29	5	120.81	1	112.28	2
5	Nawan Shehar	27170 (112.68)	3	122.31	3	58.31	14	89.02	6	94.79	8
6	Hoshiarpur	18927 (78.49)	17	128.87	1	88.08	6	86.20	8	97.60	7
7	Rupnagar	22765 (94.42)	13	114.55	4	75.09	10	87.51	7	91.38	9
8	Ludhiana	25648 (106.37)	5	93.95	13	180.07	2	116.2	2	119.03	1
9	Ferozpur	23682 (98.22)	12	93.62	14	83.11	8	61.81	15	75.49	15
10	Faridkot	24848 (103.05)	8	90.67	16	189.33	1	84.50	9	102.56	3
11	Muktsar	21499 (89.16)	15	95.20	10	46.56	17	61.33	16	69.82	16
12	Moga	28783 (119.37)	2	102.72	7	67.19	12	73.01	14	82.70	12
13	Bhatinda	23887 (99.07)	11	95.63	9	74.55	11	75.75	11	82.22	13
14	Mansa	22422 (92.99)	14	86.95	17	48.40	15	58.61	17	66.64	17
15	Sangrur	25473 (105.65)	6	94.55	12	64.97	13	75.37	12	80.66	14
16	Patiala	25273 (104.82)	7	94.57	11	135.89	4	89.41	5	98.44	6
17	Fatehgarh Sb.	29101 (120.69)	1	108.64	5	47.80	16	80.37	10	85.40	10
	Punjab State	24111 (100)		100		100		100		100	
	Coeff. of range	0.2119		0.1942		0.6053		0.3467		0.2822	
	Coeff. of variation	11.08		12.49		47.82		20.38		15.61	

\*Figures in brackets are index values with per capita net state domestic product as 100.