

A Geographical Assessment of Quality of Life in Jashpur District, Chhattisgarh State

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Abstract—Quality of life is the overall degree of health, comfort and happiness an individual or group experiences in their daily life. Quality of life influenced by the social, economic, demographic, health, educational and infrastructural conditions. The study area Jashpur district is characterized by agriculture based economy (79.63 %), rural population (91.08 %), extensive forest cover (42 %) and a significant tribal population (62.28 %). The present study aims to assess the geographical variations in quality of life in Jashpur district of Chhattisgarh state. The present study has been based on both the primary & secondary data. The present study evaluates the quality of life in the study area through selected 10 indicators. A composite Z-Score value is used to measure the overall level of quality of life and to classify the sample villages into high, medium and low categories. The findings indicate that quality of life in Jashpur district varies considerably from one area to another. Developed areas have comparatively better access to education, healthcare, transport, employment and basic facilities, whereas remote rural areas face greater socio-economic challenges. Improving infrastructure and public services is essential for reducing these regional disparities.

Keywords: Jashpur district, Quality of life, Composite Z-score and Improving infrastructure.

I. INTRODUCTION

Quality of life is a multidimensional concept that reflects the social, economic, demographic, infrastructural and environmental conditions in which people live. In geographical studies, quality of life is generally assessed through indicators such as - education, health, housing, employment, income, transport, communication, drinking water, sanitation, electricity and access to basic services. Because these facilities are not distributed uniformly across space, a geographical assessment helps identify regional disparities and areas requiring development intervention [1]. Quality of life represents the overall well-being of individuals and communities and is one of the important indicators of regional development. It is a broad and multidimensional concept that goes beyond income and economic prosperity [2]. The quality of life of people varies from one region to another according to differences in resources, infrastructure, accessibility, economic opportunities and social conditions. A geographical approach is therefore essential for examining these spatial variations and identifying areas of relative advantage and deprivation.

II. STUDY AREA

Jashpur district is located in north-eastern corner of Chhattisgarh state and forms an important geographical region of the state. The district lies between approximately 22° 17' to 23° 15' North latitudes and 83°30' to 84°24' East longitudes. The district is

characterized by a diverse physical landscape consisting of undulating plateaus, hills, valleys, forests and river systems (Ib, Shankh, Dorki, Maini, Kokiya, Lava & Kanhar River). A significant portion of the district is covered by dense forests (26.43 %) which influence the livelihood, settlement pattern and socio-economic conditions of the villagers residing in study area. The district has a predominantly rural population (91.08 %) with agriculture, forest-based activities, livestock rearing and other primary occupations forming important sources of livelihood.

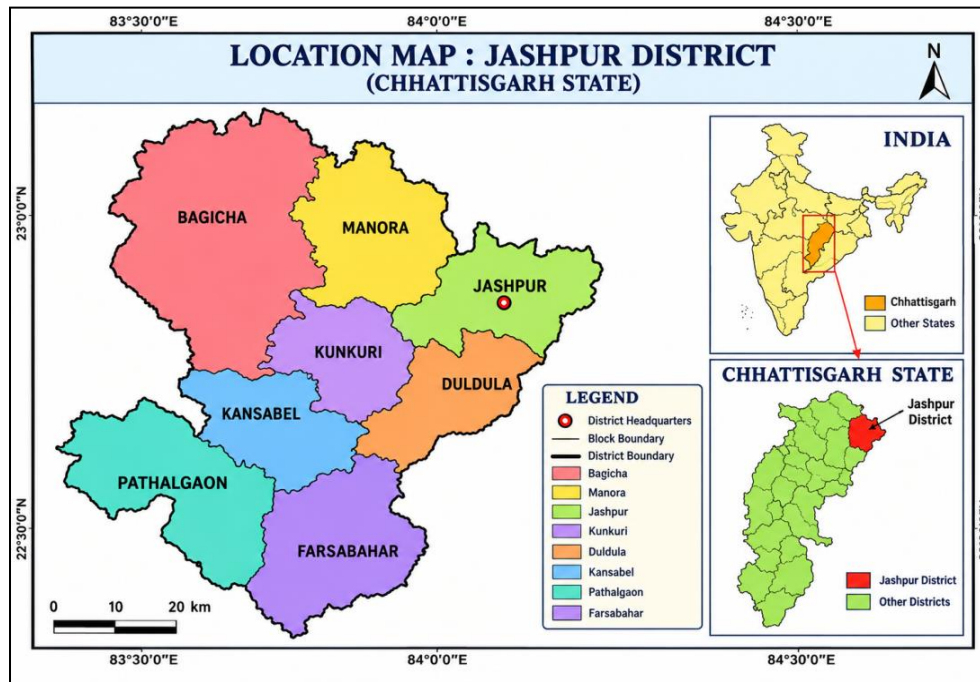


Fig. 1: Location map of the study area.

III. OBJECTIVES OF THE STUDY

The main objectives of the present study are as follows –

1. To assess the spatial variation in quality of life in Jashpur district.
2. To examine the socio-economic conditions of the sample villagers.
3. To analyze the regional disparities in basic amenities and services in the study area.
4. To identify factors affecting the quality of life in the study area.
5. To suggest measures for improving the quality of life in the study area.

IV. DATABASE & RESEARCH METHODOLOGY

The present study is based on both the primary and secondary data.

IV.I. PRIMARY DATA

The primary data has been obtained through a structural questionnaire and field survey. The primary data has been obtained from the head of selected 1216 households (applied random sampling method) regarding ownership of housing, types of house, roofs materials, types of floor, numbers of rooms in house, sources of drinking water, cooking fuels, means of transportation facilities, availability of domestic assets & household facilities.

IV.II. SECONDARY DATA

The secondary data has been collected from the reliable government & institutional sources, including: (i) Census of India - 2011. (ii) District census handbook of Jashpur. (iii) District Administration, Jashpur district. & (iv) Directorate of Economics and Statistics, Govt. of Chhattisgarh state.

The obtained primary data & collected secondary data had been processed on computer through the editing, coding, classification & tabulation process. Next, specific quality of life Indicators is selected and the variables undergo data standardization to ensure fair, normalized comparisons. These standardized inputs are converted into a Composite Z-Score value to rank or score of different index categories; high QoL, medium QoL & Low QoL. Finally, spatial analysis has been done to identify geographic patterns form an interpretation of the findings and apply statistical & cartographic techniques to visualize the final results.

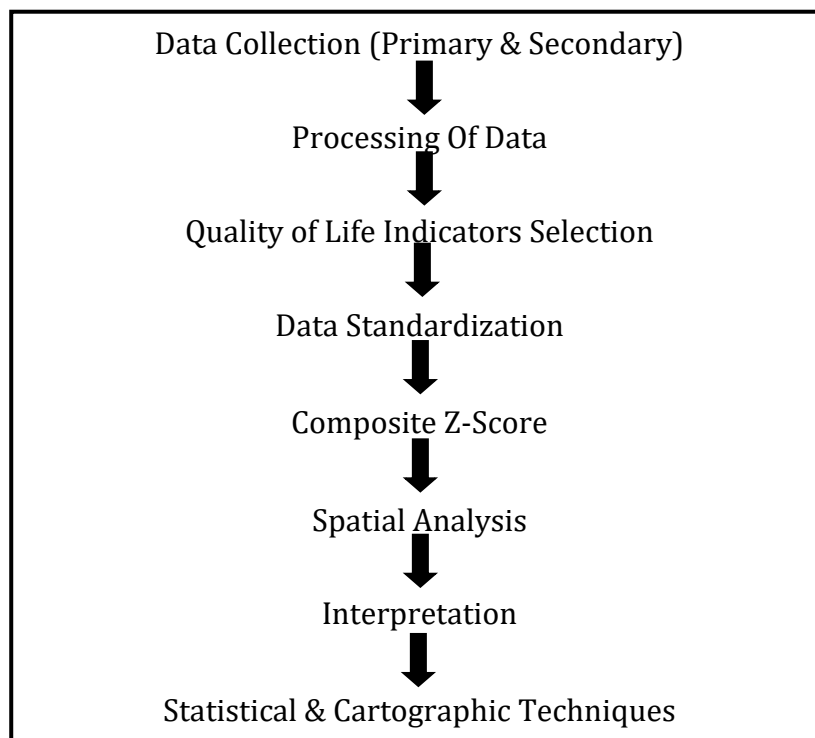


Fig. 2: Overall research methodological framework.

V. RESULTS & DISCUSSION

V.I. INDICATORS OF QUALITY OF LIFE IN STUDY AREA

There are 10 indicators have been selected for the study of geographical assessment of quality of life in Jashpur district of Chhattisgarh state.

V.I.I. OWNERSHIP OF HOUSING

Originally the term 'Ownership' is means that to have things or hold a something for a specific time periods or a life time. Ownership of housing of persons casually represented the economic conditions of the family [3]. The house may be legally his

own or rented or donated by the Government side. A wide difference has been found in the ownership of housing among the surveyed households of the selected sample villages under the study area. Out of the total 1216 surveyed households, 1145 families (94.16 %) have their own houses, 03 families (0.25 %) live in rented houses and 68 families (5.59 %) live in houses built with Government assistance under the 'Pradhan Mantri Gramin Awas Yojana'. There is not a single family among the surveyed households that does not have a house. High ownership of housing index is found in the sample village Chhichhli-A, Laranga, Jobla, Ginabahar, Pharsakani, Joranda Jharia, Kolhenjhariya, Palidih & Kumekela with high standardized Z-score value $> + 0.50$. Low ownership of housing index is found in the sample village Lodhena, Khuntitoli, Basta, Boki, Alori, Asta & Jokari with low standardized Z-score value $< - 0.50$.

V.I.II. TYPES OF HOUSE

Types of house are an important fact of socio-economic survey in respect to the quality of life. It represents the economic condition of households or family of a village. Housing is one of the basic needs of human beings [4]. Apart from being a place of refuge for human beings, it is also a place for mental peace and removal of physical fatigue. By looking at the residence of a human, one can guess about the economic conditions of that person. Out of the total 1216 surveyed households of selected sample villages under the study area 1127 households (92.68 %) have mud house (kaccha), 43 households (3.54 %) have semi - pucca (mixed) and 46 households (3.78 %) have pucca houses. High house type index has been found in sample village Chhichhli-A, Lodhena, Kusumtal, Birla, Lukhi, Dobh & Pakargaon with high standardized Z-score value $> + 0.50$. Low house type index has been found in sample village Nariyar Dand, Alori, Lodhma, Joranda Jharia, Hathibed, Abira, Kolhenjhariya & Dudungjor with low standardized Z-score value $< - 0.50$.

V.I.III. ROOFS MATERIALS

The roof of the house is an upper cover of the house which is fixed on the walls or pillars of the house, consisting of different building materials like rocks-cement, Khaprel, asbestos, rice straw etc. which provide protection to human beings from extremely temperature, rainfall, snowfall, high wind and sunlight. By looking at the nature of the roof located in the houses, the economic condition of that house or family can be ascertained [5]. Out of the total 1216 surveyed households of the selected sample villages under the study area, the houses of 1170 households (96.22 %) have khaprel roof and the houses of 46 households (3.78 %) have pucca roof. High roof materials index has been found in sample village Lodhena, Pindi, Lukhi, Ginabahar, Dobh, Pharsabahar & Pakargaon with high standardized Z-score value $> + 0.50$. Low roof materials index has been found in sample village Chalni, Laranga, Jobla, Alori, Joranda Jharia, Hathibed & Kolhenjhariya with low standardized Z-score value $< - 0.50$.

V.I.IV. TYPES OF FLOOR

House is the basic need of human beings. The condition of the house is very helpful in determining the tendency and standard of living of human beings. Types of floor in a house are a very important indicator for the determination of mans way of living and it is also indicates the development of this area [6]. Floors of the different house are made by different materials like mud / soil (Kaccha house), cement (Pucca or semi-pucca house) and rocks / tiles (fully pucca house). Out of the total 1216 surveyed households of the selected sample villages under the study area, the houses of 1127 households (92.68 %) have soil / kaccha floor, the houses of 74 households (6.09 %) have cemented / pucca floor and the houses of 15 households (1.23 %) have rocks / tiles floor. High floor type index has been found in sample village Chhichhli-A, Lodhena, Kusumtal, Birla, Dobh, Pharsabahar, Pakargaon & Palidih with high standardized Z-score value $> + 0.50$. Low floor type index has been found in sample village Nariyar Dand, Alori, Lodhma, Joranda Jharia, Hathibed, Abira, Kolhenjhariya & Dudungjor with low standardized Z-score value $< - 0.50$.

V.I.V. NO. OF ROOMS

The number of rooms in a house is another major part of housing status. The area of the house governs the number of rooms in a family or households. Naturally rich families have many rooms while poor families have fewer rooms [7]. Out of the total 1216 surveyed households of the selected sample villages under the study area Jashpur district, the numbers of 803 households (66.04 %) have one room, the numbers of 340 households (27.96 %) have two rooms and the numbers of 73 households (6.00 %) have more than two rooms. High number of rooms is found in sample village Ghoghar, Pakargaon, Palidih, Dudungjor, Gala & Kumekela with high standardized Z-score value $> + 0.50$. Low number of rooms has been found in sample village Laranga, Lukhi, Jokari, Lodhma, Dobh, Simda & Abira with low standardized Z-score value $< - 0.50$.

V.I.VI. SOURCES OF DRINKING WATER

Water is another essential source of our life. Pure water in the world is only 3 percent. Therefore, this is expressed in the form of rivers and underground water which is used by human beings as drinking water. Water is one of the basic needs of human beings. Man cannot survive in the absence of water [8]. Well, tube well / hand pump, bore well, Govt. supply etc. are the main sources of drinking water in the selected sample villages under the study area but a considerable difference have been found in the availability of drinking water among the surveyed families or households. Out of the total 1216 surveyed households of the selected sample villages under the study area Jashpur district the well, tube well / hand pump, bore well and Govt. supply is the major source of drinking water in 44 surveyed households (3.62 %), 386 surveyed households (31.74 %), 45 surveyed households (3.70 %) and 741 surveyed households (60.94 %) respectively. High sources of drinking water index has been found in sample village Khuntitoli, Nariyar Dand, Pondi, Birla, Abira & Kolhenjhariya with high standardized Z-score value $> + 0.50$. Low sources of drinking water index has been found in sample village Jobla, Lodhma, Pharsabahar & Dudungjor with low standardized Z-score value $< - 0.50$.

V.I.VII. USE OF COOKING FUELS

The capacity to do work is called energy. The main source of energy is the sun. Scientists have mainly divided the sources of energy into two types; conventional sources of energy and non-conventional sources of energy. Sources of energy as well as fuels for cooking in surveyed households under the study area are wood, kerosene, cow dung, gas and electricity. But a lot of variation has been found in its use among the surveyed households. In the selected sample villages under the study area out of the total 1216 surveyed households as a fuels (sources of energy) facilities for cooking like wood, kerosene, cow dung, gas and electricity is available in 908 households (74.67 %), 26 households (2.14 %), 153 households (12.58 %), 129 households (10.61 %) and 00 households (00 %) respectively. High use of cooking fuels index has been found in sample village Lodhena, Basta, Pondi, Birla, Lukhi, Jokari, Simda & Dudungjor with high standardized Z-score value $> + 0.50$. Low use of cooking fuels index has been found in sample village Ghoghar, Khuntitoli, Boki, Litim, Ginabahr, Lodhma & Hathibed with low standardized Z-score value $< - 0.50$.

V.I.VIII. MEANS OF TRANSPORTATION FACILITIES

Transport plays an important role in the overall development of any Geographical area. Transport is a major infrastructural element through which the pattern of social development and economic development can be prepared in the area. Means of transport are the pillars of development of any region, because means of transport are needed to bring and carry any goods or people from one place to another [9]. In the selected sample villages under the study area out of the total 1216 surveyed households as a means of transportation facilities Cycle, Motor cycle, Car, Bullock cart and Tractor is available in 637 households (52.38 %), 517 households (42.52 %), 13 households (1.07 %), 07 households (0.58 %) and 42 households (3.45 %) respectively. High means of transportation facilities index has been found in sample village Chhichhli-A, Kamarima, Pondi, Palidih & Kumekela with high standardized Z-score value $> + 0.50$. Low means of transportation facilities index has been found in sample village Ghoghar, Laranga, Basta & Litim with low standardized Z-score value $< - 0.50$.

V.I.IX. AVAILABILITY OF DOMESTIC ASSETS

It is clear from the household's survey that due to the study area being rural, the use of domestic materials is very less. Only the essential items of daily life are used by the sample villagers. In the sample villages of the study area, a wide variation has been found in the domestic materials used by the surveyed households. On the basis of primary survey out of the total 1216 surveyed households of the selected sample villages the pressure cooker, television, electric fan, refrigerator, cooler, mobile phone and CD player / home theater is available in 129 households (10.61 %), 73 households (6.00 %), 109 households (8.96 %), 10 households (0.82 %), 27 households (2.22 %), 843 households (69.33 %) and 25 households (2.06 %) respectively. High availability of domestic assets index is found in sample village Dobh, Hathibed & Palidih with high standardized Z-score value $> + 0.50$. Low availability of domestic assets index is found in sample village Lodhena, Khuntitoli, Boki & Jokari with low standardized Z-score value $< - 0.50$.

V.I.X. HOUSEHOLD FACILITIES

It is natural for human development and modern methods to lead life in today's era because man is a social animal. That's why he blocks the speed of development in the day-to-day search of material resources in the society, but is unable to suppress his desires. The peoples of the study area are also not untouched by this. On the basis of primary survey out of the total 1216 surveyed households, the number of households with courtyard facility is 870 (71.55 %) and courtyard facility is not available in 346 households (28.45 %), the number of households with bathroom facility is 171 (14.06 %) and bathroom facility is not available in 1045 households (85.94 %), the number of households with toilet facility is 783 (64.39 %) and toilet facility is not available in 433 households (35.61 %) and the number of households with electric facility is 1205 (99.10 %) and electric facility is not available in 11 households (0.90 %) under the basic requirements in the surveyed households of the study area. High household facilities index has been found in sample village Chalni, Jobla, Litim, Ginabahar & Kumekela with high standardized Z-score value $> + 0.50$. Low household facilities index has been found in sample village Khuntitoli, Pindi, Lukhi, Jokari, Abira with low standardized Z-score value $< - 0.50$.

V.II. COMPOSITE Z - SCORE VALUE OF SELECTED INDICATORS

Table no. 01 presents the composite Z-score values for ten selected quality-of-life indicators across 38 sample villages, based on a survey of 1,216 households conducted in 2021. The indicators include ownership and type of housing, roof and floor materials, number of rooms, sources of drinking water, cooking fuel, transport, domestic assets and household facilities. The composite Z-score indicates the relative position of each sample village compared with the overall sample; positive values indicate conditions above the sample average, while negative values indicate conditions below the average.

The following table reveals considerable spatial variation in the quality of life among the sampled villages. Sample villages such as Hathibed, Pharsakani, Ginalahar, Chhichhli-A, Laranga and Joranda Jharla generally record positive scores across most indicators, suggesting comparatively favorable housing and household living conditions. The sample village Hathibed is particularly notable, with high composite Z-scores for type of house (+1.4552), roof materials (+1.1044), floor types (+1.1565), sources of drinking water (+1.4552) and cooking fuels (+1.1565). Similarly, the sample village Pharsakani records relatively high composite Z-score values, particularly for type of house (+1.2062), floor types and cooking fuels (+1.1210) and sources of drinking water (+1.2062). In contrast, the sample village Khuntitoli, Pakargaon, Lodhena, Boki, Basta and Dudingjor show predominantly negative composite Z-scores value which indicating the relatively poor conditions. The sample village Khuntitoli has particularly low composite Z-scores for type of house (-1.1396), floor types (-1.1963), sources of drinking water (-1.1396) and cooking fuels (-1.1963). The sample village Pakargaon also exhibits very low composite Z-scores for type of house (-1.1396), types of floor (-1.1190), sources of drinking water (-1.1396) and cooking fuels (-1.1190).

Overall, the table demonstrates that quality of life is unevenly distributed among the sample villages, with substantial differences in housing quality, basic amenities, household assets and infrastructure. The results suggest the need for targeted development interventions in sample villages with consistently negative Z-scores, particularly in housing, drinking water, cooking fuels, means of transportation facilities and household facilities.

Table 1: Quality of Life - Composite Z-Score Value of selected indicators

Selected Sample Villages	Composite Z-Score Value									
	Ownership of housing	Type of House	Roof Materials	Types of Floor	No. of Rooms	Sources of Drinking Water	Use of Cooking Fuels	Means of Transport Facilities	Availability of Domestic Assets	Household Facilities
Chhichhli- A	+0.3462	+0.9416	+0.6974	+0.9427	+0.3705	+1.0924	+0.4497	+0.4054	+0.3204	+0.3705
Lodhena	-0.1929	-0.1974	-1.1895	-0.3409	-1.2185	-0.9930	-0.7381	-0.9632	-1.1895	-1.2185
Chalni	-0.2398	+0.0526	+0.2858	+0.1256	-0.6693	+0.2570	-0.0125	-0.0051	+0.2858	-0.6693
Ghoghar	+0.0543	-0.4704	-0.4682	-0.5694	+0.5847	-0.4704	-0.5694	+0.5847	-0.4682	+0.5847
Loro	-0.0638	+0.4431	+0.4741	+0.4022	-0.2241	+0.4431	+0.4022	-0.2241	+0.4741	-0.2241
Kamarima	-0.2398	+0.2599	-0.0908	+0.1654	-0.0927	+0.2599	+0.1654	-0.0927	-0.0908	-0.0927
Laranga	+0.2783	+0.8066	+1.0402	+0.8711	+0.2391	+0.8066	+0.8711	+0.2391	+1.0402	+0.2391
Khuntitoli	-0.4795	-1.1396	-1.0315	-1.1963	-0.4057	-1.1396	-1.1963	-0.4057	-1.0315	-0.4057
Kusumtal	+0.2099	+0.6406	+0.1215	+0.6983	-0.3807	+0.6406	+0.6983	-0.3807	+0.1215	-0.3807
Nariyar Dand	-0.3082	-0.2917	-0.0908	-0.3409	-0.0927	-0.2917	-0.3409	-0.0927	-0.0908	-0.0927
Basta	-0.3766	-0.4704	-0.4682	-0.5694	-0.3204	-0.4704	-0.5694	-0.3204	-0.4682	-0.3204
Pondi	+0.2099	+0.1482	+0.1215	+0.1256	+0.5847	+0.1482	+0.1256	+0.5847	+0.1215	+0.5847
Boki	-0.3766	-0.2917	-0.4682	-0.3409	-0.3807	-0.2917	-0.3409	-0.3807	-0.4682	-0.3807
Jobla	+0.2441	+0.4079	+0.3155	+0.4503	+0.3048	+0.4079	+0.4503	+0.3048	+0.3155	+0.3048
Pindi	-0.1322	+0.1132	-0.2792	-0.1419	+0.2173	+0.1132	-0.1419	+0.2173	-0.2792	+0.2173
Birla	+0.2783	+0.5401	+0.1274	+0.4549	+0.0168	+0.5401	+0.4549	+0.0168	+0.1274	+0.0168
Alori	+0.1347	+0.8066	+0.4741	+0.8711	-0.2241	+0.8066	+0.8711	-0.2241	+0.4741	-0.2241
Litim	-0.0638	+0.1482	-0.0511	+0.1654	+0.3267	+0.1482	+0.1654	+0.3267	-0.0511	+0.3267
Asta	-0.3424	-0.0125	-0.4285	-0.1419	-0.2111	-0.0125	-0.1419	-0.2111	-0.4285	-0.2111
Lukhi	+0.1757	+0.4589	-0.0664	+0.3807	+0.1293	+0.4589	+0.3807	+0.1293	-0.0664	+0.1293

Ginabahar	+0.5516	+1.1540	+1.1044	+0.5562	+0.5847	+1.1540	+0.5562	+0.5847	+1.1044	+0.5847
Jokari	-0.3766	-0.1132	-0.4682	-0.3409	-0.1365	-0.1132	-0.3409	-0.1365	-0.4682	-0.1365
Pharsakani	+0.3804	+1.2062	+0.6179	+1.1210	+0.1954	+1.2062	+1.1210	+0.1954	+0.6179	+0.1954
Lodhma	+0.2783	+0.8066	+0.2858	+0.7001	+0.3267	+0.8066	+0.7001	+0.3267	+0.2858	+0.3267
Kamtara	-0.1322	+0.1132	-0.0511	-0.0964	+0.1954	+0.1132	-0.0964	+0.1954	-0.0511	+0.1954
Korna	-0.0296	+0.6593	+0.1215	+0.5291	-0.0051	+0.6593	+0.5291	-0.0051	+0.1215	-0.0051
Dobh	+0.2099	+0.3540	-0.1162	+0.3852	+0.4101	+0.3540	+0.3852	+0.4101	-0.1162	+0.4101
Simda	+0.2783	+0.4589	+0.1274	+0.5291	+0.4759	+0.4589	+0.5291	+0.4759	+0.1274	+0.4759
Joranda Jharia	+0.2441	+1.1540	+0.8514	+0.9855	-0.1365	+1.1540	+0.9855	-0.1365	+0.8514	-0.1365
Hathibed	+0.4422	+1.4552	+1.1044	+1.1565	+0.4540	+1.4552	+1.1565	+0.4540	+1.1044	+0.4540
Abira	+0.1757	-0.2917	-0.0908	-0.3409	-0.0051	-0.2917	-0.3409	-0.0051	-0.0908	-0.0051
Kolhenjhariya	+0.2100	+0.8572	+0.6631	+0.7001	+0.1074	+0.8572	+0.7001	+0.1074	+0.6631	+0.1074
Pharsabahar	+0.1757	+0.0475	-0.0908	+0.0543	+0.3927	+0.0475	+0.0543	+0.3927	-0.0908	+0.3927
Pakargaon	+0.0714	-1.1396	-0.4079	-1.1190	+0.2560	-1.1396	-1.1190	+0.2560	-0.4079	+0.2560
Palidih	+0.2100	+0.4589	+0.3155	+0.3807	-0.1146	+0.4589	+0.3807	-0.1146	+0.3155	-0.1146
Dudungjor	+0.4146	-0.2917	-0.0908	-0.3409	-0.8009	-0.2917	-0.3409	-0.8009	-0.0908	-0.8009
Gala	+0.2099	+0.2599	-0.0908	+0.1654	+0.4101	+0.2599	+0.1654	+0.4101	-0.0908	+0.4101
Kumekela	+0.4146	+1.0534	+0.8407	+0.5562	+0.2173	+1.0534	+0.5562	+0.2173	+0.8407	+0.2173

Source: Computer by the researcher based on personal survey of 1216 Households, 2021.

V.III. QUALITY OF LIFE INDEX

To classify the sample villages into High, Medium, and Low Quality of Life (QoL) index categories, I have calculate the standard Composite Z-Score (mean score across all 10 standard developmental indicators) for each sample village. Based on the distribution of their standard composite Z-score values, the sample village has been divided into three QoL index categories:

V.III.I. HIGH QUALITY OF LIFE (> + 0.45)

Under this category, sample villages with consistently positive indicator scores and a high composite average (> + 0.45). High quality of life index has been found in 09 sample villages; Hathibed, Ginabahar, Pharsakani, Laranga, Kumekela, Chhichhli-A,

Joranda Jharia, Kolhenjhariya and Lodhma due to robust service infrastructure, diverse economic opportunities, high environmental quality, strong social and institutional support & efficient connectivity & mobility.

V.III.II. MEDIUM QUALITY OF LIFE (- 0.10 TO + 0.45)

Under this category, sample villages with moderate, mixed indicator and a stable composite average near the mean (- 0.10 to + 0.45). Medium quality of life index has been found in 18 sample villages; Simda, Alori, Jobla, Pondi, Dobh, Korna, Birla, Palidih, Lukhi, Gala, Kusumtal, Loro, Litim, Pharsabahar, Kamtara, Kamarima, Pindi and Chalni due to offsetting indicators, baseline development, geographic transitions, livelihood diversification and institutional stagnation.

V.III.III. LOW QUALITY OF LIFE (< - 0.10)

Under this category, sample villages characterized by predominantly negative scores across essential infrastructure indicators (< - 0.10). Low quality of life index has been found in 11 sample villages; Ghoghar, Abira, Nariyar Dand, Asta, Jokari, Dudungjor, Boki, Basta, Pakargaon, Lodhena and Khuntitoli due to geographical isolation, severe utility deprivation, poor transportation networks, deficient social infrastructure and digital & telecom exclusion.

Table 2: Jashpur District - Quality of Life index

Index Categories	Index value	Description	No. of Sample Villages	Name of Sample villages
High Quality of Life	> + 0.45	Consistently positive infrastructure metrics.	09	Hathibed, Ginabahar, Pharsakani, Laranga, Kumekela, Chhichhli-A, Joranda Jharia, Kolhenjhariya and Lodhma
Medium Quality of Life	- 0.10 to + 0.45	Moderate or mixed indicators stabilized near the mean.	18	Simda, Alori, Jobla, Pondi, Dobh, Korna, Birla, Palidih, Lukhi, Gala, Kusumtal, Loro, Litim, Pharsabahar, Kamtara, Kamarima, Pindi and Chalni
Low Quality of Life	< - 0.10	Predominantly negative scores across developmental indicators.	11	Ghoghar, Abira, Nariyar Dand, Asta, Jokari, Dudungjor, Boki, Basta, Pakargaon, Lodhena and Khuntitoli

Source: Computer by the researcher based on personal survey of 1216 Households, 2021.

V.IV. MEASURES TO IMPROVE THE QUALITY OF LIFE IN JASHPUR DISTRICT

Jashpur District in Chhattisgarh state has significant potential due to its forests, natural resources, agriculture and tribal culture. The following measures can help improve the quality of life of its people:

V.IV.I. Improve healthcare: - Strengthen primary health centres, mobile medical units, maternal and child healthcare, and access to essential medicines, especially in remote tribal areas.

V.IV.II. Strengthen education:- Improve school infrastructure, teacher availability, digital learning facilities, scholarships, and vocational education for tribal and rural students.

V.IV.III. Create employment opportunities: - Promote agro-processing, forest-based industries, handicrafts, tourism, small businesses, and skill-development programmes to generate local employment.

V.IV.IV. Improve agriculture: - Provide irrigation, better seeds, modern farming techniques, storage facilities, crop diversification, and better market access for farmers.

V.IV.V. Develop infrastructure: - Improve roads, public transport, electricity, drinking-water supply, sanitation, and reliable internet connectivity in remote villages.

V.IV.VI. Promote tribal welfare: - Protect tribal rights and culture while ensuring access to education, healthcare, livelihoods, and government welfare schemes.

V.IV.VII. Encourage sustainable tourism: - Develop eco-tourism around Jashpur's waterfalls, forests, and cultural heritage while ensuring that local communities benefit economically and the environment is protected.

V.IV.VIII. Improve nutrition and sanitation: - Strengthen Anganwadi services, mid-day meals, clean drinking water, sanitation facilities, and awareness about nutrition and hygiene.

V.IV.IX. Empower women and youth: - Support self-help groups, entrepreneurship, vocational training, financial inclusion, and leadership opportunities.

V.IV.X. Protect the environment: - Promote afforestation, sustainable use of forest resources, soil and water conservation, and renewable energy.

V.IV.XI. Improve governance: - Ensure transparent delivery of government schemes, strengthen local self-government institutions, and increase public participation in district development planning.

Overall, Jashpur's development should focus on inclusive, sustainable and locally appropriate growth, with special attention to tribal communities, remote villages, women, youth and vulnerable households.

VI. CONCLUSION

The geographical assessment of quality of life in Jashpur district of Chhattisgarh state reveals that quality of life (well-being) among the sample villagers is influenced by a combination of socio-economic, demographic, infrastructural, health, educational and environmental factors. The study indicates that quality of life is not uniform throughout the district, but varies spatially due to differences in accessibility, availability of basic services, employment opportunities, literacy, healthcare facilities and economic conditions among the sample villages. The assessment suggests that sample villages with better road connectivity, educational institutions, healthcare facilities, electricity, drinking water, employment opportunities and other basic amenities tend to have comparatively better quality-of-life indexed. Improving the quality of life in Jashpur requires integrated efforts focused on strengthening healthcare & education, improving rural infrastructure, expanding employment & skill-development opportunities, supporting sustainable agriculture & forest-based livelihoods and ensuring access to safe drinking water & sanitation. Special attention should be given to tribal communities, women, children and populations living in geographically isolated areas.

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