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Economic Status, Housing Infrastructure and Sanitation Amenities of Lewa Patidar Communities in Jalgaon District: A Geographical Review

Raju Gaware[1], Nanda Bendale[2]

Abstract

Housing infrastructure and sanitation amenities represent fundamental components of social development and public health. They not only reflect the material conditions under which households live but also serve as indicators of economic well-being and environmental sustainability. This study examines the nature, distribution, and adequacy of housing structures, home ownership patterns, and sanitation facilities with the objective of understanding disparities and their socio-economic implications. Attention is directed toward the availability of residential space, access to household sanitation, wastewater disposal practices, and associated infrastructural characteristics. A geographical perspective is employed to highlight spatial variations and to assess how local environmental and socio-economic factors shape household living conditions. The analysis contributes to broader scholarly discourse on sustainable housing, basic amenities, and community-level development. Findings from this study provide useful insights for planners, policymakers, and researchers concerned with improving residential environments and promoting inclusive development outcomes.

Keywords: *Economic Status, Housing Infrastructure & Ownership, Sanitation Amenities.*

Introduction

Housing infrastructure and sanitation amenities constitute essential components of human well-being and socio-economic development. The built residential environment shapes not only the physical comfort and safety of households but also influences health outcomes, quality of life, and economic productivity. Appropriate housing structures, availability of residential space, access to sanitation, and efficient wastewater disposal systems are widely recognized as indicators of a community's material standard of living and its integration into broader developmental processes. In developing regions, questions of housing and sanitation acquire added significance due to demographic pressures, uneven levels of infrastructural investment, and disparities in access across socio-economic groups. The provision of sanitation facilities, home ownership, and basic household infrastructure often vary spatially, reflecting the interplay of environmental, cultural, and economic factors. Such variations are particularly pronounced at sub-district or tehsil levels, where localized differences in resource availability, administrative capacity, and community preferences come into sharper focus. Understanding housing and sanitation conditions, therefore, provides valuable insight into the lived realities of communities, their economic positioning, and the challenges they encounter in pursuit of better living standards. Academic examination of these dimensions contributes to ongoing policy discourse on sustainable development, public health, and inclusive urban–rural planning. This study situates housing infrastructure and sanitation amenities within a geographical context to assess the extent and nature of spatial disparities, while also interpreting these patterns as reflections of broader socio-economic dynamics.

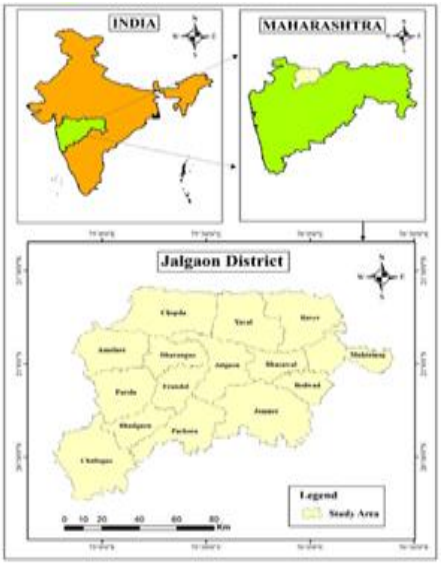

Fig. 1: Location Map f the Study Area

Study Area

Jalgaon district selected as a study region. The Satpuda mountain ranges border it to the north, the Ajanta mountain ranges to the south, the Dhule district to the west, and the Bhuldana district to the east. The district's fertile volcanic soil is perfect for growing bananas and cotton. The district is located between longitudes 20° N and 21° N and 74° 55′ and 76° 28′ East. According to the 2011 census, the district has a population of 42,29,917 and a population density of 360 persons per square kilometer, covering an area of 11,776 square kilometers. 13,42,711 people lived in the district's total urban area, while 28,87,206 people lived in its rural areas (Census, 2011).

Objectives of the Study

- To examine the housing structure, home ownership patterns, and residential space availability among the surveyed households.
- To assess the accessibility and adequacy of sanitation amenities and wastewater disposal methods among the sample households.
- To analyze tehsil-wise spatial variations in housing infrastructure and sanitation facilities, and to interpret their socio-economic implications.

Methodology and Data Collection

The methodological framework adopted for the present study was designed to analyze the housing infrastructure, sanitation amenities, residential space availability, and home ownership patterns among selected households. Given the thematic orientation of the research, both qualitative and quantitative analytical techniques were utilized to examine the data. Quantitative data facilitated the assessment of tehsil-wise variations and household-level differences in housing and sanitation characteristics, while qualitative inputs enabled better contextual interpretation of socio-economic issues influencing household living conditions.

Primary and secondary data sources were employed in the study. Primary data were collected directly from households through structured questionnaires, field observations, and household-level interactions. Secondary data were gathered from official records, census publications, district handbooks, socio-economic reports, and relevant academic literature, which collectively contributed to background understanding and contextual analysis.

Sample Size

The number of Lewa Patidar migrant households tested using structured questionnaires is included in the sample size. "Approximately 375 households in all were surveyed.

Findings & Discussion

Type of Housing Structures among the Respondent Lewa Patidar Families

Housing constitutes one of the most visible indicators of socio-economic well-being and quality of life within any community. The condition, durability, and type of residential structures often reflect household income, asset accumulation, access to resources, and exposure to urban or semi-urban influences. As shown in Table No. 1 and illustrated in

Table No. 1: Type of Housing Structures among the Respondent Lewa Patidar Families in Jalgaon District.

Tehsil	Kaccha (Temporary)	%	Semi-Pucca (Mixed)	%	Pucca (Permanent)	%	Total
Bodwad	4	13.33	10	33.33	16	53.33	30
Muktainagar	2	14.29	5	35.71	7	50.00	14
Jamner	0	0.00	4	17.39	19	82.61	23
Jalgaon	6	22.22	3	11.11	18	66.67	27
Pachora	1	9.09	3	27.27	7	63.64	11
Bhusawal	0	0.00	1	2.44	40	97.56	41
Chalisgaon	2	11.11	10	55.56	6	33.33	18
Dharangaon	1	5.00	10	50.00	9	45.00	20
Raver	2	4.55	2	4.55	40	90.91	44
Yawal	8	12.31	17	26.15	40	61.54	65
Chopda	1	6.25	1	6.25	14	87.50	16
Bhadgaon	2	20.00	2	20.00	6	60.00	10
Amalner	2	10.00	2	10.00	16	80.00	20
Erandol	0	0.00	3	18.75	13	81.25	16
Parola	2	10.00	4	20.00	14	70.00	20
Total	**33**	**8.80**	**77**	**20.53**	**265**	**70.67**	**375**

Source: Dada Collected and Compiled by Researcher.

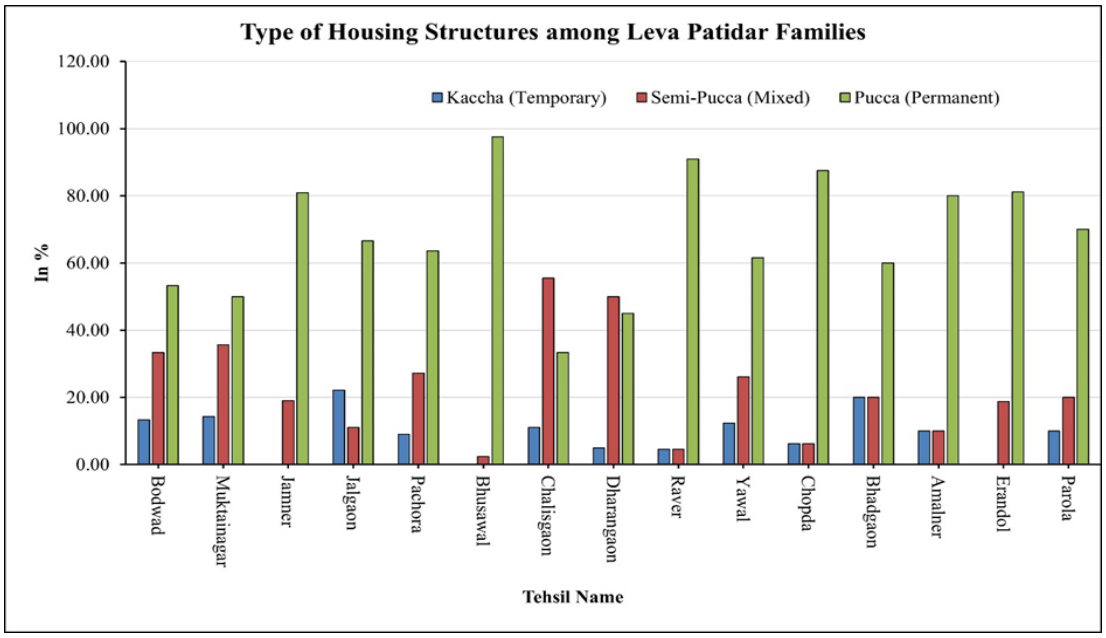

Fig. No. 2

Figure No. 2, the distribution of housing structures among the 375 surveyed Lewa Patidar families in Jalgaon district reveals considerable spatial differentiation across tehsils. The dominance of pucca houses in tehsils such as Bhusawal and Raver indicates higher levels of economic security and long-term investment in residential infrastructure, while the presence of semi-pucca and kaccha houses in other tehsils points to transitional stages of development and varying access to financial and material resources.

At the district level, the aggregated data confirm that a significant majority of households (approximately 70.67 percent) reside in pucca dwellings, whereas only a small proportion remains confined to kaccha housing. This distribution suggests that a substantial segment of the Lewa Patidar community has achieved relatively advanced levels of residential development, likely influenced by stable income flows, agricultural productivity, diversified occupations, and improved access to construction materials and credit facilities. The persistence of semi-pucca and kaccha structures in select tehsils, however, indicates internal disparities shaped by differences in irrigation facilities, proximity to urban centers, and micro-level socio-economic gradients.

These spatial variations provide valuable insight into the geography of socio-economic progress among the Lewa Patidar community. Housing infrastructure serves not only as an index of current living standards but also as an expression of long-term aspirations, asset-building strategies, and community-level development trajectories. Thus, the observed housing patterns form a crucial component in assessing rural living conditions and regional development, as well as in interpreting broader socio-economic dynamics in the Jalgaon district.

Tehsil-wise Home Ownership Status among the Surveyed Lewa Patidar Families

Home ownership represents an important indicator of economic security, investment capacity, and financial stability among rural communities. As shown in Table No. 2 and illustrated in Figure No. 3, the distribution of home ownership among the 375 surveyed Lewa Patidar households across Jalgaon district reveals a strong orientation toward residential ownership, indicative of long-term asset formation and a deeply rooted cultural emphasis on property. High ownership levels in tehsils such as Jamner, Chopda, Bhadgaon, and Raver—where ownership approaches or reaches 100 percent—highlight the economic strength and continuity of ancestral landholding practices within the community. Similar patterns in tehsils such as Bhusawal, Bodwad, Chalisgaon, Yawal, and Amalner further reinforce the trend of housing stability and financial independence.

Table No. 2 Tehsil-wise Home Ownership Status among the Surveyed Lewa Patidar Families in Jalgaon District.

Tehsil	Yes	No	Total
Bodwad	26	2	28
Muktainagar	12	1	13
Jamner	21	0	21
Jalgaon	20	9	29
Pachora	9	1	10
Bhusawal	38	3	41
Chalisgaon	17	2	19
Dharangaon	18	2	20
Raver	42	2	44

Yawal	60	5	65
Chopda	16	0	16
Bhadgaon	10	0	10
Amalner	18	2	20
Erandol	14	3	17
Parola	16	6	22
Total	**337**	**38**	**375**

Source: Data Collected by Researcher.

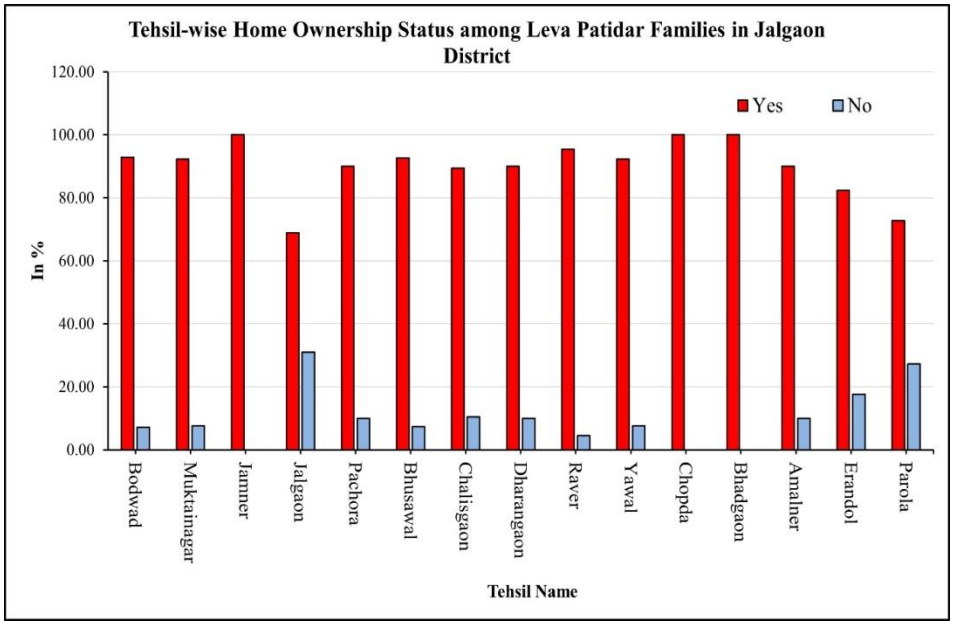

Fig. No. 3

At the district scale, 337 households (approximately 89.87 percent) reported owning their residence, while only 38 households (10.13 percent) did not. This dominant share of ownership strongly points toward socio-economic resilience, sustained agricultural or mixed occupational incomes, and intergenerational property transfer. The presence of non-owning households in tehsils such as Jalgaon, Parola, and Erandol suggests localized disparities influenced by semi-urban conditions, rental markets, or fragmented financial capacities. These intra-district contrasts highlight the layered and spatially differentiated socio-economic fabric of the community.

Overall, the observed pattern of residential property ownership constitutes a central component of socio-economic well-being for the Lewa Patidar households in Jalgaon district. High ownership levels signal long-term stability, generational wealth accumulation, and secure living conditions, making housing tenure an important variable for interpreting the broader geography of socio-economic progress within the community.

Tehsil-wise Access to Household Sanitation among the Sampled Lewa Patidar Families

Access to adequate household sanitation constitutes an essential dimension of socio-economic development and quality of life. For rural communities, it reflects both the financial capacity of households and the degree of infrastructure penetration as well as awareness regarding health, hygiene, and environmental safety. As illustrated in Table No. 3 and Figure No. 4, sanitation coverage among the 375 surveyed Lewa Patidar households in Jalgaon district demonstrates a generally advanced infrastructural profile, with most tehsils recording very high levels of access. Several tehsils, including Muktainagar, Pachora, Chopda, and Erandol, have achieved complete coverage, while others such as Raver, Jamner, Bhusawal, and Amalner register access levels exceeding 90 percent. These patterns strongly suggest that sanitation infrastructure has become an accepted household necessity and that investments in hygienic amenities have increased, supported by government programs and higher economic capabilities.

At the district level, 349 households (93.07 percent) reported having access to sanitation facilities, while only 26 households (6.93 percent) lacked such amenities. This substantial coverage indicates significant progress in basic infrastructure and public health conditions within the community. However, selective pockets of deprivation persist in tehsils such as Jalgaon, Yawal, and Bodwad, where gaps in sanitation access reveal intra-community inequalities potentially shaped by urban rental dynamics, financial limitations, or older housing stock. These disparities underscore the continued need for targeted socio-economic interventions and awareness-building efforts, particularly in areas where sanitation adoption has not reached saturation.

Table No. 3: Tehsil-wise Access to Household Sanitation among the Sampled Lewa Patidar Families in the Study Area.

Tehsil	Yes	%	No	%	Total
Bodwad	23	85.19	4	14.81	27
Muktainagar	14	100.00	0	0.00	14
Jamner	22	95.65	1	4.35	23
Jalgaon	18	75.00	6	25.00	24
Pachora	10	100.00	0	0.00	10
Bhusawal	32	94.12	2	5.88	34
Chalisgaon	16	88.89	2	11.11	18
Dharangaon	19	95.00	1	5.00	20
Raver	49	98.00	1	2.00	50
Yawal	67	91.78	6	8.22	73
Chopda	16	100.00	0	0.00	16
Bhadgaon	9	90.00	1	10.00	10
Amalner	19	95.00	1	5.00	20
Erandol	16	100.00	0	0.00	16
Parola	19	95.00	1	5.00	20
Total	349	93.07	26	6.93	375

Source: Data Collected by Researcher.

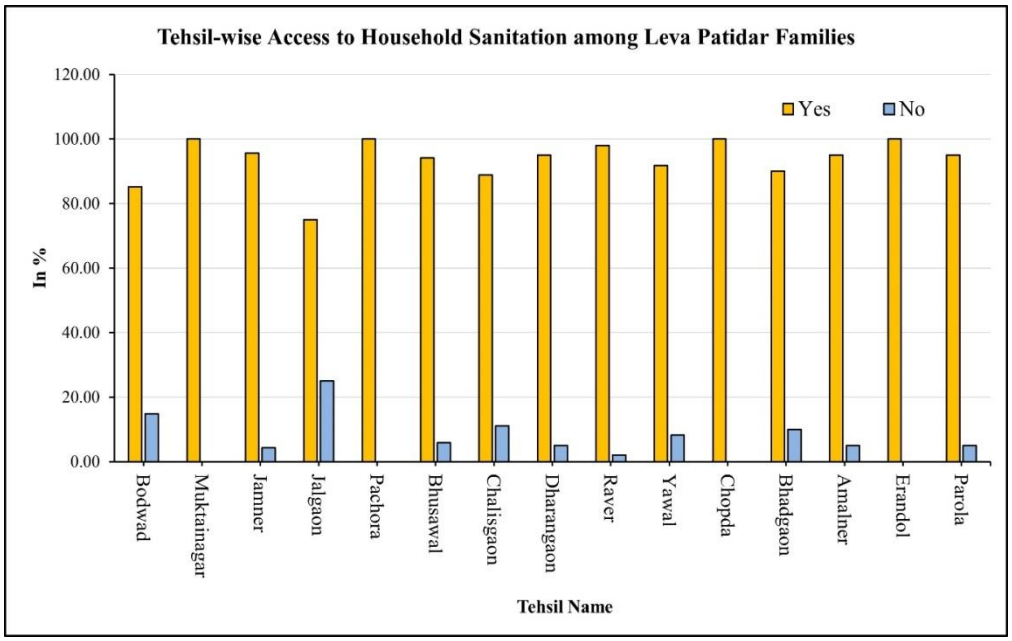

Fig. 4

Overall, the spatial distribution of sanitation access reflects both changing lifestyle norms and the strengthening economic status of the Lewa Patidar community in Jalgaon district. Sanitation facilities—once considered a supplementary amenity—have evolved into a near-universal household attribute, demonstrating how infrastructure, income stability, and policy outreach collectively contribute to improved living standards. The patterns observed in Table No. 3 thus remain central to understanding the broader socio-economic trajectory of the community.

Wastewater Disposal Methods

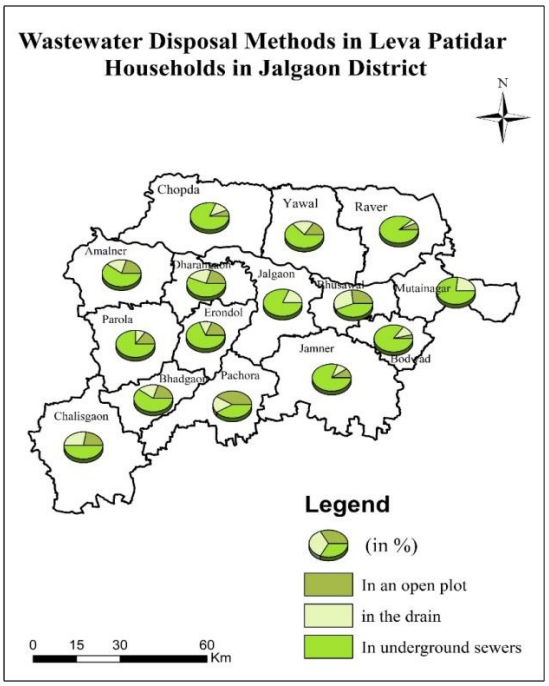

Fig. No. 5

Wastewater disposal represents a critical dimension of household sanitation, environmental health, and infrastructural development. Among rural communities, the method by which wastewater is managed reflects both socio-economic capacity and public health awareness. As presented in Figure No. 5, wastewater disposal practices among the 375 surveyed Lewa Patidar households in Jalgaon district exhibit notable spatial variation across tehsils. A majority of households now make use of underground sewerage systems, indicating improved sanitation infrastructure and a gradual shift away from environmentally hazardous practices such as open plot disposal or direct drainage. Tehsils such as Bodwad, Muktainagar, Jamner, and Raver demonstrate particularly high levels of infrastructure integration, with sewer coverage exceeding 75 percent, suggesting advanced household investment and effective adoption of sanitary systems.

At the district level, 68 percent of households reported using underground sewerage, while 17.60 percent and 14.40 percent continued to rely on open drains and open plots, respectively. These residual methods reveal continuing infrastructure gaps and economic or awareness constraints within certain pockets of the community. Tehsils such as Pachora, Bhusawal, and Yawal display transitional profiles where multiple disposal methods coexist, reflecting uneven spatial development and varied levels of municipal or household-led sanitation initiatives. In contrast, more progressive tehsils show minimal reliance on outdated methods, pointing toward greater alignment with modern infrastructure and improved public health standards.

Collectively, the wastewater disposal patterns highlight the broader socio-economic and spatial dynamics shaping rural sanitation transformation within the Lewa Patidar community. Rising adoption of sewerage systems indicates infrastructural progress, enhanced environmental health awareness, and increased financial capability, whereas lingering inequalities in semi-urban or infrastructural lagging tehsils underscore the need for targeted interventions, planning, and awareness programs. As such, wastewater management emerges as a meaningful proxy for assessing the ongoing socio-economic development trajectory of the community.

Residential Space Availability

The availability of residential space serves as an important indicator of household welfare, living standards, and economic capacity. Within largely agrarian and semi-urbanizing communities such as the Lewa Patidar in Jalgaon district, the number of rooms per dwelling reflects not only financial resources but also lifestyle transitions, privacy norms, sanitation practices, and aspirations toward spatial quality of life. Table No. 4 presents the distribution of residential space across 375 surveyed households, categorized by the number of available rooms. The spatial variation across tehsils highlights differing levels of economic progress and infrastructure access. Larger tehsils such as Yawal and Raver show concentrations of families living in two- to four-room houses, suggesting stable medium-sized household profiles and moderate economic strength. Bhusawal stands out due to its comparatively higher proportion of six-room and larger dwellings, indicating that a segment of households benefits from better economic opportunities influenced by urban-industrial connectivity.

Across smaller tehsils such as Pachora, Bhadgaon, and Chopda, residential space is more modest, with most households occupying two- or three-room dwellings, reflecting more limited economic capacity and fewer diversification opportunities. Other tehsils, including Jamner, Chalisgaon, Dharangaon, Parola, Amalner, and Erandol, display mixed distributions indicative of varied levels of financial stability, occupational diversification, and spatial household planning. At the district level, the largest share of households (109) occupy three-room dwellings, followed by substantial segments in four-room

Table No. 4: Residential Space Availability (No. of Rooms) in Respondent Lewa Patidar Households in the Study region.

Tehsil	1	2	3	4	5	Above 5	Total
Bodwad	0	0	2	4	5	1	12
Muktainagar	1	4	5	1	2	0	13
Jamner	0	3	8	8	4	0	23
Jalgaon	2	13	6	3	3	0	27
Pachora	0	5	3	2	0	0	10
Bhusawal	0	3	9	10	6	13	41
Chalisgaon	0	8	4	2	3	1	18
Dharangaon	2	4	4	5	3	2	20
Raver	2	6	14	20	8	7	57
Yawal	5	17	22	19	4	0	67
Chopda	1	3	6	11	0	0	21
Bhadgaon	1	2	4	2	1	0	10
Amalner	2	6	6	4	2	0	20
Erandol	1	7	7	1	0	0	16
Parola	2	6	9	2	1	0	20
Total	**19**	**87**	**109**	**94**	**42**	**24**	**375**

Source: Based on Primary Data Collected by the Researcher.

(94 households) and two-room (87 households) categories. Only a small number of households (19) reside in single-room structures, while a notable minority (24 households) occupy six-room and larger houses, signaling upward mobility among a subset of families.

This district-wide pattern points toward improving residential standards, increasing spatial adequacy, and a gradual shift away from spatially constrained living conditions. The prominence of medium-sized housing among the Lewa Patidar community suggests strengthening household economies and evolving expectations for living space. Overall, Table No. 4 illustrates both the socioeconomic stratification and the trajectory of residential development within the community, reinforcing the broader interpretation that housing conditions serve as a meaningful proxy for socio-economic progress in rural Maharashtra.

Conclusion

The analysis of household-level housing indicators among the Lewa Patidar community in Jalgaon district reveals a strong and consistent pattern of socio-economic advancement. High proportions of pucca housing, substantial rates of home ownership, and widespread access to sanitation facilities collectively demonstrate that the community has achieved considerable material stability and infrastructural integration. These indicators reflect not only the financial capacity of households but also generational investments in long-term assets and improvements to basic living conditions. Tehsil-wise variations underscore the influence of spatial factors such as urban proximity, irrigation availability, occupational diversification, and infrastructural penetration in shaping the community's residential development trajectory.

At the same time, the distribution of wastewater disposal systems and residential space highlights internal stratification and ongoing transitions within the community's economic profile. While the dominant use of underground sewerage systems and prevalence of medium-sized dwellings point toward improving quality of life and rising expectations for modern amenities, residual reliance on open disposal methods and limited room availability in select tehsils signal pockets of infrastructural lag and economic inequality. Collectively, these findings confirm that the Lewa Patidar community is positioned on an upward socio-economic path, characterized by strengthening household stability, greater spatial comfort, and enhanced health-related infrastructure, albeit tempered by tehsil-specific disparities that warrant targeted development interventions.

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Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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