

## Geographical Method of Research in Socio-Economic Transformation

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### Introduction:

**G**eography is concerned with the arrangement of things on the surface of the earth. It is one of the fields, interested in man's use of space and natural resources. It examines the bonds between man, culture and land from a comparative regional view point and can initially be approached from the natural (Earth Science) and cultural (Social Science and Humanities) side. Geographers contend that human societies can be fully understood only if their behavior and activities are examined against the background of space they occupy, their situation (Relative location in terms of both natural and cultural patterns) and present prospective resources and resistance facing them. Economic Geography is concerned with the distribution of man's productive activities over the surface of the earth. These activities we commonly divide into three kinds, primary activities are those which obtain simple commodities or raw materials from the soil, sea and rocks. They are agriculture, forestry, fishing, mining etc. These goods are then manufactured, processed or fabricated in factories and workshops. This constitutes the secondary group of activities. It rarely happens, however, that a manufacturing process can be completed without making use of transportation services, insurance agents, brokers and dealers. These services constitute tertiary activities. Social Geography can be defined as identification of different regions of the earth surface according to association of social phenomena related to total environment. It is a study of patterns and processes in understanding socially defined population in spatial setting. It is a study of areal pattern and functional relations of social groups in the context of their social environment.

### Choice of the Region:

For the study of Geographical Analysis of Socio-Economic Transformation, Latur District is selected as a study region. The district of Latur lies between 17°12' to 18°50' north latitudes and 76°12' to 77°18' east longitudes. It is surrounded by Beed and Parbhani district in the north, Nanded district in the north-east, Karnataka state in the south-east and Osmanabad district in the west and north-west. The Latur district has an area of 7,157 sq.km. and population 24,55,543 as per 2011 census. Out of the total population of the district 74.53 percent lives in rural areas while 25.47 percent lives in urban areas. There is a spatial variation in the socio-economic development in the study region. Economy of the study region is mainly based on agriculture and agro-based industries.

Out of the total working population 54.80 percent population in the study region is working in primary activities. Region has limited irrigation facilities through wells, tube wells and canals. The percentage of gross irrigated area to gross cropped area is 17 percent (2009-10), percentage of irrigated area varies from tahsil to tahsil, which ultimately affects the development of agriculture in the study region. Region has not best but good accessibility for market through transportation and communication network. Region has also noticed the disparity in the development of social amenities. Such types of imbalances in the socio-economic transformation lead to research scholar to select the topic and region for investigation.

### Objectives of the Study:

To study the levels of socio-economic development in the study region and causes behind the regional disparity in the development.

**Database and Methodology:**

Success of the research work depends upon the methodology adopted for the study. For the present study data is collected through primary and secondary sources. Primary data is obtained by preparing objective based interview schedule and questionnaire. Secondary data is obtained from socio-economic reviews of the district, district census handbook, gazetteer, reports of the Zilla Parishad and Panchayat Samiti, web site etc. The data thus collected through primary and secondary sources are classified, tabulated and analyzed by using various statistical techniques and presented by using appropriate cartographic methods.

In the present study various methods and techniques have been used. However, it is not appropriate here to give all details. The details regarding various methods and techniques are discussed in the thesis at appropriate places. For the purpose of survey work stratified sampling technique is used.

To determine levels of socio-economic development in the study region indices are selected. The selection of indices is of paramount significance in this respect. The indicators selected should clearly reflect the socio-economic picture of the component areal unit of the study area. The tahsils have been awarded proportionate weights on the basis of the data of the indicators.

The lowest value of *i* indicator in the tahsils  $X_1, X_2, X_3, \dots, X_n$  (say in  $X_5$ ) has been awarded the score of 1. The weights of *i* indicator in remaining tahsils have been determined on the basis of the following formula:

$$Wix_1 = \frac{i X_1}{i X_5}$$

Where,

- $iX_1$  = weight of *i* indicator in tahsil  $x_1$
- $iX_1$  = numerical value of *i* indicator in tahsil  $x_1$
- $iX_5$  = numerical value of *i* indicator in tahsil  $x_5$

On the basis of the above formula, the weights of all the indicators in each tahsil have been computed and then composite scores have been

obtained for all tahsils on the basis of the following formula:

$$CX_1 = W_1X_1 + W_2X_1 + \dots + W_nX_1$$

Where,  $CX_1$  = composite score of tahsil  $X_1$

**Composite Scores of Socio-Economic Development:**

To determine the levels of socio-economic development in the study region composite scores of economic and social indicators are combined together and total composite score for each tahsil is calculated and shown in the table.

The composite scores of all tahsils in the study region have been arranged in the descending and on the basis of break in the progression of the scores of the tahsils have been grouped into five levels of socio-economic development as follows:

- i) Areas of Very High Development
- ii) Areas of High Development
- iii) Areas of Medium Development
- iv) Areas of Low Development
- v) Areas of Very Low Development

**Composite Scores of Economic Indicators of Tahsils**

Sr. No.	Tahsil	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Composite Score
1	Latur	1.08	1.08	2.85	1	1.39	23.82	2.36	3.36	5.96	28.79	1	1.01	1	1	13.17	3.00	19.31	3.97	120.58	23.12	53.23	312.08
2	Renapur	1.16	1.01	2.10	3.30	1.22	7	1.45	1.73	3.24	4.84	1.27	1.10	1.75	1.61	2.21	2.00	1.37	2.29	34.48	2.29	2.48	79.9
3	Ahmadpur	1.09	1.22	1.42	2.23	1.68	5.13	1.18	2.76	3.65	4.06	1.19	1.04	1.65	1.81	3.49	2.59	2.68	1	11.65	5.18	2.52	59.22
4	Ausa	1.11	1.06	1.40	2.72	1	13.67	1	3.56	6.60	5.68	1.25	1.08	1.74	2.55	4.08	2.81	2.50	1.70	51.49	5.48	3.47	115.9
5	Nilanga	1.12	1.07	2.33	2.15	1.32	11.36	1.72	3.42	9.14	30	1.24	1.09	1.69	1.98	4.76	3.70	2.32	1.44	47.04	5.41	3.67	137.97
6	Udgir	1.17	1.09	1.34	1.23	1.52	11.93	2.27	2.39	3.48	3.53	1.08	1	1.34	1.53	3.91	2.25	4.44	1.32	14.48	5.53	10.73	77.56
7	Chakur	1.10	1.13	1.64	2.41	1.94	3.75	1.27	2.27	1	1.45	1.28	1.08	1.83	2.28	1.87	1.59	1.67	1.20	16.96	3.12	2.30	53.14
8	Jalkot	1	1	1	2.06	1.36	1	1.09	1.47	1.76	1	1.17	1.04	1.56	2.51	1.14	1.33	1	1.76	1	1	1	27.25
9	Shirur A.	1.08	1.08	1.46	2.54	1.43	6.86	1.69	1	1.76	1.05	1.30	1.05	1.88	2.15	1	1	.43	3.31	27.63	1.02	2.20	63.92
10	Deoni	1.00	1.10	1.71	2.41	1.33	4.87	1.81	1.14	3.18	3.53	1.30	1.10	1.86	2.50	1.42	1.29	1.02	2.31	20.41	1.44	1.49	58.22

*Source: Compiled by the Researcher.*

**Composite Scores of Social Indicators of Tahsils**

Sr. No.	Tahsil	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Composite Score
1	Latur	2.79	10.97	1.08	1.04	1.14	1	2.34	1	2.74	1.43	3.93	1	2.0	6.33	5.09	1	19.77	3.5	15.25	1.5	6.25	1.30	14.31	1.24	108
2	Renapur	1.05	--	1.00	1	1.01	1.38	1.17	1.12	1.11	1.33	1.31	3.01	2.05	1	1.72	1.50	1	1.67	1.75	1	2.93	1.76	2.75	1.08	34.7
3	Ahmadpur	1.23	1.21	1.03	1.03	1.05	1.59	1.65	1.37	1.67	1.67	2.03	1.81	1.47	3.42	2.36	1.26	1.81	1.52	4.5	1.6	4.83	1.43	6.81	1.10	49.45
4	Ausa	1	1	1.01	1.00	1.03	1.17	1	1	1	1	1	1.93	2.11	1.54	4.72	1.10	3.44	1.37	3.12	1.8	3.70	1.34	5.29	1.03	43.7
5	Nilanga	1.26	1.00	1.01	1.01	1.02	1.23	1.31	1.11	1.39	1.00	1.25	1.84	1	2.48	2.90	1.75	3.09	1.32	3.68	1.7	1.50	1.37	5.09	1.01	41.32
6	Udgir	1.62	3.10	1.07	1.04	1.11	1.38	1.88	1.39	2.22	1.27	2.02	1.37	--	6.16	3.54	1.43	4.88	2.78	10.75	1.8	1	1.27	5.02	1.00	59.1
7	Chakur	1.08	--	1.02	1.01	1.04	1.58	1.470	1.5	1.56	1.06	1.10	1.44	1.64	2.29	2.36	1.60	1.49	1.17	3.5	1.3	1.73	2.27	4.25	1	38.39
8	Jalkot	1.02	--	1	1.00	1	1.53	1.30	1.53	1.52	1.78	1.76	1.96	3.35	1.94	1	1.54	1.28	1	1	1.3	1.91	1	1	1.02	32.74
9	Shirur A.	1.03	--	1.02	1.02	1.04	1.39	1.21	1.27	1.30	2.06	2.10	2.05	--	2.23	1	1.43	1.27	2.23	3.0	2.0	1.24	1.07	1.31	1.20	33.47
10	Deoni	1.04	--	1.00	1.01	1.02	1.41	1.08	1.80	1.63	2.29	2.06	1.75	3.0	2.91	1.54	1.91	1.25	1.47	1.93	1	1.05	1.24	1.5	1.17	36.06

*Source: Compiled by the Researcher.*

**Composite Scores of Economic and Social Indicators of the Tahsils**

**Descending Order of Composite Scores of the Tahsils**

Sr. No.	Tahsils	Composite Score of Economic Indicators	Composite Score of Social Indicators	WiX <sub>1</sub>
1	Latur	312.08	108	420.08
2	Renapur	79.9	34.7	114.6
3	Ahmadpur	59.22	49.45	108.67
4	Ausa	15.9	43.7	159.6
5	Nilanga	137.97	41.32	179.29
6	Udgir	77.56	59.1	136.66
7	Chakur	53.14	38.39	91.53
8	Jalkot	27.25	32.74	59.99
9	Shirur A.	63.92	33.47	97.39
10	Deoni	58.22	36.06	94.28

Sr. No.	Tahsils	Composite Score
1	Latur	420.08
2	Renapur	114.6
3	Ahmadpur	108.67
4	Ausa	159.6
5	Nilanga	179.29
6	Udgir	136.66
7	Chakur	91.53
8	Jalkot	59.99
9	Shirur A.	97.39
10	Deoni	94.28

*Source: Compiled by the Researcher.*

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To distinguish the role of the indicators operating behind the existing status of socio-economic development of the tahsils, the weights of all the indicators have been arranged in descending

order and Q1 has been determined. The weights of the indicators in the tahsils above Q1 have been treated as dominant ones responsible for the existing status of socio-economic development.

### Summary

From the above discussion, it is apparent that the disparities in socio-economic development are very marked within the district. This situation is not conducive to proper development of the district. a majority of tahsils (Jalkot, Shirur Anantpal, Deoni and Chakur) require immediate attention.

Spatial analysis of the levels of socio-economic development clearly indicates that only 14 percent area of the study region comes under relatively very high development area, 32.30 percent area comes under relatively high development area, 29.59 percent area comes under medium development area, 19.28 percent area comes under low development area and 4.83 percent area comes under very low development area. Area under low socio-economic development is about 25 percent. To devoid the spatial disparity in the socio-economic development special attention of govt. and non-govt. agencies is essential. As the economy of the region has agrarian base priority in developmental process should be given to agricultural sector through modern measures. Social development automatically takes place in association with the economic development.

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