



REGIONAL DISPARITIES IN LEVELS OF DEVELOPMENT IN KOLHAPUR DISTRICT OF MAHARASHTRA

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ABSTRACT

The population of any region plays a vital role in the development of the region. The study of the population by age and sex composition, the composition of religions, economic status, marital status, education status reveals the real picture of the society. In order to deal with problems and ensure development of the region planning policies in terms of quality and quantity of population resource are required. The socio-economic development of any region reflects in these elements. Levels of development can be defined as the position of rank or a scale that a region or a state or a country or any other unit has attained in terms of development. Development is a multifaceted process; it imbibes economic, social, political and ecological dimension of development. In recent years there has been a surge of interest in the geographical aspects of development and the study of regional disparity. The study area includes the district of Kolhapur, which is one of the industrial districts of the state of Maharashtra in India. Census data has been used for analyzing the social and economic conditions of the study area. Demographic, agricultural and infrastructural indicators have been selected to study the disparities of development. Sources like District Economic and Statistical Bureau, socio-economic abstracts of the region and periodicals have been used for the research, economic profile of the region.

Development is a process which is continuous in nature. There are several methods for estimating the level of development, but most of them are having their own limitation. A total of 33 development indicators have been used in the present study to analyze the level of socio-economic and demographic development of different sub-units of the Kolhapur district. A composite index has been prepared, taking into account these indicators of development. Regional disparities have been studied using the index.

KEYWORDS: *Regional Disparities.*

INTRODUCTION

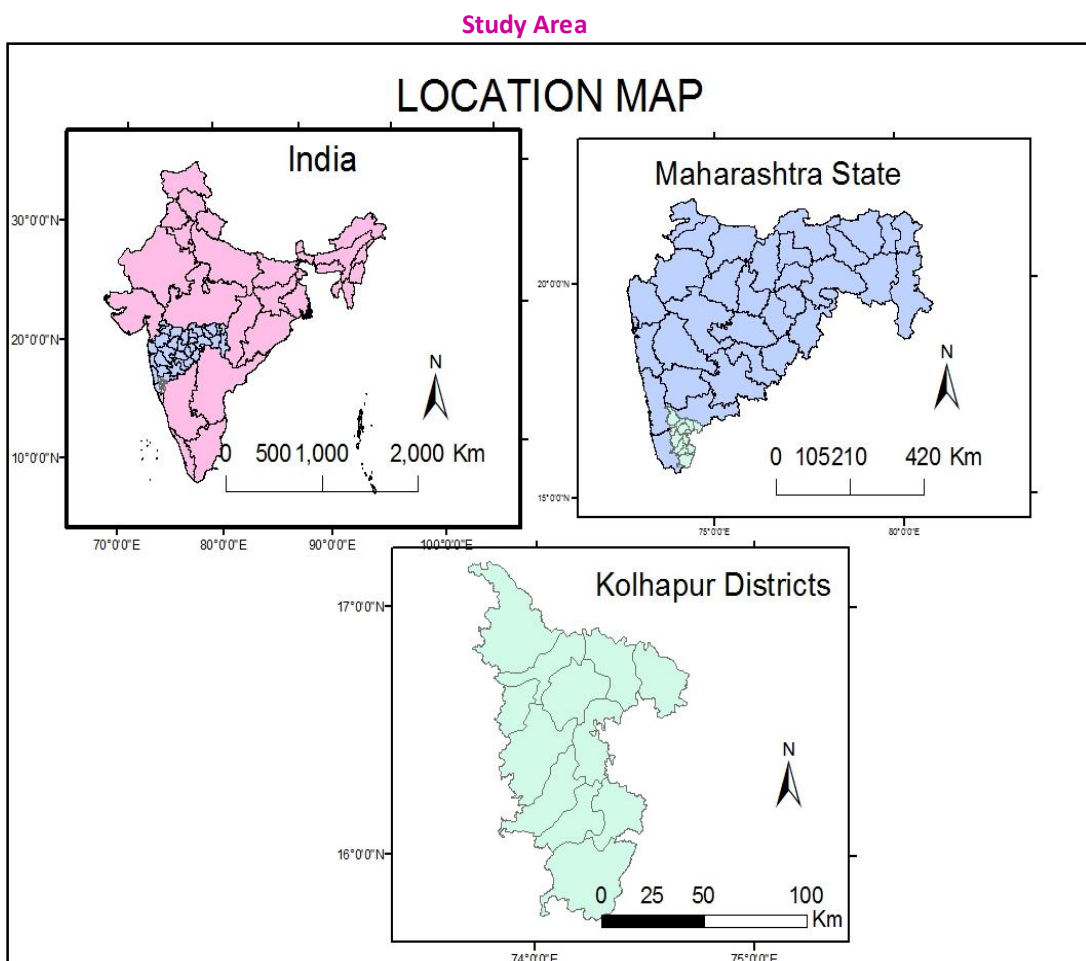
Development is a dynamic concept; it varies from area to area and many other changes from time to time within the same area. What our fore-fathers perceived as development may have been left far behind by future generation. Thus, there is no permanent and universally accepted definition of development. Development is a relative term-the extent to which a country region is developed can be determined if one compares that country region to others. In its strong sense, development means more of everything for everyone in the context of a lot more for a few. Development is associated with growth and refers to growth with social justice. The ultimate purpose of development is to provide increasing opportunities to all people for raising their living standard. Levels of development can be defined as the position of rank or a scale that a region or a state or a country or any other unit has attained in terms of development. Development is a multifaceted process; it imbibes economic, social, political and ecological dimension of development. In

recent years there has been a surge of interest in the geographical aspects of development that is, in the question of where economic activity takes place. This research helps to analysis dimensions of development and typology of backwardness and also useful to formulate a future plan for the balanced regional development and a relevant strategy to minimize spatial variation in the level of development at micro-level (Dr. Pawan Kumar Sharma). Composite index, Development indicators, Model districts, Potential targets, Regional disparities these are the core analysis done to study the overall regional development. (Prem Narain, 2001). The study of Regional Geography on Iran, based on social and economic factors of Iran, he has attempted to find out the level of development and region (Keramathollah Ziari 2006).

AIM AND OBJECTIVES

The major aim of the study is to assess the overall levels of development of Kolhapur district. The objectives are as follows:

- To observe the regional disparities in agricultural, Infrastructural and Demographical development at tehsil level.
- To ascertain the developmental disparities between the tehsils.



The Kolhapur district is one of the southernmost districts of Maharashtra state. The total area of the district is 7,685sq km. It lies between 1543' to 170 17' North latitude and 73040' to 78042, East longitude. The length of the district South to North is 160 kms. And to the west is 60 Km. The Sahyadri ranges to the west and Warna River to the north. The river Krishna and Belgaum district to the South and East forms the natural boundaries of the district.

Data and Methodology

Secondary data were used for study.

Data type	Demographic	Agricultural	Infrastructural
Source	Census of India Publications (2011)	District Economic and Statistical Bureau, Socio-Economic Extracts and Periodicals. (2013)	

METHODOLOGY

Development is a multi-dimensional process which is continuous in nature. There are several methods for estimating the level of development, but most of them are having their own limitations. The major limitation arises from the assumptions made about the developmental indicators themselves and their weightage in the aggregate index. From the detail literature survey carried out the following method was thought to be apt for the present study and thus the same was adopted.

Method of Estimation of Composite Index of Development.

The following statistical procedure for estimation of the composite index of development is adopted in the study.

Let [X_{ij}] be the data matrix.
 $I = 1, 2, \dots, n$ (Number of area unit)
 $J = 1, 2, \dots, k$ (Number of indicators)

Since [X_{ij}] come from different population distribution and they might be recorded in different units of measurement, they are not quite suitable from the simple addition for obtaining the composite index. Therefore, [X_{ij}] is transformed to [Z_{ij}] as follows.

$$[Z_{ij}] = \frac{X_{ij} - \bar{X}_j}{S_j}$$

Where, \bar{X}_j = Mean of the j^{th} indicator
 S_j = Standard deviation of the j^{th} indicators
 Z_{ij} = is the matrix of standardized indicators
 from [Z_{ij}] identify the best value of each indicator let it be denoted by Z_{oj} .

The best value will be either the maximum value or minimum value of the indicator depending upon the direction of the impact of indicator on the level of development for obtaining the pattern of development, calculate P_{ij} as follows:

$$P_{ij} = (Z_{ij} - Z_{oj})^2$$

Pattern of development C_i as given as

$$C_i = \left[\sum_{j=1}^k P_{ij} / (c.v.)_j \right]^{1/2}$$

Where $(c.v.)_j$ is the coefficient of variation of the j th indicator in X_{ij}
 Composite index D_i is given by

$$D_i = C_i / C \text{ for } i = 1, 2, \dots, n$$

Where, $C = C + 3D_{Di}$
 C = Mean of C_i and
 D_{Di} = Standard deviation of C_i

Smaller value of D_i will indicate high level of development and higher value of D_i will indicate low level of development.

For classificatory purposes, a simple ranking of the Taluka indices will suffice. However, a more meaningful characterization of different stages of development would be in terms of suitable fractile classification from the assumed distribution of the mean of composite indices. For relative comparison, it appears to assume that the Talukas having the composite index $\leq(\text{Mean}-\text{SD})$ are levelled as high developed, districts having composite index $>(\text{Mean}=\text{SD})$ are low level developed.

INDICATORS OF LEVEL OF DEVELOPMENT

A total of 33 development indicators have been used in the present study to analyze the level of socio-economic and demographic development of different talukas in the Nashik district.

Indicators used to measure level of the overall development.

A. Infrastructural Indicators.

- i. Number of PCO
- ii. Total of Primary Schools
- iii. Total Secondary Schools.
- iv. Total Higher Secondary Schools.
- v. Total Colleges
- vi. Number of Medical Facilities.
- vii. Number of Banks.
- viii. Road length.
- ix. Electricity Consumption.
- x. Veterinary.
- xi. Number of Post Offices.

B. Agricultural Indicators.

- i. Number of Total Agricultural Pumps.
- ii. Total Cultivated Land.
- iii. Barren land
- iv. Total Agricultural Land
- v. Total Non-Cultivable Land.
- vi. Chemical Fertilizers in Metric Ton.
- vii. Total Cereals.
- viii. Total Pulses.
- ix. Total Food grains.
- x. Total Fruits.
- xi. Total Vegetables.
- xii. Total Fodder.

C. Demographic Indicators.

- i. Total Population.
- ii. Recorded Deaths.
- iii. Recorded Births.
- iv. Infant Deaths.
- v. Maternal Deaths.
- vi. Total Urban Population.
- vii. Male Literates.
- viii. Female Literates.
- ix. Total Rural Population.

RESULTS

The Level of Development

Composite Index of Development in Kolhapur District (2011)

		Agriculture		Demography		Infrastructure	
S.No.	Taluka	C.I.	Rank	C.I.	Rank	C.I	Rank

1	Shahuwadi	0.624612	7	0.389703	3	0.309543	3
2	Panhala	0.624264	6	0.388044	2	0.504107	8
3	Hatkangle	0.388605	1	0.588320	9	0.280272	2
4	Shilol	0.467295	4	0.416027	5	0.467782	4
5	Karveer	0.393532	2	0.326560	1	0.017204	1
6	Gaganbawda	0.857591	12	0.823780	12	0.817066	12
7	Radhanagri	0.651854	9	0.591691	8	0.479762	5
8	Kagal	0.413445	3	0.514571	7	0.483472	6
9	Bhudargad	0.712555	11	0.395245	4	0.546019	10
10	Aajra	0.690548	10	0.446300	6	0.618913	11
11	Gadhinglag	0.532426	5	0.721058	10	0.517109	9
12	Chandgad	0.631067	8	0.745233	11	0.497616	7

The composite indices of development have been worked out for different taluka separately for agriculture, infrastructural service and demographic development. The talukas have been ranked on the basis of development indices. It shows the composite indices of development along with the ranks of different talukas. In this table, a simple ranking of the talukas on the basis of level of development has been presented. This is sufficient for classificatory purposes.

SCOPE OF DEVELOPMENT

- Assessment of city infrastructure including preliminary surveys.
- Gap analysis and investment potential.
- Master planning of Mahalaxmi Mandir Parisar and surrounding investment.
- Requirement for upgradation the city infrastructure.
- Project outlay and investment sharing pattern.

Area under different levels of Development (2011)

S.No.	Sector of Development	Levels	No. of Tehsils	Area %
1	Agriculture	High (<0.39)	2	16.03
		Moderate (0.39-0.69)	9	68.7
		Low (>0.69)	1	15.27
2.	Demography	High (<0.38)	1	16.24
		Moderate (0.38-0.69)	8	78.05
		Low (0.69)	3	5.71
3.	Infrastructure	High (<0.21)	1	16.03
		Moderate (0.21-0.61)	10	66
		Low (>0.61)	1	17.97

Above table shows that classification of the tahsils can be made by using the average level of development and its standard errors. The tahsils having the composite index equal to or less than (Mean-SD) are classified in category first as developed tahsils. The tahsils with composite index line between (Mean±SD) are classified in category second as middle level of developed tahsils and tahsils having the composite index equal to or greater than (Mean+SD) are classified in category third as low level of development districts. The

2. Karveer is highly developed in infrastructural facilities and Gaganbawda is low level of development. In infrastructural services, about 16.03% area is highly developed and 66% area is moderately developed and 17.97% area fall in the tahsils which are low level of development.
3. Karveer is highly developed in the demographic sector and Ajra is low level of development. The remaining tahsils like Shahuwadi, Panhala, Gadhinglaj, Radhanagari Chandgad, Shirol, Hathkanangle, are moderately developed. In the demographic sector, about 16.24% area is highly developed and 78.05% area is moderately developed and only 5.71% area fall in the level of low development tahsils.
4. Karveer is found highly developed in agriculture, infrastructural and demographic development, whereas Gaganbawda is found low level of development in all sectors of development.
5. Hence Karveer is highly developed in overall development whereas the tahsil of Gaganbawda is low level of development in overall development. The analysis reveals that about 16% area is highly developed in all the sectors and remaining areas are moderately and low level of development in all levels of development.
6. It is observed that low level of development tahsils are not as thickly populated as the Tahsils belonging to the category of high development.
7. To reduce the regional disparities, the priorities should be given for low level of development tahsils. The state government should include these tahsils in regional planning, encourage the local people to start small scale industries, giving them financial schemes.

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