

**Availability Of Facilities And Assets In Rural Houses Of Kolhapur District, Maharashtra****Dr. Abhijit Vishnu Pore**Asst. Professor, Department of Geography,  
Chhatrapati Shivaji College, Satara.**Abstract**

House is useful indicator to know the living condition of the people and to know status of rural development. The study of rural houses in view of facilities and assets available is aimed in this paper. The study focuses on Kolhapur district of Maharashtra in which regional inequality in rural development can be understood. The kitchen availability and fuel used therein is significant especially for female population. The census of India's data related to housing has been compiled and processed with statistical techniques. The analysis identifies the regional inequality in housing development and living condition of the rural peoples on which topography and climatic condition necessarily affects.

**1. Introduction**

The quality of rural houses is Significant to study and hence, Misra (1987) argued that, the quality of housing and health status are basic determinants in the quality of life for people. The term 'Rural Dwellings' not only includes residential houses ranging from the humblest huts of poor to the most elaborate and massive city mansions, but other human structures as well where people congregate or where their goods are stored (Flinch and Trewartha, 1946). Rural dwellings can be studied by focusing their distribution, building material, general features, occupancy rate and available facilities and assets. The houses are the product of cultural tradition and natural condition (Brunches, 1952).

**2. Objective**

In above context, present paper aims to study different facilities (bathroom, kitchen, latrine, electricity etc.) and assets (TV, radio, bicycle, other vehicles etc.) available in rural houses of Kolhapur district of Maharashtra with the special attention on kitchen facility and fuel used therein.

**3. Study Area**

The Kolhapur district of Maharashtra is selected as a study area for the present investigation. It comprises 7685 sq. km area in twelve tahsils. In general the physiography of the district have the Sahyadri hills in a north-south direction, the Plateau situation to the east of the Sahyadri hills and the river valley basin of Varna and Panchaganga. The average annual rainfall varies widely from about 600 mm in Shirol tahsil in the east to 6000 mm in Bavada tahsil

in the west. The temperature ranges between 14°C to 38°C. As per the census of India 2001, the total population of Kolhapur district was 35, 23,162 (455 persons per sq. km.). The decadal growth rate (1991-2001) of population is 17.85 per cent. About 70.19 per cent of total population resides in rural area.

**4. Methodology**

To meet the objectives of present paper, the data has been collected from secondary sources like, district census handbook, 2001. Table on houses, household amenities and assets, series 28, Maharashtra, Census of India, 2001, socio-economic review and district statistical abstract, 2010 are used. The proportion of houses having different amenities and assets has been calculated. The standard deviation of these proportions has also been compared and comparison with Maharashtra state also done.

**5. Available Facilities And Assets**

Only the distribution and building material of rural houses are not important but recently the attention is turning to endeavor what type of facilities and assets available in the rural houses. The problems of rural settlements are unemployment, housing shortage, lack of proper drainage, pavements stoney houses to the ring of cattle in the close proximity besides safe drinking water supply and the barriers of religion and caste (Mandal, 2001). In this context condition of few important facilities like drinking water, drainage, latrine, separate bathroom and electricity and few important assets like kitchen, radio, television, telephone and different vehicles are

focused. This sort of study is useful to clear the picture about the living condition of rural peoples of the study area.

**5.1. Facilities**

**5.1.1. Drinking water:** The requirement of water is mostly for domestic, irrigation, industrial and recreational purposes (Survase, Pore, et.al. 2009). Hence, as discussed in previous chapter the human settlements are established by considering the water source. In the year 2001, drinking water facility available within the premise or near the premise of 89.03 per cent rural houses which is more than the state average (82.77%). In general all tahsils records more percentage of rural houses having near drinking water facility than the state average but in particular this percentage has spatial variations (SD = 2.74). Above 90 per cent rural houses of Hatkangale, Kagal, Shirol, Bhudargad and Radhanagari tahsils have nearer drinking water facility. Panhala, Gadhinglaj, Ajara and Bavada tahsils records satisfactory percentage of rural houses having nearer drinking water supply facility. Comparatively, low percentage is observed in Chandgad and Shahuwadi tahsils. Low water level of this part is the main reason behind this. Tap is major sources of drinking water in the study area mostly of Karvir, Hatkangale and Shirol tahsils. The water of tube well and hand pumps are used for drinking purpose mostly in

Shahuwadi, Panhala and Chandgad tahsils. The proportion of rural houses used well for drinking water is high in Gadhinglaj, Hatkangale, Chandgad, Kagal and Panhala tahsils. Besides this springs (mostly in Shahuwadi and Radhanagari tahsils), tanks and lakes (mostly in Kagal and Karvir tahsils), river etc. are also the source of drinking water to the rural houses of the study area.

**5.1.2. Drainage:** The study of connectivity for waste water outlet in rural houses reveals that 41.14 per cent rural houses of Maharashtra state have this facility and this proportion is 52.47 per cent in the study area. The standard deviation in percentage of rural houses having this facility is 7.94, which indicates the exiting spatial variation. This facility is highly observed in Radhanagari, Karvir, Bhudargad, Hatkangale, Kagal and Gadhinglaj tahsils and less observed in Bavda, Chandgad and Shahuwadi tahsils. About 4.57 per cent rural houses have close and 47.90 per cent have open drainage facility. The close drainage are highly found in rural houses of Karvir, Bhudargad, Shirol, Hatkangale and Panhala tahsils and less found in rural houses of Bavda, Kagal and Shahuwadi tahsils. The open drainage facility is mostly observed in Radhanagari, Karvir, Kagal, Bhudargad, Gadhinglaj and Hatkangale tahsils and less observed in Bavada, Shahuwadi and Chandgad tahsils.

Table 1  
Kolhapur District: Different Facilities in Rural Houses, 2001

Sr. No.	Tahsil	Drinking Water		Type of connectivity for waste water outlet			Latrine		Bathroom Within the House		Electricity	
		Away	Near	Not Available	Available		Not Available	Available	Not Available	Available	Not Available	Available
					Close	Open						
1	Shahuwadi	13.26	86.74	66.35	2.36	31.29	84.95	15.05	31.17	68.83	14.88	85.12
2	Panhala	11.79	88.21	51.04	4.95	44.01	70.09	29.91	29.83	70.17	10.02	89.98
3	Hatkanangle	9.66	90.34	43.59	5.38	51.03	74.24	25.76	33.85	66.15	13.51	86.49
4	Shirol	8.76	91.24	48.61	5.76	45.64	75.90	24.10	41.49	58.51	16.00	84.00
5	Karvir	9.98	90.02	40.21	6.29	53.51	61.17	38.83	27.43	72.57	7.26	92.74
6	Bavda	10.18	89.82	70.02	1.25	28.73	85.07	14.93	39.72	60.28	16.87	83.13
7	Radhanagari	5.12	94.88	40.06	3.71	56.23	65.72	34.28	34.40	65.60	8.79	91.21
8	Kagal	9.18	90.82	44.89	2.25	52.86	71.04	28.96	39.92	60.08	13.91	86.09
9	Bhudargad	6.28	93.72	41.98	5.99	52.03	59.80	40.20	19.28	80.72	11.24	88.76
10	Ajra	10.82	89.18	45.94	4.20	49.87	69.11	30.89	8.66	91.34	13.98	86.02
11	Gadhinglaj	11.74	88.26	44.94	3.80	51.26	67.61	32.39	15.37	84.63	16.39	83.61
12	Chandgad	15.06	84.94	60.96	3.74	35.31	72.53	27.47	11.89	88.11	15.41	84.59
	Study Area	70.36	10.07	47.53	4.57	47.90	89.93	29.64	28.73	71.27	12.66	87.34
	SD	7.94	2.74	10.27	1.61	9.27	2.74	7.94	11.36	11.36	3.15	3.15
	Maharashtra	81.79	17.23	58.86	5.15	35.99	82.77	18.21	53.91	46.09	34.83	65.17

Source: Based on Tables on Houses, Household Amenities and Assets, Series 28, Maharashtra, Census of India, 2001.

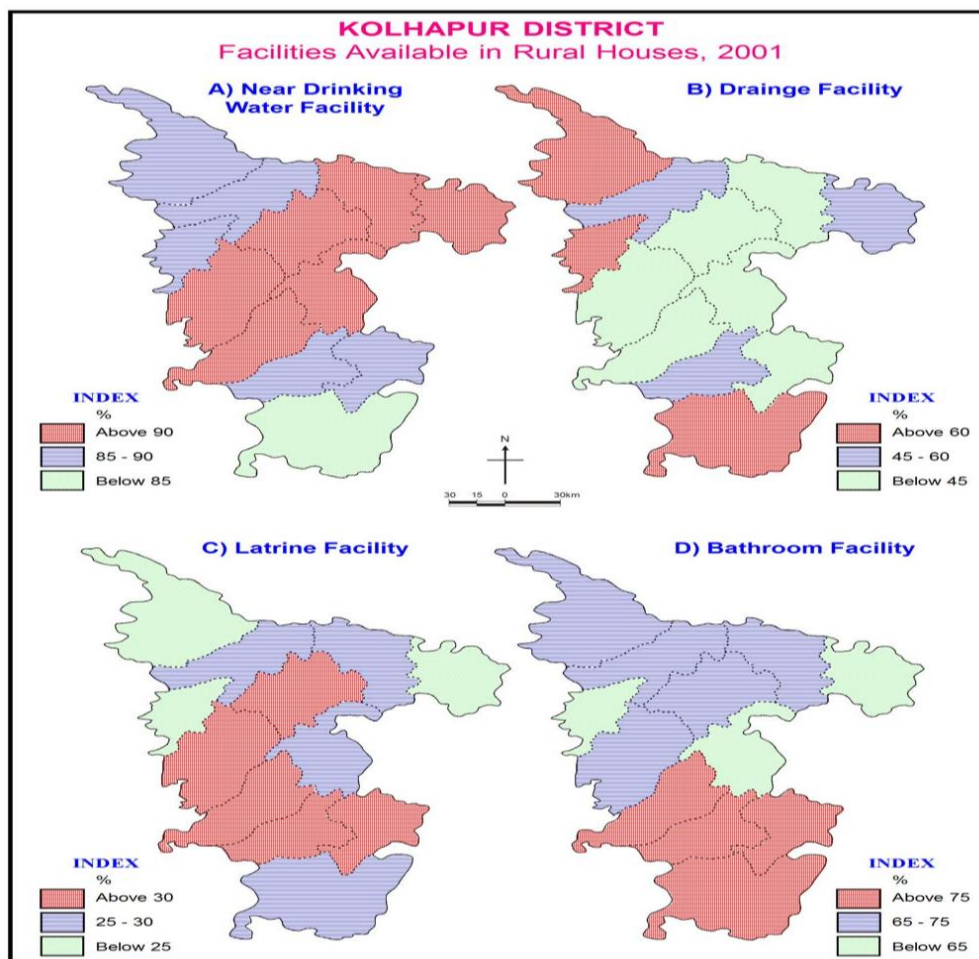


Fig. 1

**5.1.3. Latrine:** Latrine facility in rural houses is poor in the state of Maharashtra (18.21%). Study area also experiences poor latrine facility. This facility is available in 29.64 per cent rural houses of the study area which is minimum in Bavda tahsil followed by Shahuwadi and Shirol tahsils and maximum in Bhudargad tahsil followed by Karvir, Radhanagari and Gadhinglaj tahsils.

**5.1.4. Bathroom:** Is only 46.09 per cent rural houses of Maharashtra and 71.27 per cent of study area have this facility. Though in the study area, condition of this facility is satisfactory than the Maharashtra, the study area experiences spatial variations (SD = 11.36). The percentage of rural houses having this facility is high in Ajra, Chandgad, Gadhinglaj and Bhudargad tahsils and low in Shirol, Kagal and Bavda tahsils.

**5.1.5. Electricity:** Electricity is an important facility to any house. The proportion of rural houses having this facility has been observed 87.34 per cent which is more than the state average (65.17 %). There is tahsil level variation in which Bavda,

Gadhinglaj, Shirol and Chandgad tahsils records low proportion of rural houses and it is highest in Radhanagari and Karvir tahsils.

**5.2 Assets :** Actually the assets are not basic necessities of rural houses, but the living condition of peoples can be judged by focusing the assets in the houses.

**5.2.1. Kitchen and cooking fuel:** Out of the total rural houses of the study area, separate kitchen is noted in 91.29 per cent house. Chandgad, Radhanagari and Ajara tahsils have high percentage of rural houses with separate kitchen and there percentage is low in Bavda, Shirol, Hatkangale and Shahuwadi tahsils. Cooking in open is observed only in 0.44 per cent rural houses of the study area, which is highest in Kagal, Karvir and Shahuwadi tahsils and lowest in Bavada, Ajra and Bhudargad tahsils. Low proportion of cooking in open found low to high rainfall in these tahsils.

Khataniar (2011) rightly stated that, “even today with the advancement of science and

technology, more than 60 per cent of Indian households depend on the traditional sources of energy for meeting their energy needs". Firewood 46.35 per cent is the main fuel used for cooking in rural houses which is followed by cow dung cake (23.71%), LPG (11.24%) and Biogas in (9.24%). The

proportion of rural housing firewood is high in Bavda, Chandgad, Ajra and Bhudargad tahsils and low in Karvir, Shirol, Hatkangale and Panhala tahsils. The wood availability due to forest area

**Table 2**  
Kolhapur District: Availability of Separate Kitchen in Rural Houses and Type of Fuel Used For Cooking (% to Total Rural Houses)

Sr. No.	Tahsil	Separate Kitchen Within the House				Type of fuel used for cooking								
		Available	Not available	Cooking in Open	No Cooking	Fire wood	Crop residue	Cow dung cake	Coal, Lignite, Charcoal	Kerosene	LPG	Electricity	Biogas	Any other
1.	Shahuwadi	89.45	9.90	0.51	0.14	61.74	2.19	29.86	0.03	1.15	2.09	0.03	2.75	0.03
2.	Panhala	91.14	8.22	0.45	0.19	32.85	1.55	45.89	0.05	1.35	8.34	0.02	9.76	0.01
3.	Hatkanangle	88.62	10.68	0.45	0.24	30.85	7.91	31.17	0.03	4.89	20.61	0.04	3.83	0.43
4.	Shirol	86.12	13.23	0.42	0.24	25.38	18.30	23.97	0.12	4.50	24.82	0.09	1.95	0.62
5.	Karvir	92.16	6.95	0.63	0.26	24.16	1.67	40.85	0.01	3.38	15.12	0.03	14.20	0.31
6.	Bavda	85.28	14.61	0.03	0.08	84.23	0.75	7.94	0.00	0.88	1.55	0.03	4.53	0.00
7.	Radhanagari	94.24	5.20	0.41	0.15	63.23	1.58	13.18	0.01	1.18	3.73	0.02	16.89	0.02
8.	Kagal	90.65	8.47	0.81	0.07	36.09	1.51	41.98	0.02	1.11	5.52	0.06	13.34	0.30
9.	Bhudargad	93.42	6.26	0.20	0.12	74.50	1.39	2.11	0.01	2.05	6.68	0.05	13.07	0.02
10.	Ajra	96.19	3.56	0.19	0.06	80.44	0.72	2.60	0.00	0.80	2.79	0.49	12.11	0.00
11.	Gadhinglaj	93.25	6.37	0.22	0.16	59.39	3.03	15.73	0.07	1.14	10.05	0.07	10.30	0.05
12.	Chandgad	96.51	3.08	0.22	0.20	82.11	1.52	0.71	0.01	2.47	4.39	0.05	8.52	0.03
	Study Area	91.29	8.09	0.44	0.18	46.35	4.46	25.70	0.04	2.51	11.24	0.07	9.24	0.21
	SD	3.60	3.58	0.22	0.07	23.37	5.04	16.54	0.03	1.44	7.58	0.13	4.97	0.21
	Maharashtra	77.20	18.50	4.09	0.20	73.46	7.66	3.39	0.12	4.30	9.60	0.12	1.03	0.11

*Source: Based on Tables on Houses, Household Amenities and Assets, Series 28, Maharashtra, Census of India, 2001.*

**Table 3**  
Kolhapur District: Specified Assets in Rural Houses (%), 2001

Sr. No.	Tahsils	Radio, Transistor	Television	Telephone	Bicycle	Scooter, Motor Cycle, Moped, etc.	Car, Jeep, Van	None of the Specified Assets
1	Shahuwadi	37.28	15.29	3.83	13.97	5.42	2.12	52.75
2	Panhala	42.17	32.72	8.29	30.23	16.24	3.16	37.15
3	Hatkanangle	43.47	45.08	9.53	52.15	16.93	2.62	25.75
4	Shirol	44.86	44.48	11.29	59.32	19.09	2.80	22.83
5	Karvir	46.37	46.54	11.33	44.10	21.11	4.15	26.77
6	Bavda	38.57	15.94	3.12	19.24	7.57	1.54	48.53
7	Radhanagari	39.72	26.56	4.70	23.75	10.24	2.33	42.91
8	Kagal	49.73	27.65	5.57	38.38	11.59	1.99	32.98
9	Bhudargad	44.45	25.72	5.93	19.97	8.82	2.21	42.85
10	Ajra	49.19	19.80	4.63	13.98	6.66	1.19	42.16
11	Gadhinglaj	48.19	25.89	7.47	33.85	10.54	2.00	35.72
12	Chandgad	42.96	26.35	4.54	30.73	10.80	2.25	37.71
	Study Area	44.37	33.27	7.68	36.39	13.81	2.60	34.32
	SD	4.06	10.86	2.85	14.68	5.08	0.77	9.17
	Maharashtra	26.80	24.72	4.38	28.31	7.99	1.61	50.20

*Source: Based on Tables on Houses, Household Amenities and Assets, Series 28, Maharashtra, Census of India, 2001.*

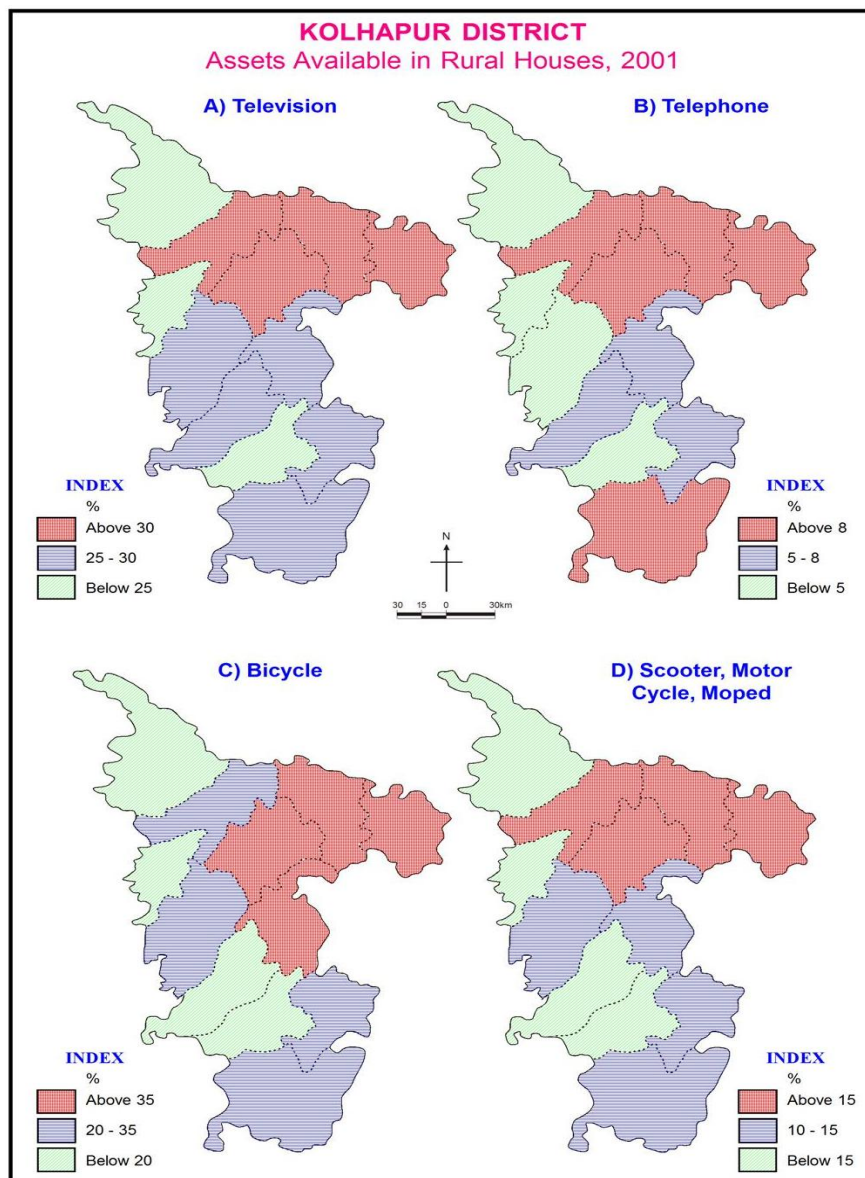


Fig. 2

affects on this spatial variation. It is observed that cow dung cake is mainly used in Panhala, Kagal, Karvir and Hatkangale tahsils and less used in Chandgad, Bhudargad, Ajra, Bavda and Radhanagari tahsils, where this spatial variation mainly determined by dairy development.

It is noticed that, the LPG is the source of fuel for cooking in rural houses mainly of Shirol, Hatkangale, Karvir and Gadhinglaj tahsils. Which are comparatively developed tahsils of the study area. It is observed that, the biogas fuel highly observed in rural houses of Radhanagari, Karvir, Hatkangale, Bhudargad and Ajra tahsil.

**5.2.2. Radio, transistor and television:** Radio and television not only useful for entertainment but also they play role in information communication,

awareness to the people etc. The radio and transistor available in 44.37 per cent rural houses of the study area, which is more high than the state (26.80%). This proportion is high in Kagal, Ajara, Gadhinglaj, Karvir and Shirol tahsils and low in Shahuwadi Bavda and Radhanagari tahsils. About 33.27 per cent rural houses of the study area have television which is also more than the state average (24.72%). The percentage of rural houses having television assets is high in the eastern tahsils like Karvir, Hatkangale, Shirol, Panhala and Kagal tahsils, moderate in Bhudargad, Gadhinglaj and Chandgad tahsils and low in Shahuwadi, Bavda and Ajara tahsils.

**5.2.3. Telephone:** But due to remoteness still telephones played vital role in the rural area. The percentage of rural houses having this asset is 7.68 in

the study area and 4.38 in the state. This proportion is high in Karvir, Shirol, Hatkangale and Panhala tahsils and less in Bavda, Shahuwadi, Chandgad and Ajara tahsils.

**5.2.4. Vehicles:** The vehicles are used in rural houses also reflects living condition of rural peoples. The vehicles bicycle is found in most of the rural houses of study area (36.39%). Bicycle is highly (above 55%) recorded in the rural houses of Shirol, Hatkangale, Karvir and Kagal tahsils, moderately (20 to 35%) observed in the rural houses of Radhanagari, Panhala, Gadhinglaj and Chandgad tahsils and less observed (below 20%) in rural houses of Shahuwadi, Ajara, Bavda and Bhudargad tahsils. scooter, motor cycle, moped recorded in 13.81 per cent rural houses of the study area (SD = 5.08). It is highly observed in Karvir, Shirol and Panhala tahsil and less observed in rural houses of Shahuwadi, Ajara, and Bavda and Bhudargad tahsils. Only 2.6 per cent rural houses of the study area and 1.61 per cent of the Maharashtra have car, jeep of van as an asset. This proportion is high in Karvir, Panhala, Shirol and Hatkangale tahsils and less in Ajara, Shahuwadi and Kagal tahsils.

#### Overall Availability Of Assets

The rural part is comparatively undeveloped than the urban. The percentage of rural houses having at least one specified asset is one of the indicators of rural development and percentage of rural houses not having any asset is the negative indicator of rural development (Pore, 2011). It is interesting to note that about 50.02 per cent rural houses of Maharashtra have none of the specified asset. In the study area, only 34.32 per cent rural houses have not any specified asset. But the standard deviation value clearly reveals that there is spatial variation in this percentage. In above 40 per cent rural houses of Shahuwadi, Bavada, Bhudargad and Ajara tahsils the specified asset is not observed. This proportion ranges between 30 to 40 in Chandgad, Panhala and Gadhinglaj tahsils and very low (below 30%) is recorded in Shirol, Hatkangale, Karvir and Kagal tahsils. In short, western part of the study area

is far behind and comparatively eastern part reflects satisfactory picture so far as facilities available in rural houses is concern.

#### 6. Conclusion

The study of available facilities and assets in rural houses clearly reveals three pockets in the study area where Hatkangale, Shirol, Karvir tahsils shows good situation, Kagal, Panhala, Gadhinglaj tahsils are moderately good but the tahsils like Chandgad, Radhanagari, Bavda, Shahuwadi, Ajara and Bhudargad are far backward in terms of amenities and assets availability. It is interesting to note that, the fuel used for cooking is highly affected by available resources and economic status of families.

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