# Development of Composite Index in Block Level: A Case Study of Nirmal District, Telangana

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Abstract:- In an era characterized by rapid urbanization and evolving regional development priorities, understanding the nuanced dynamics of different localities is paramount. This paper presents a comprehensive framework for creating a composite index at the block level, which is essential for informed policy decisions, urban planning, and resource allocation. We outline the significance of this work, the methodology employed, and the potential implications of our research.

*Keywords:- Block-Level Composite Index, Indicators, Normalization, Regional Development.* 

# I. INTRODUCTION

The challenges of regional development, urban planning, and resource allocation have become increasingly complex in today's dynamic world. Traditional methods of assessing development based solely on economic metrics or aggregate data at the city or district level often fail to capture the intricate variations between different localities. As such, there is a growing need for more nuanced and granular approaches to evaluate the development of specific geographical units.

In this context, the development of a composite index at the block level emerges as a vital research endeavor. Blocks, being the smallest administrative units in many countries, provide a unique lens through which to examine and understand the localized factors contributing to or hindering development. This paper introduces the concept of developing a block-level composite index, designed to comprehensively evaluate the multifaceted dimensions of development, including economic, social, agriculture, industrial, tourism, conservation and environmental aspects.

The significance of this research lies in its potential to revolutionize the way we approach urban planning, policy formulation, and regional development strategies. By creating a composite index that operates at the block level, we can pinpoint areas that require targeted interventions, thereby improving the overall well-being and sustainability of a region. Furthermore, this approach can foster greater equity and inclusivity by highlighting disparities that might be concealed in broader regional analyses. This paper aims to provide a step-by-step guide to developing a block-level composite index. It will delve into the methodologies for data collection, selection of indicators, normalization techniques, and the aggregation process. The outcome will be a holistic and quantifiable measure of development at the block level, offering insights that can be leveraged by policymakers, urban planners, and researchers alike.

In the subsequent sections, we will explore the data sources, the methodology used for index creation, and the potential applications and limitations of our approach. By the end of this paper, it is our hope that you will appreciate the value of a block-level composite index and its transformative potential in the field of regional development assessment.

- > Objectives
- To study the overall factors responsible for spatial disparities in the socio-economic condition
- To assess the socio economic condition of the blocks and to identify the backward blocks of the district
- To determine identical clusters and create a composite index based on the influence of indicators.

# II. LITERATURE REVIEW

Level of development assessed often rely on a variety of indicators. Different indicators are measured and reported in units pertinent to the particular metric. Having a common unit of measure is useful for comparison and synthesis of indicators. The synthesis of indicators can be done analytically, statistically, or graphically. Combining of measurements of multiple indicators to produce sustainability scores, composite indices, or aggregates is done to reduce dimensionality and can provide a single holistic value. Industry reports and national inventories are typically based on these highly aggregated data. (N.L. Pollescha, 2016)

Normalization is the process of transforming units of measurement from the original units to common measurement units or to measurements that are unit less. This process is also referred to as unit scaling or standardization, with terminology varying based on the functions utilized in the process and by discipline. For clarity, this paper uses the term normalization to refer to all such processes transforming

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diverse units to common or unit-less quantities. When indicator units vary, normalization is seen as a necessary step prior to aggregation. (N.L. Pollescha, 2016)

Indicators been identified based on Indian constitution Article 243G of the Constitution allows State Legislatures to grant Panchayats necessary powers and authority for selfgovernment. The law may also include provisions for devolution of powers and responsibilities, subject to specific conditions. The Constitution Eleventh Schedule lists 29 subjects for devolution, with State Governments holding authority for power and fund transfers.

#### III. DATABASE AND METHODOLOGY

The study is based on secondary data from various sources particularly from District census Hand book (2022-23). The composite score method has been used to analyze the spatial variation in socio-economic condition of the district. Keeping in view the existing socio economic condition of the district 21 indicators have been selected and grouped into three categories i.e. demographic, Social and economic index

- > Demographic Indicators
- Z1 Population Density
- Z2 Literacy Rate
- Z3 Sex Ratio
- Z4 Work Force Participation
- Z5 Child Population
- Social Indicators
- Z6 Medical Facilities
- Z7 Educational Facilities
- Z8 Self-help Groups
- Z9 Cooperative Societies
- Z10Garmin Banks

#### Economic Indicators

- Z11Area/Yield/Production of Crops
- Z12Area/Yield /Production of Fruits/Vegetables
- *Z13Amc's*
- Z14Irrigation Sources
- Z15Livestock & Poultry
- Z16Production Dairy's
- Z17Production of Meat &Egg
- Z18Factories & Employees
- Z19Mineral Resources & Production
- Z20Connectivity (Length of Roads)
- Z21Land use Pattern

#### IV. COMPOSITE SCORE METHOD

By using these data and indicators an attempt has been made to examine the existing condition of different blocks of Koch Bihar district. Z score has been used to analyze the spatial variation of socio- economic condition.

$$z_i = \frac{x_i - \bar{x}}{s}$$

Where, Zi is the computed Z-score  $\bar{x}$  is the mean and S is the standard deviation (SD). For categorizing the blocks mean and SD value has been calculated. Then SD is divided by 2 and Half of SD is added with mean value to form 'high' category and half of SD is subtracted from mean to form 'low' category and rest values lying between high and low category comes under 'medium' category. Finally, correlation matrix has been shown to show the relationship between demographic, infrastructural and economic with each other and with overall development. The composite score of demographic, infrastructural and economic indicators present overall scenario of Nirmal district.

The blocks have been classified into three groups based on these computed values. "Equation" markup style. Press the tab key and write the equation number in parentheses.

Most developed region "Median+ 0.25SD"	<b>Developed region</b> Below "Median+ 0.25SD & Less than Median-0.25SD"	Less developed region "Less than Median-0.25SD"

Equation 1: Equations for Categorization of Regions

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# V. INTRODUCTION TO STUDY AREA

The Nirmal district is etched out of erstwhile Adilabad District. The district is located in northern Telangana and borders Maharashtra and the Telangana districts of Asifabad (Komuram Bheem) Adilabad Mancherial Jagtial and Nizamabad. The district has two revenue divisions Nirmal and Bhainsa and 19 mandals while the district headquarters is located at Nirmal town.



Map 1 Key Map Showing the Study Area Location

Nirmal district has rich historical and cultural traditions. It is greatly inclined towards art. Several art forms flourish in the district viz. Bindu Yakshaganam, Bagavatham, Pandavulu, Yellamma Katha, Sharada Kathalu, Kolatam and Jada Koppulu. And the most distinguishing of all, the exotic Nirmal Toys, made of wood, have earned national and international recognition. Travel lovers are sure to find the district a huge attraction for its numerous tourist spots. Sri Gnana Saraswathi Temple situated on the banks of River Godavari at Basar is very famous for Akshara Sweekaram – initiation of children into learning. Aptly, the district also takes the credit of having the prestigious IIIT Basara. Kuntala Waterfalls in the district attracts thousands of nature lovers during the fall season. Kadem Minor Irrigation project is another place of interest for visitors. The district also boasts of forts like the Nirmal Fort, and the Quilla Outta fort.

# VI. ANALYSIS & FINDINGS

A. Indicators and its Values based on District Handbook of Statistics.

# > Population

Major population located in Nirmal, Bhainsa & Khanapur due to the connectivity of major highways. It's observed that settlements are formed earlier than others. It's observed that difference between top and bottom 3 population is that they are far away from the district headquarters.



Map 2 Showing the Population of Study Area

# > Population Density

Major population density located in Nirmal, Bhainsa due to the connectivity of major highways & older settlements, it's observed that difference between top and bottom, population is that they are far away from the district head quarters



Map 3 Map Showing the Population Density of Study Area

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#### Child Population Density

Major Child population located in Nirmal, Bhainsa due to the highest populations the same blocks. Its observed that difference between top and bottom 3 child population is showing the pattern of only towards Westside is high other than the ULB s its actually shows the Eastside of the district future population is decline.



Map 4 Map Showing the Child Population Density of Study Area

# ➢ Sex Ratio

Nirmal district is the highest Sex ratio in Telanagana when compared to all districts. If we compare the sex ratio in all blocks it's reducing if we are going far from district headquarters.



Map 5 Map Showing the Sex Ratio of Study Area

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# ➢ Literacy Rate

As per the data most of the literacy rate found in urban areas. Nirmal rural is with highest literacy rate showing the migration of literates because nirmal urban is oldest settlement.



Map 6 Map Showing the Literacy Rate of Study Area

# > Total Workers

As per the data most of the workers found in rural areas. Most of the urban areas is having the lowest workforce because the females most of them are housewife's where as in rural areas they are in the part of beedi workers/Agriculture/Marginal workers.



Map 7 Map Showing the Total Workers in Study Area

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# ➤ Main Workers

As per the data most of the workers are agriculture laborers other workers are in less percentage. As per the data main workers found in nirmal to Bhainsa areas which has the most of the agriculture production due to the black cotton soil.



Map 8 Map Showing the Main Workers in Study Area

# > Marginal Workers

Marginal workers although in very less percentage and most of them are found to be in forest effected region and few of them in nearby nirmal urban .Where as in heavy agriculture area marginal workers are found to be less.



Map 9 Map Showing the Mariginal Workers in Study Area

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#### Educational Facilities

As per the data and primary survey the schools are well established but due to the poor maintenance the enrollment ratio is very less. There is some government schemes like kgbv, tribal welfare, and BC welfare residential schools established. Most of the girl students were enrolled in residential schools because it's free and providing with hygiene kits.



Map 10 Map Showing the Educational Facilities in Study Area

#### Self-Help Groups

Self-help groups plays crucial role in the financial assistance to the rural areas most of the agriculture effected area is enrolled in self-help groups. If we observe the pattern which constantly reducing the enrollment with increases in distance. Selfhelp groups are providing loans averagely 1 lakh rupees loan per year per head with low interest or interest free loans. These loans are diverted for the personal use by the beneficiaries and also extra charges are carried by the middlemen's while repayment of every month installments



Map 11 Map Showing the Self-Help Groups in Study Area

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# ➤ Medical Facilities

As per the data and primary survey there has been medical facilities covered over the district. Due to the UN awareness this facilities are not utilizing for major diseases, but this facilities has been gained more importance after the covid vaccination. The district administration concentrated on more rural areas then the urban areas where actually they are not there example they did not concentrated mudhole because they are several ngo's established medical institutions



Map 12 Map Showing the Medical Facilities in Study Area

#### > Banks

Banks are playing crucial role Indian economy after the digitalization. Aadhar enabled payments, zero bank accounts, UPI payments are in the rural areas are almost adopted but grievances addressing some issues like scams are un effective due to un awareness. Most of the banks are established in urban areas only.



Map 13 Map Showing the Banks in Study Area

# > Co-Operative Societies

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As per the primary survey most of the Cooperative societies are effective with political interest. If we see the pattern of beneficiaries also it will be more in the agriculture area.



Map 14 Map Showing the Co-Operative Societies in Study Area

# > Agriculture Land use

As per the data most of the agriculture land cover is lies on western part of the district due to geographical conditions like soil condition also whereas eastern part is having lowest agriculture cover due to forest area and satmal hills.



Map 15 Map Showing the Agriculture Landuse in Study Area

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# > Principal Crops Sown

Major agriculture production is happening to wards west side of nirmal districts that's the area with black cotton soil which actually produce more yield than the red soil. East side of the district is having low agriculture production although water facilities available due to red soil and area is having impact of forest on it. Paddy, maize, jowar, red gram, soya been, turmeric, sesame are the major productions of the nirmal district.



Map 16 Map Showing the Area of Crops Sown in Study Area

# ➢ Area of Fruits & Vegetables Sown

Major fruits vegetable productions is happening west side of the districts although due to forest area fruits vegetables productions are happening east side in significantly. Mango, orange, brinjal, tomato & ladyfinger are the major productions of the district.



Map 17 Map Showing the Area of Fruits & Vegetables Sown in Study Area

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#### ➤ Agriculture Marketing Committee

Major AMC storages available in nearby urban areas and block level is having very lowest storage. As on primary survey people are facing issue whenever they selling the crops. The crops are taken to mandi then the transfer station or storage but whereas here they are buying and directly taking to the transfer station directly from the farmers because storage un availability, Until they buy the crops need to take care by the farmer if any loss occurs farmer has to be responsible and most of them they actually dried on roads which causes the accidents.



Map 18 Map Showing the AMC's in Study Area

# > Irrigation Sources

Nirmal district is having the highest water resources in telangana because godavri river flows along the length of the districts but the issue lies hers is it's an upstream side. The left canal (Saraswati) is of sriram sager is provided but which passes through only 4 blocks in that 2 of them are covered by the forest area. Major sources of irrigation are tube wells since the area is upstream side the groundwater extracted through bore wells.



Map 19 Map Showing the Irrigation Sources in Study Area

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# ➤ Livestock & Poultry

Livestock population is more found to be in the where they have more population Golla-kurma caste people. Telanagana govt announced program for sheep rearing development program in 2018, in this scheme they provide 20+1 sheep's with 75% subsidy cost.



Map 20 Map Showing the Livestock & Poultry in Study Area

# > Production of Milk

Production of dairy is found more with rural influence it has been found more if the distance traveling more from the urban areas. If we observe the pattern it's also found more with where the irrigation & agriculture facilities are available.



Map 21 Map Showing the Production of Milk in Study Area

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#### > Production of Meet

Production of meat is occur more in rural areas because most of the sheep's and hens are grown over there. If we observe the pattern it has to be found same as with production of dairy and eggs which has clearly indicating where the livestock and agriculture high there we have daily products like milk, eggs, and meat productions are high.



Map 22 Map Showing the Production of Meet in Study Area

#### > Production of Eggs

Production of eggs are more in nearby urban areas due to the demand and markets is more in urban areas. If we see the data the production of eggs are reducing if we are going far from district headquarters.



Map 23 Map Showing the Production of Eggs in Study Area

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# ➢ Road Density

Nirmal district is well connected with highways although no railway line is available, Major nodal points is Nizamabad and Hyderabad other all works Nirmal is the nodal point. Urban nodes are having good infrastructure facilities in compared to others. If we see the roads covered in Map the lowest blocks are the dead end points located geographically due to river and Satmala hills.



Map 24 Map Showing the Road Density in Study Area

#### > Mineral Resources

There is very less mineral sources in overall district. If we see the data major mineral resources are Building stones, Road metal & Gravel.



Map 25 Map Showing the Mineral Sources in Study Area

# > Demographic Index

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BLOCK NAME	Z1	Z2	Z3	Z4	Z5	COMPOSITE SCORE	CATEGORY
Basar	-0.33	0.17	-0.73	-0.66	-0.47	-0.40	Less Developed
Bhainsa	0.37	1.23	2.74	-0.89	-1.53	0.38	Most Developed
Dasturabad	-0.23	-0.44	-1.04	1.01	0.20	-0.10	Developed
Dilawarpur	-0.46	-0.59	-0.78	-0.53	1.30	-0.21	Less Developed
Kaddampeddur	-0.70	-0.14	-0.23	-0.50	0.13	-0.29	Less Developed
Khanapur	-0.22	1.23	0.20	-1.21	-0.86	-0.17	Developed
Kubeer	-0.35	-0.29	0.83	-0.82	0.12	-0.10	Developed
Kuntala	-0.37	-0.14	-0.63	-0.27	0.33	-0.21	Less Developed
Laxmanchanda	-0.09	-0.90	-0.42	1.13	0.46	0.04	Most Developed
Lokeshwaram	-0.41	-1.05	-0.27	1.06	0.75	0.02	Most Developed
Mamda	-0.59	-0.59	-0.24	0.48	0.72	-0.04	Developed
Mudhole	-0.26	0.02	0.07	-0.11	-0.45	-0.15	Developed
Narsapur_G	-0.39	-0.29	-0.62	0.48	0.32	-0.10	Developed
Nirmal	3.47	-0.14	-0.32	0.74	0.58	0.87	Most Developed
Nirmal Rural	1.74	3.21	2.23	-1.08	-3.10	0.60	Most Developed
Pembi	-0.82	-1.05	-0.92	-1.05	0.89	-0.59	Less Developed
Sarangapur	-0.29	-0.29	0.29	1.72	0.49	0.39	Most Developed
Soan	0.24	-0.44	-0.52	1.70	0.39	0.27	Most Developed
Tanoor	-0.31	0.47	0.37	-1.19	-0.27	-0.19	Developed

Table 1 Table Showing the Demographic Index of Study Area

Table 2 Table Showing the Composite Score of Demographic Index

COMPOSITE SCORE							
MEDIAN	-0.10						
SD	0.36						
MOST DEVELOPED	-0.01						
DEVELOPED	-0.01 to -0.19						
LESS DEVELOPED	-0.19						





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If we observe the pattern of demographic index most of the people are located in urban areas which clearly indicating in the map. If we observed the pattern of less developed regions which has been effected by natural features like forest, river, hills& tourism (roaming population)

# ➢ Social Index

#### Table 3 Table Showing the Social Index of Study Area

BLOCK NAME	Z6	<b>Z</b> 7	<b>Z</b> 8	<b>Z</b> 9	Z10	COMPOSITE SCORE	CATEGORY
Basar	1.80	-0.48	0.06	-2.00	0.54	-0.02	Developed
Bhainsa	-0.81	-0.63	-1.48	0.21	0.00	-0.54	Less Developed
Dastuarabad	0.60	-0.04	0.43	-2.00	-0.52	-0.31	Less Developed
Dilawarpur	0.62	-0.52	0.89	0.52	-0.32	0.24	Most Developed
Kaddampeddur	-0.45	0.64	0.52	-0.37	-0.17	0.03	Developed
Khanpur	-0.55	0.39	-0.86	-1.15	-0.23	-0.48	Less Developed
Kubeer	-0.16	0.08	-0.17	0.00	-0.53	-0.16	Less Developed
Kuntala	-0.01	-0.01	0.68	0.19	0.60	0.29	Most Developed
Laxmanchanda	0.29	-0.48	0.91	0.59	-0.02	0.26	Most Developed
Lokeswaram	-0.41	-0.27	0.89	0.83	-0.13	0.18	Most Developed
Mamda	-0.17	0.04	0.66	-0.42	-0.30	-0.04	Developed
Mudhole	-1.11	-0.05	0.29	0.32	0.02	-0.10	Developed
Narsapur_G	-0.27	-0.65	0.70	2.03	-0.68	0.23	Most Developed
Nirmal	-0.90	2.39	-2.72	0.10	3.88	0.55	Most Developed
Nirmal_Rural	-1.07	-1.61	-1.67	-0.12	-0.40	-0.97	Less Developed
Pembi	3.00	2.60	0.17	-0.44	-0.46	0.98	Most Developed
Sarangapur	-0.41	-0.29	0.43	0.54	-0.22	0.01	Developed
Soan	0.25	-0.68	0.49	-0.30	-0.45	-0.14	Less Developed
Tanur	-0.23	-0.43	-0.22	1.46	-0.62	-0.01	Developed

# Table 4 Table Showing the Composite Score of Social Index

COMPOSITE SCORE								
MEDIAN	- 0.01							
SD	0.42							
MOST DEVELOPED	0.10							
DEVELOPED	0.10 to - 0.11							
LESS DEVELOPED	- 0.11							



Map 27 Map Showing the Social Index of Study Area

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If we observe the pattern of Social index most of the facilities and infrastructure it has been planned for rural area but the population is shifted towards urban the facilities are more compared to urban. As per the data except banks all the other social infrastructure are concentrated in rural areas.

#### ➢ Economical Index

# Table 5 Table Showing the Economical Index of Study Area

BLOCK NAME	Z11	Z12	Z13	Z14	Z15	Z16	Z17	Z18	Z19	Z20	Z21	COMPOSITE SCORE	CATEGORY
Basara	0.52	0.06	-0.45	-1.17	-0.74	0.06	-0.09	-0.88	-0.72	-0.39	0.24	-0.33	Less Developed
Bhainsa	1.19	0.84	2.49	1.08	0.05	-0.52	-1.33	-1.32	1.88	0.74	1.39	0.59	Most Developed
Dasturabad	-1.05	-1.17	-0.45	-1.07	-0.65	1.90	0.47	0.47	0.14	-0.62	-0.58	-0.24	Less Developed
Dilawarpur	1.37	0.94	-0.45	1.83	2.35	0.71	1.25	2.20	-0.72	0.19	-0.10	0.87	Most Developed
kaddam	-1.22	-1.35	-0.45	-0.75	-0.49	0.54	-0.31	-0.59	0.14	-0.53	-1.21	-0.57	Less Developed
Khanapur	-1.06	-1.14	0.11	-0.46	-0.41	-0.71	-0.71	-0.75	0.14	-0.42	-1.09	-0.59	Less Developed
Kubeer	0.37	0.11	0.11	-0.54	-0.73	-1.09	-0.82	-1.10	-0.72	-0.21	0.95	-0.33	Less Developed
Kuntala	0.82	0.72	-0.45	0.37	-0.60	1.13	1.34	1.34	-0.72	-0.35	0.94	0.41	Most Developed
Laxmanachanda	0.61	1.22	-0.45	1.58	1.30	0.27	0.27	0.39	-0.72	0.18	0.50	0.47	Most Developed
Lokeshwaram	-0.02	0.25	-0.45	0.32	1.81	0.58	0.82	0.10	-0.72	-0.40	-0.14	0.20	Most Developed
Mamada	-1.00	-0.89	-0.45	-0.47	-0.81	-0.39	0.01	0.97	-0.72	-0.47	-0.98	-0.47	Less Developed
Mudhole	1.74	1.57	-0.45	0.43	0.09	-0.53	-0.20	-0.65	1.01	-0.31	1.74	0.40	Most Developed
Narsapur -G	0.05	0.13	-0.45	0.27	-0.12	-1.09	-0.54	0.16	-0.72	-0.41	0.15	-0.23	Less Developed
Nirmal ( U)	-1.47	-1.39	2.91	-1.62	0.69	-0.52	1.08	1.00	-0.72	3.86	-0.12	0.34	Most Developed
Nirmal (R )	-0.18	0.18	-0.45	0.58	0.24	-1.50	-1.95	-1.44	1.88	0.40	-1.53	-0.34	Less Developed
Pembi	-1.51	-1.68	-0.45	-1.22	-1.62	1.86	2.07	0.99	0.14	-0.53	-1.54	-0.32	Less Developed
Sarangapur	-0.31	-0.18	0.67	-0.31	-0.47	0.92	0.07	0.17	1.88	-0.29	-0.46	0.15	Most Developed
Soan	0.20	0.63	-0.45	1.43	0.82	-1.07	-0.73	-0.17	-0.72	-0.09	0.51	0.03	Most Developed
Tanoor	0.95	1.16	-0.45	-0.28	-0.72	-0.57	-0.70	-0.90	-0.72	-0.35	1.33	-0.11	Developed

 Table 6 Table Showing the Composite Score of Economical Index

COMPOSITE SCORE								
MEDIAN	-0.1132							
SD	0.43							
MOST DEVELOPED	- 0.01							
DEVELOPED	-0.01to-0.22							
LESS DEVELOPED	-0.22							



Map 28 Map Showing the Economical Index of Study Area

Economical index pattern shows left side of the Nirmal district it has been more due to their soil fertility. West side of the area is more due to geographical advantage comparative with east side area because it's more of covered with hillocks and forest.

#### Co-Relation Matrix

Table 7 Table Showing the Co-Relation between Different Indexes

co-relation matrix	Demographic index	Social index	Economical index
Demographic index	1		
Social index	-0.336260019	1	
Economical index	0.282493383	0.214056	1



Chart 1 Chart Showing the Corelation Matrix

Co relation matrix shows that demographic index having positive relation with Economical index which indicates the wherever the population is more their income levels is more compared to other blocks.

Co relation matrix shows that the demographic index having negative relation with social index which indicating wherever the population is high infrastructure facilities required more.

# VII. CONCLUSION

As per the study parameters it's found the Demographical, Social, Economic indexes gives the present scenario within the block level irrespective statistics based on District statistics handbook, where in its required to change the change existing polices as the block level parameters are varying and not suitable for existing policies. Due to which the growth in the block level will lead adverse direction. This indexes will be more suitable for allocation of funds and revision policies based on potential growth within block level.

#### REFERENCES

- [1]. Article published on The Hindu on population growth -https://www.thehindu.com/news/national/telangana/ telangana-urbanising-at-a-faster-pace-than-india-as-awhole/article66654226.ece
- [2]. Page 7 Sarvekshana-journal of the national sample survey organization https://mospi.gov.in/sites/default/ files/publication\_reports/sarvekshna\_issue17\_vol.VI\_ JUL-OCT1982.pdf
- [3]. Handbook on Constructing Composite Indicators page13-https://www.oecd.org/sdd/42495745.pdf

ISSN No:-2456-2165

- [4]. Review of implementation of Panchayati Raj System – Backgrounder- https://pib.gov.in/newsite/Print Release.aspx?relid=11575-
- [5]. Identifying the Economic Potential of Indian Districts -THE WORLD BANK https://documents1.worldbank.org/curated/en/862931 468185344797/pdf/WPS7623.pdf-
- [6]. District Development Indicatorshttps://www.cgg.gov.in/core/uploads/2017/07/WP-156-178.pdf
- [7]. Normalization in sustainability assessment: Methods and implications- https://www.sciencedirect.com/ science/article/abs/pii/S0921800915305899
- [8]. Handbook on Constructing Composite Indicators methodology and user guide https://www.oecdilibrary.org/economics/handbook-on-constructingcomposite-indicators-methodology-and-userguide\_9789264043466-en
- [9]. From\_Regional\_Development\_to\_Growth\_of\_Econo mic\_Clusters\_and\_Nodes\_Policies\_and\_Strategieshttps://www.researchgate.net/publication/345342027\_ From\_Regional\_Development\_to\_Growth\_of\_Econo mic\_Clusters\_and\_Nodes\_Policies\_and\_Strategies/lin k/6022d257a6fdcc37a815ca8b/download
- [10]. Block-Wise Disparities in Socio-Economic Condition of Koch Bihar District, West Bengal https://www.researchgate.net/publication/338752850\_ Block-Wise\_Disparities\_in\_Socio-Economic\_Condition\_of\_Koch\_Bihar\_District\_West\_ Bengal

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He served as a Design Executive for Alufit India Pvt ltd from 2018 to 2021. Worked on creating the BIM models for the Wipro-Gopanpally Campus in Hyderabad and the Hyderabad International Airport.

He was presently concentrating on the GIS-based urban planning solution, which focuses on economic planning for tier 2 and tier 3 cities, blocks, and villages, in an effort to reduce migration to urban areas.