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Availability of Basic Amenities among Rural Households in Haryana: Field Survey

Sushma Nain[1*] | Kiran Devi[2*]

[1]Research Scholar, Department of Economics, GJUS&T, Hisar, Haryana, India.
[2]Assistant Professor, Department of Economics, GJUS&T, Hisar, Haryana, India.

[*]Corresponding Author: nainsushma1998@gmail.com

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ABSTRACT

A good living standard depends on access to basic facilities, including electricity, drainage, drinking water, and sanitary facilities. In India, the development of numerous policies and initiatives has placed a strong emphasis on these demands due to their importance. This paper analyzes housing inequality in Haryana, highlighting the significance of housing conditions as key determinants of health. Access to adequate housing and basic amenities is crucial for improving public health. In this context, we examine the distribution of housing and essential facilities, including housing type, kitchen availability, cooking fuel, drinking water access and source, electrification, toilet facilities, drainage, and residential surroundings. The findings reveal an unequal distribution of housing conditions. While the Indian government has made efforts under the Sustainable Development Goals to enhance access to safe drinking water and sanitation, a significant gap remains between policy goals and actual living conditions. This study is based on primary data collected from a sample of 400 respondents across six districts of Haryana, selected using a multistage random sampling method. The results were analyzed using descriptive statistics, t-test with the help of SPSS.

***Keywords**: Basic Amenities, Inequality, Haryana, Housing Condition, Sustainable Development.*
***JEL Codes:** B55, D63, J11, J12, O15, Q01.*

Introduction

A person's health is greatly influenced by the circumstances surrounding in which she is born, grows, works, lives, and ages. These are known as the social determinants of health (SDH) (Marmot and Wilkinson 1999; WHO 2010) and are an important part of the post-2015 development agenda (UNDP 2015).Inequalities in these fundamental aspects of life often lead to differences in health status. As a result, a social gradient in health is commonly observed, where individuals in higher socioeconomic groups tend to have significantly better health outcomes than those in disadvantaged conditions (Marmot 2005; Marmot et al. 2012; Wilkinson and Marmot 2003).

Access to essential services like water, sanitation, and housing is a key focus of the global discussion on social determinants of health (Bambra et al. 2010). A WHO report states that around one-quarter of the global disease burden, and over one-third in children, is caused by modifiable environmental factors (Prüss-Üstün and Corvalán 2006). For example, the majority of instances of diarrhea, which is a major cause of death for children under five, are associated with contaminated water, inadequate sanitation, and poor hygiene (Black et al. 2003; WHO 2014).It is generally accepted that the

entire influence of housing quality is only apparent over an extended period, even though it has frequently been connected to the spread of infectious diseases, particularly in historical situations (Mary 2004; Thomson and Thomas 2015). Along with education and the work environment, access to water, sanitation, and housing forms the foundation of population-based health improvement and disease prevention strategies, as opposed to relying on costly medical care focused on treating diseases.

The NFHS-5 reports that 96% of Indian families have access to better drinking water, 69% have better sanitation, 97% have electricity, and 59% have clean fuel for cooking. Access to electricity and drinking water has greatly improved, but problems with clean fuel use and sanitation still exist. Compared to rural areas, urban areas typically offer better access (Ministry of Health and Family Welfare, 2021).

This article attempts to analyze the amenities in Haryana, including access to toilet facilities, safe drinking water, cooking fuel, drainage, and electricity. The second section presents a literature review, while the third discusses the data sources and methodology. The fourth section examines data analysis, addressing multiple deprivations and socio-economic groups. Finally, the last section concludes with the findings.

Objectives

- To check the availability of basic amenities in rural Haryana.
- To check the variation in basic amenities among the selected districts.
- To check the relationship between socio-economic conditions and basic amenities.

Literature Review

Nayar, K.R.(1997), “Research on housing facilities and health highlights that factors like proper housing, access to clean drinking water, and adequate sanitation play a crucial role in improving people's health. In some cases, these basic amenities can have an even greater impact on overall health than medical services”. Basic amenities in rural India are still insufficient, especially for marginalized groups like poor households, Scheduled Castes (SC), and Scheduled Tribes (ST). The absence of essential services such as drinking water, sanitation, electricity, and drainage highlights significant socio-economic disparities.(Kumar Arjun, 2015).These are essential for meeting basic human needs and enhancing the overall quality of life in the nation(Mishra and Shukla, 2013).Although both rural and urban areas saw improvements between 2001 and 2011, the number of deprived households increased, particularly in rural regions and small to medium-sized urban towns. Bhagat also stated that the lack of drinking water, sanitation, and toilet facilities has led to a rise in various gastrointestinal diseases(Kumar Arjun 2015, R.B. Bhagat 2011).(S. K.Chandoke, 1997) mentioned in one of his articles that the villages face a shortage of healthcare resources and specific challenges. Poor planning and inadequate maintenance of areas outside homes contribute to a more distressing environment.

Methodology

This study is based on primary data collected from rural areas of Haryana. A total sample of 400 respondents was selected using a multistage random sampling method to ensure a representative distribution across different socio-economic groups. The study focuses on six districts: Jind, Kaithal, Kurukshetra, Faridabad, Rohtak, and Gurugram, chosen based on demographic diversity and regional variations in amenities.

To analyze the data, descriptive statistics were used to summarize and interpret the key findings, providing insights into the distribution of amenities across households. Additionally, t-tests were conducted to examine significant differences between various groups. All statistical analyses were performed using SPSS 23, ensuring accuracy and reliability in data processing. Tabulation and graphical methods have been employed for analysis using MS Excel.

Table 1: Demographic Profile of Respondents

Demographics	Frequency	Percent
Age		
Below 20	1	0.25
20-30	136	34.00
31-40	147	36.75
41-50	105	26.25
50-60	11	2.75

Community		
General	227	56.75
Bc	55	13.75
Sc	76	19.00
Other	42	10.50
Marital status		
Married	375	93.75
Widow	25	6.25
Education		
Illitrate	79	19.75
Primary	58	14.50
High school	98	24.50
Higher secondary	53	13.25
Degree & above	112	28.00
Family type		
Joint	246	61.50
Single	154	38.50
Working status		
Working	99	75.25
Not working	301	24.75
Occupation		
Govt. employ	34	8.5
Private employ	20	5
Labourer	25	6.25
Self-employ	19	4.75
Unemployed	302	75.50

Source: Computed through primary data.

The demographic characteristics of the respondents provide a comprehensive understanding of their background.

The majority of respondents fall within the **31-40 years age group (36.75%)**, followed by **20-30 years (34%)**. A significant portion (26.25%) belongs to the **41-50 years** category, while a small percentage (2.75%) are aged between **50-60 years**. Only **0.25% of respondents are below 20 years old**, indicating that the sample is predominantly composed of adults in their prime working and family-building years.

The largest proportion of respondents belongs to the **General category (56.75%)**, followed by the **Scheduled Caste (SC) at 19%**, **Backward Class (BC) at 13.75%**, and **Others at 10.5%**. This distribution suggests a diverse representation of social groups within the sample.

A vast majority of respondents are **married (93.75%)**, while **only 6.25% are widowed**, highlighting that most respondents belong to active family units.

Education levels vary among the respondents. The highest proportion holds a **degree or above (28%)**, followed by **high school education (24.5%)**. A considerable percentage (19.75%) is **illiterate**, while **14.5% have completed primary education** and **13.25% have finished higher secondary education**. This data indicates that while many respondents have attained formal education, a significant segment still lacks basic literacy.

The **majority (61.5%)** of the respondents live in **joint families**, while **38.5% belong to single-family households**. This suggests that traditional joint family structures are still prevalent.

Among the respondents, **75.25% are employed**, while **24.75% are not working**. This high employment rate suggests active economic participation, although a quarter of the population remains unemployed.

Within the employed category, **8.5% are government employees**, **5% work in private jobs**, **6.25% are laborers**, and **4.75% are self-employed**. However, a significant portion (**75.5%**) is **unemployed**, which may indicate dependency on family earnings or other non-formal sources of income. This demographic analysis provides crucial insights into the socio-economic background of the respondents, highlighting variations in education, employment, and family structures.

Basic Amenities	General	BC	SC	Others	Total
Nature of house					
Kaccha	9 (3.96)	3 (5.46)	7 (9.21)	3 (7.14)	22
Pucca	186 (81.94)	49 (89.09)	59 (77.63)	37 (88.10)	331
Semi pucca	32 (14.10)	3 (5.45)	10 (13.16)	2 (4.76)	47
Total	227	55	76	42	400
Kitchen					
Yes	200 (88.11)	44 (80.00)	68 (89.47)	37 (88.10)	349
No	27 (11.89)	11 (20.00)	8 (10.53)	5 (11.90)	51
Total	227	55	76	42	400
Fuel for cooking					
Firewood	68 (29.95)	24 (43.63)	14 (18.42)	22 (52.38)	128
LPG	96 (42.29)	17 (30.90)	14 (18.42)	17 (40.47)	144
Both	63 (27.75)	14 (25.45)	48 (63.15)	3 (7.14)	128
Total	227	55	76	42	**400**
Drinking water					
Filtered	113 (49.77)	14 (25.45)	9 (11.84)	24 (57.14)	160
Not filtered	114 (50.22)	41 (74.54)	67 (88.15)	18 (42.85)	240
Total	227	55	76	42	**400**
Source of drinking water					
Bore well	62 (27.31)	9 (16.36)	4 (5.26)	18 (42.85)	93
Facility at home	119 (52.42)	12 (21.81)	33 (43.42)	13 (30.95)	177
Public tap	45 (19.82)	34 (61.81)	39 (51.31)	11 (26.19)	129
Open well	1 (0.44)	0 (0)	0	0 (0)	1
Total	227	55	76	42	**400**
Electification in house					
Yes	224 (98.67)	53 (96.36)	76 (100)	38 (90.47)	391
No	3 (1.32)	2 (3.63)	0 (0)	4 (9.52)	9
Total	227	55	76	42	**400**
Toilet facility					
Flush out	227 (100)	52 (94.54)	74 (97.36)	38 (90.47)	391
Open place	0 (0)	3 (5.45)	2 (2.63)	4 (9.52)	9
Total	227	55	6	42	**400**
Drainage facility					
Available	224 (98.67)	50 (90.90)	73 (96.05)	38 (90.47)	385
Not available	3 (1.32)	5 (9.09)	3 (3.94)	4 (9.52)	15
Total	227	55	76	42	**400**

Residential surrounding					
Clean	210 (92.51)	46 (83.63)	64 (84.21)	35 (83.33)	355
Congested	15 (6.60)	6 (10.90)	12 (15.78)	5 (11.90)	38
polluted	2 (0.88)	3 (5.45)	0 (0)	2 (4.76)	7
Total	227	55	76	42	**400**

Source: Computed through primary data.

The table presents an analysis of basic amenities across different social groups—General, Backward Classes (BC), Scheduled Castes (SC), and Others—based on a sample of 400 households in rural Haryana.

In terms of housing, most households reside in pucca houses, with the highest proportion in the BC category (89.09%) and the lowest in the SC group (77.63%). However, kaccha houses are more common among SC households (9.21%) compared to General (3.96%) and BC (5.46%). Regarding kitchen availability, a majority of households across all categories have a separate kitchen, though the BC group has the highest proportion without a separate kitchen (20%).

When it comes to cooking fuel, LPG usage is highest in General households (42.29%), while reliance on firewood remains significant among BC (43.63%) and Others (52.38%). Notably, a majority of SC households (63.15%) use both LPG and firewood, indicating a transitional phase in fuel adoption.

For drinking water, filtered water is most common in General (49.77%) and Others (57.14%), while SC households rely heavily on unfiltered water (88.15%). The main source of drinking water varies across groups, with General households primarily using home-based facilities (52.42%), while BC and SC households depend largely on public taps (61.81% and 51.31%, respectively).

Regarding electrification, almost all households have access to electricity, with 100% of SC households covered. However, a small percentage of Others (9.52%) and BC (3.63%) still lack electricity.

Sanitation facilities show considerable improvement, as most households have flush toilets. However, open defecation is still present in BC (5.45%) and Others (9.52%). Similarly, drainage facilities are widely available, particularly among General (98.67%) and SC (96.05%) households, though gaps remain for BC (9.09%) and Others (9.52%).

The residential environment also varies among groups. A majority of respondents report clean surroundings, with General (92.51%) having the highest percentage. However, polluted conditions are reported mainly by BC households (5.45%), while congestion is more prevalent among BC (10.90%) and SC (15.78%) households.

Overall, the data highlights disparities in access to amenities, particularly in sanitation, water quality, and fuel usage. While significant progress has been made, certain social groups, especially BC and SC, continue to face challenges in housing quality, water accessibility, and environmental conditions.

Table 3: Education and basic Amenities

Nature of house	Illiterate	Primary	High school	Higher Secondary	Degree and above	Total
Kaccha	6 (7.59)	6 (10.34)	7 (7.14)	3 (5.66)	0 (0)	22
Pucca	53 (67.08)	47 (81.03)	81 (82.65)	43 (81.13)	107 (95.53)	331
Semi pucca	20 (25.31)	5 (8.62)	10 (10.24)	7 (13.20)	5 (4.46)	47
Total	79	58	98	53	112	400
Proper kitchen						
Yes	58 (73.41)	47 (81.03)	90 (91.83)	45 (97.32)	109 (97.32)	349
No	21 (26.58)	11 (18.96)	8 (8.16)	8 (15.09)	3 (2.67)	51
Total	79	58	98	53	112	**400**
Fuel for cooking						
Firewood	36 (45.56)	26 (44.82)	26 (26.53)	16 (30.18)	24 (21.42)	128
LPG	22 (27.84)	7 (12.06)	20 (20.40)	25 (47.16)	70 (62.5)	144

Both	21 (26.58)	25 (43.10)	52 (53.06)	12 (22.64)	18 (16.07)	128
Total	79	58	98	53	112	**400**
Drinking water						
Filtered	21 (26.58)	10 (17.24)	26 (26.53)	20 (37.73)	83 (74.10)	160
Not filtered	58 (73.41)	48 (82.75)	72 (73.46)	33 (62.26)	29 (25.89)	240
Total	79	58	98	53	112	**400**
Source of drinking water						
Bore well	25 (31.64)	14 (24.13)	21 (21.42)	12 (22.64)	21 (18.75)	93
Facility at home	24 (30.37)	19 (32.75)	31 (31.63)	25 (47.16)	78 (69.64)	177
Public tap	30 (37.97)	25 (43.10)	46 (46.93)	15 (28.30)	13 (11.60)	129
Open well	0	0	0	1 (1.88)	0	1
Total	79	58	98	53	112	400
Electification in house						
Yes	76 (95)	53 (92.98)	98 (100)	51 (96.22)	112 (100)	390
No	4 (5)	4 (7.01)	0	2 (3.77)	0	10
Total	80	57	98	53	112	**400**
Toilet facility						
Flush out	74 (93.67)	56 (96.55)	97 (98.97)	52 (98.11)	112 (100)	391
Open well	5 (6.32)	2 (3.44)	1 (1.02)	1 (1.88)	0	9
Total	79	58	98	53	112	**400**
Drainage facility						
Available	71 (89.87)	55 (94.82)	95 (96.93)	52 (98.11)	112 (100)	385
Not available	8 (10.12)	3 (5.17)	3 (3.06)	1(1.88)	0	15
Total	79	58	98	53	112	**400**
Residential surrounding						
Clean	60 (75.94)	51 (87.93)	90 (91.83)	49 (92.45)	105 (93.75)	355
Congested	16 (20.25)	6 (10.34)	6 (6.12)	4 (7.54)	6 (5.35)	38
polluted	3 (3.79)	1 (1.72)	2 (2.04)	0	1 (0.89)	7
Total	79	58	98	53	112	**400**

Source: Computed through primary data.

The data presents the distribution of housing conditions and basic amenities based on educational levels.

Regarding the nature of houses, a majority of households across all education levels reside in pucca houses, with the highest proportion among those with a degree or higher (95.53%). In contrast, kaccha houses are more common among the illiterate (7.59%) and primary-level educated households (10.34%), while no households with higher education live in kaccha houses. Semi-pucca houses are more prevalent among the illiterate (25.31%) compared to those with higher education (4.46%).

For kitchen availability, most households have a separate kitchen, with the proportion increasing as education levels rise. While only 73.41% of illiterate households have a proper kitchen, this percentage increases to 97.32% among those with higher secondary education and above. The lack of a kitchen is highest among the illiterate (26.58%) and lowest among degree holders (2.67%).

In terms of cooking fuel, firewood is more commonly used by less educated households, with 45.56% of illiterate and 44.82% of primary-educated households relying on it. LPG usage is highest among degree holders (62.5%) and higher secondary-educated households (47.16%), indicating a shift towards cleaner fuel with higher education. A mix of both fuels is more common among high school-educated households (53.06%).

For drinking water, the use of filtered water increases with education levels. Only 26.58% of illiterate households use filtered water, compared to 74.10% of those with a degree or higher. Households with lower education levels primarily rely on unfiltered water, with the highest proportion among the primary-educated (82.75%).

Regarding the source of drinking water, those with higher education levels are more likely to have a water facility at home (69.64%), while illiterate (37.97%) and primary-educated households (43.10%) depend more on public taps. Bore wells are a secondary source for all groups, while open wells are rarely used.

Electrification is nearly universal, with 100% of high school and degree-holding households having electricity. However, a small percentage of illiterate (5%) and primary-educated (7.01%) households still lack electricity.

Toilet facilities are widely available, with almost all households having flush-out toilets. The proportion is slightly lower among the illiterate (93.67%) and primary-educated (96.55%), while all degree holders have a proper toilet.

Drainage facilities are available to most households, with 100% of degree holders having proper drainage. The illiterate group has the highest proportion without drainage (10.12%), followed by primary-educated households (5.17%).

For residential surroundings, cleanliness improves with education. While 75.94% of illiterate households live in a clean environment, this increases to 93.75% among degree holders. Congestion is more common among illiterate households (20.25%), while pollution is minimal across all categories.

Overall, the data suggests that higher education levels are associated with better housing conditions, improved amenities, and greater access to essential facilities.

Table: 4 Housing Conditions and Access to Basic Amenities by Family Structure and Employment Status

Nature of House	Single-Family	Joint family	Total	Working	Not working	Total
Kaccha	12	10	22	8	14	22
Pucca	120	211	331	81	250	331
Semi pucca	22	25	47	9	38	47
Total	154	246	400	98	302	400
Proper kitchen						
Yes	131	218	349	78	271	349
No	23	28	51	20	31	51
Total	154	246	400	98	302	400
Fuel for cooking						
Firewood	37	91	128	32	96	128
LPG	58	86	144	51	93	144
Both	59	69	128	15	113	128
Total	154	246	400	98	302	400
Drinking water						
Filtered	44	116	160	57	103	160
Not filtered	110	130	240	41	199	240
Total	154	246	**400**	98	302	**400**

Source of drinking water						
Bore well	31	62	93	12	81	93
Facility at home	66	111	177	53	124	177
Public tap	56	73	129	32	97	129
Open well	1	0	1	1	0	1
Total	154	246	**400**	98	302	**400**
Electrification in house						
Yes	147	244		93	298	
No	7	2		5	4	
Toilet facility						
Flush out	148	243	391	94	297	391
Open well	6	3	9	4	5	9
Total	154	246	**400**	98	302	**400**
Drainage facility						
Available	146	239	385	91	294	385
Not available	8	7	15	7	8	15
Total	154	246	**400**	98	302	**400**
Residential surrounding						
Clean	133	222	355	86	269	355
Congested	18	20	38	9	29	38
polluted	3	4	7	3	4	7
Total	154	246	400	98	302	400

Source: Computed through primary data.

In this table, the housing conditions and access to basic amenities were analyzed based on family structure (single vs. joint) and employment status (working vs. not working). Among the 400 surveyed households, 154 were single-family, while 246 were joint-family. Most households (331) lived in pucca houses, with a higher proportion in joint families (211) than single families (120). Kaccha houses were relatively rare, comprising only 22 households. Similarly, working individuals were more likely to reside in pucca houses (81 out of 98), whereas non-working individuals predominantly lived in pucca and semi-pucca structures.

Proper kitchen facilities were available in 87.25% of households, with joint families having better access (218 households) than single families (131). The working population had slightly less access (78 out of 98) compared to non-working individuals (271 out of 302).

Firewood remained a primary cooking fuel for 128 households, predominantly in joint families (91). LPG usage was reported in 144 households, with a relatively equal distribution between single and joint families. A significant proportion (128) used both firewood and LPG, particularly among non-working households (113 out of 302).

Regarding drinking water, 160 households used filtered water, with joint families (116) having better access than single families (44). Among working individuals, 57 relied on filtered water compared to 103 non-working individuals. Public tap water was a common source, serving 129 households, while only one household used an open well.

Electrification was nearly universal, with 98% of households having electricity. Similarly, 97.75% of households had flush toilets, with minimal reliance on open defecation. Drainage facilities were available in 96.25% of homes, with slightly higher access in joint families (239 households).

Residential surroundings were mostly clean in 355 households, with joint families (222) reporting better conditions than single-family homes (133). A minority (38) lived in congested areas, while only 7 households reported polluted surroundings.

Overall, the data highlights that joint families tend to have better housing and access to basic amenities compared to single-family households, and non-working individuals generally experience slightly better access to utilities than their working counterparts.

One-Sample t-Test Analysis of Household Infrastructure and Amenities

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Nature of House	400	2.600	.8983	.0449
Proper Kitchen	400	.873	.3339	.0167
Fuel for cooking Firewood, LPG, both	400	1.680	1.2253	.0613
Drinking water	400	.405	.4915	.0246
Source of Drinking Water	400	1.565	1.3343	.0667
Electrification in house	400	.978	.1485	.0074
Toilet facility	400	.978	.1485	.0074
Drainage facility	400	.968	.1775	.0089
Residential Surroundings	400	1.080	.3375	.0169

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Nature of House	57.884	399	.000	2.6000	2.512	2.688
Do you have a proper Kitchen	52.253	399	.000	.8725	.840	.905
Fuel for cooking Fire wood,2 Or3	27.422	399	.000	1.6800	1.560	1.800
Drinking water	16.480	399	.000	.4050	.357	.453
Source of Drinking Water	23.459	399	.000	1.5650	1.434	1.696
Electrification in house	131.660	399	.000	.9775	.963	.992
Toilet facility	131.660	399	.000	.9775	.963	.992
Drainage facility In your house	108.986	399	.000	.9675	.950	.985
Residential Surroundings	64.006	399	.000	1.0800	1.047	1.113

The one-sample t-test table provides insights into whether the mean values of various housing and infrastructure-related variables significantly differ from zero. The mean value for the nature of the house is 2.6 ($t = 57.884$, $p < 0.001$), indicating that most respondents live in better-quality housing, such as semi-pucca or pucca structures. The highly significant p-value confirms the statistical significance of this result. Similarly, the proper kitchen variable has a mean of 0.873 ($t = 52.253$, $p < 0.001$), suggesting that a majority of households have a proper kitchen, with the significant p-value confirming that this finding is not due to chance.

For fuel used for cooking, the mean value of 1.68 ($t = 27.422$, $p < 0.001$) indicates that households use a mix of firewood and other fuels, and the significant result highlights a clear preference for certain cooking fuels. Drinking water access has a mean of 0.405 ($t = 16.480$, $p < 0.001$), suggesting that many households may lack access to filtered water, which is further supported by the significant p-value. The source of drinking water has a mean of 1.565 ($t = 23.459$, $p < 0.001$), showing that most households rely on borewells, public taps, or in-house facilities, with statistical significance confirming this pattern.

Electrification has a very high mean of 0.978 ($t = 131.660$, $p < 0.001$), indicating near-universal electricity access, supported by an extremely high t-value and significance level. Similarly, toilet facility (mean = 0.978, $t = 131.660$, $p < 0.001$) suggests that most households have toilet facilities, with the statistical significance reinforcing this conclusion. The drainage facility also shows a high mean of 0.968 ($t = 108.986$, $p < 0.001$), confirming good drainage availability with a significant result.

Lastly, residential surroundings have a mean of 1.08 (t = 64.006, p < 0.001), indicating a relatively cleanliving environment, with the significant p-value demonstrating a strong trend in residential conditions. Overall, all the variables show statistically significant differences from zero, suggesting that housing and infrastructure conditions are well-defined and non-random. The findings indicate relatively good access to housing, electricity, toilets, and drainage, though concerns remain regarding drinking water availability and cooking fuel sources.

Table: 5 Housing and living conditions across selected districts in Haryana

Nature of house	Faridabad N=110	Gurugram N=45	Jind N= 25	Kaithal N=102	Kurukshetra N=30	Rohtak N=88
Kaccha	4 (3.64)	44 (97.78)	5 (20.00)	20.00 (0.98)	6 (20.00)	6 (6.82)
Pucca	103 (93.64)	1 (2.22)	16 (64.00)	64.00 (69.61)	17 (56.67)	80 (90.91)
Semi pucca	3 (2.73)	0	4 (16.00)	16.00 (29.41)	7 (23.33)	2 (2.27)
Proper kitchen						
Yes	104 (94.55)	41 (91.11)	16 (64.00)	82 (80.39)	19 (63.33)	87 (98.86)
No	6 (5.54)	4 (8.89)	9 (36.00)	20 (19.61)	11 (36.67)	1 (1.14)
Fuel for cooking						
Firewood	21 (19.09)	35 (77.78)	12 (48.00)	50 (49.02)	8 (26.67)	2 (2.27)
LPG	81 (73.64)	7 (15.56)	6 (24.00)	18 (17.65)	13 (43.33)	19 (21.59)
Both	8 (7.27)	3 (6.67)	7 (28.00)	34 (33.33)	9 (30.00)	67 (76.14)
Drinking water						
Filtered	75 (68.18)	27 (60.00)	1 (4.00)	35 (34.31)	1 (3.33)	21 (23.86)
Not filtered	35 (31.82)	18 (40.00)	24 (96.00)	67 (65.69)	29 (96.67)	67 (76.14)
Source of drinking water						
Bore well	19 (17.27)	17 (37.78)	1 (4.00)	55 (53.92)	1 (3.33)	0 (0)
Facility at home	74 (67.27)	13 (28.89)	0	37 (36.27)	5 (16.67)	48 (54.55)
Public tap	16 (14.55)	15 (33.33)	24 (96.00)	10 (9.8)	24 (80.00)	40 (45.45)
Open well	1 (0.91)	0	0	0	0	0
Electification in house						
Yes	109	39	25	102	28	88
No	1	6	0	0	2	0
Toilet facility						
Flush out	110 (100)	42 (93.33)	24 (96.00)	102 (100)	25 (83.33)	88 (100)
Open well	0	3 (6.67)	1 (4.00)	0	5 (16.67)	0
Drainage facility						
Available	110 (100)	42 (93.33)	20 (80.00)	101 (99.02)	24 (80.00)	88 (100)

Not available	0	3 (6.67)	5 (20.00)	1 (0.98)	6 (20.00)	0
Residential surrounding						
Clean	108 (98.18)	42 (9333)	20 (80.00)	86 (84.31)	11 (36.67)	88 (100)
Congested	2 (1.82)	0 (0)	2 (8.00)	15 (14.71)	19 (63.33)	0 (0)
Polluted	0 (0)	3 (6.67)	3 (12.00)	1 (0.98)	0 (0)	0 (0)

Source: Computed through primary data.

The table provides an overview of housing conditions and essential amenities across six districts: Faridabad, Gurugram, Jind, Kaithal, Kurukshetra, and Rohtak, highlighting variations in infrastructure and living standards.

In terms of housing types, pucca houses dominate in Faridabad (93.64%), Rohtak (90.91%), and Kaithal (69.61%), indicating better construction quality. In contrast, Gurugram has a significantly higher proportion of kaccha houses (97.78%), pointing to weaker infrastructure. Semi-pucca housing is relatively more common in Kaithal (29.41%) and Kurukshetra (23.33%).

Kitchen availability is highest in Rohtak (98.86%) and Faridabad (94.55%), while it is relatively lower in Kaithal (80.39%) and Kurukshetra (63.33%), indicating disparities in kitchen facilities.

Regarding cooking fuel, LPG usage is highest in Faridabad (73.64%) but significantly lower in Gurugram (15.56%) and Jind (24%), where firewood remains a primary source (77.78% and 48%, respectively). Rohtak shows the highest combination usage of both fuels (76.14%), suggesting transitional fuel preferences.

Water filtration practices vary, with the highest usage in Faridabad (68.18%) and the lowest in Jind (4%) and Kurukshetra (3.33%). Public taps serve as the primary water source in Jind (96%), Kurukshetra (80%), and Rohtak (45.45%), whereas home-based water facilities are more common in Faridabad (67.27%) and Rohtak (54.55%). Bore wells are a major source in Kaithal (53.92%) and Gurugram (37.78%).

Electrification is nearly universal across all districts, except for minor gaps in Gurugram (6 households) and Kurukshetra (2 households). Toilet facilities are well-established, particularly in Faridabad, Kaithal, and Rohtak, whereas open defecation persists in Gurugram (6.67%), Jind (4%), and Kurukshetra (16.67%).

Drainage facility coverage is highest in Faridabad, Rohtak, and Kaithal, but gaps exist in Gurugram (6.67%), Jind (20%), and Kurukshetra (20%).

The residential environment also varies, with Faridabad (98.18%) and Rohtak (100%) reporting the cleanest surroundings. However, congestion is a major concern in Kurukshetra (63.33%), and pollution is noted in Gurugram (6.67%), Jind (12%), and Kaithal (0.98%).

Overall, the data highlights clear disparities between urban and rural districts, with Faridabad and Rohtak displaying better living conditions, while Gurugram and Jind exhibit infrastructural challenges.

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