



ISSN: 0975-833X

RESEARCH ARTICLE

AN OVERVIEW OF HOUSEHOLD AMENITIES IN MAHARASHTRA:  
A DISTRICT LEVEL ANALYSIS FROM DLHS-3

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ARTICLE INFO

**Article History:**

Received 10<sup>th</sup> July, 2014  
Received in revised form  
02<sup>nd</sup> August, 2014  
Accepted 04<sup>th</sup> September, 2014  
Published online 25<sup>th</sup> October, 2014

**Key words:**

Sanitation facility,  
Drinking water,  
Electricity and housing type.

ABSTRACT

Socio-economic development is a very important domain in recent lifestyle in India. The majority of the peoples were not receiving pure drinking water and enough food. The water and sanitation condition becoming the worst day by day. The government and Non-Government organizations (NGO) were running number of programs to overcome of the water crisis in Maharashtra, but rapid urbanisation brings along several challenges related to water quality issues and sanitation. However, the lives of poor people were becoming serious concern for government in case of health, education, employment, etc. The aim of present paper is to study the district level status of household amenities in Maharashtra. The secondary data of District Level Household Survey- 3 (DLHS) 2007-08 has been used for the present paper. The study reveals that in Maharashtra only 27.5 percent of the households having pucca houses. Further analysis shows that less than 20 percent of the households having pucca houses in the districts namely Nandurbar, Gadchiroli, Washim, Hingoli and Beed. In case of drinking water state as whole 82 percent of the household having drinking water facility. Only 47 percent of the household having toilet facility in Maharashtra and the district level analysis shows that Gadchiroli 12 percent Beed 16 percent Nandurbar 20 percent of the household having toilet facility. Overall in all the indicators more than ten districts were performing very low -level of excellence. So there is needed to design very strong program and proper implementation policy to improve household amenities in Maharashtra.

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INTRODUCTION

A household amenity is a very important indicator of socio-economic indicator of the society or community. According to NFHS-3 around 53 percent of the household having toilet facility and 59 percent of the household living in pucca houses in Maharashtra. Maharashtra rank second in case of population with about 9.29 percent of total county's population. As of the census 2011 Maharashtra has a total population of 11,23,72,972. An increase of 1,54,94,345 during the decade 2001-11. In the 2001 census, this was 9,68,78,627. The growth rate of population during last decade 2001-11 is 15.99% in the State is 1.65% less than the same at the county level which is 17.64%. In case of the child sex ratio Maharashtra is far behind to national average that is 883 females per 1000 males against 914 at national level. The state literacy rate 82.9 percent against the national average 74 percent stands at 12 ranks in the country (Census 2011). In case of literacy there is around six percent increase from 2001 to 2011 census in Maharashtra. The state of Maharashtra is going fast in case of urbanization, but the lives of the poor is also going down rapidly.

The world latest statistics reveal that the world is near to the MDG water target, but it has fallen dangerously behind in case sanitation. Around two and half billion people are still without access to improved sanitation-including 1.2 billion, who have no facilities at all (MDG report-2010). The Government of India, Ministry of Urban Development developed and published the "National Urban Sanitation Policy" in 2008. It instructs states to come up with their own detailed state-level urban sanitation strategies and City Sanitation Plans (National Urban Sanitation Policy" in 2008). The Government of Maharashtra has launched various water and sanitation program to overcome from the problems related to water and sanitation.

Objectives of the Study

The broad objective of this paper is to examine the status of household amenities like having electricity, LPG Gas for cooking, source of drinking water and house type in Maharashtra by district.

Data and Methodology

DLHS RCH-3 (2007-08), the data used for this study. The 37,716 households from 35 districts of Maharashtra were

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interviewed of which around 70 percent from rural area and 30 percent from the urban area. In the DLHS-3 series of questions were asked to household like caste religion education and household amenities, etc. Household having any type of toilet facility calculated as having toilet facility. In the case of sources of water facility considered piped water into dwelling/yard/plot, public taps/stand pipe, tube well or bore well or hand pumps, etc. For the present paper the DLHS-3 data and published report from International Institute for Population Sciences Mumbai (IIPS) is used.

## Findings

The Table 1 reveals that around eight percent of the households interviewed in Maharashtra were less than 30 years old; around 35 percent were in the age group of 30-44 years while 26 percent of the household head were 60 or more years old. The social status of the women is less in India as well as Maharashtra too. The study shows that only 10 percent of the households headed by females whereas 90 percent of the houses headed by male person in Maharashtra. The majority of the household belongs to Hindu religion that is around 83 percent followed by Muslim and Buddhist/ Neo-Buddhist religion household was 8 percent. In case of caste around 16 percent of the household head belongs to Scheduled Caste (SC), 8 percent belongs to scheduled tribes, 28 percent of the household head belongs to other caste and the majority of the household head around 37 percent belongs to the other caste category.

**Table 1. Percent Distribution of the household by selected characteristics in Maharashtra**

Characteristics	Total	Rural	Urban
Age (years)			
< 30	7.5	7.6	7.3
30-44	35.4	34.6	37.4
45-59	31.3	30.4	33.1
60+	25.8	27.4	22.1
Sex			
Male	89.8	90.3	88.5
Female	10.2	9.7	11.5
Religion			
Hindu	82.6	87.7	70.8
Muslim	7.9	3.5	18.3
Christian	0.6	0.4	1.3
Sikh	0.1	0	0.3
Buddhist/ Neo-Buddhist	7.7	7.9	7.3
Jain	0.7	0.3	1.6
Others	0.3	0.3	0.3
Caste/tribe			
Scheduled castes	15.8	15.4	16.8
Scheduled tribes	18.4	23.7	6.2
Other backward classes	28.7	28.5	29
Others	37.1	32.4	48
Type of House			
Kachha	30.3	38.2	11.8
Semi-pucca	42.2	44.9	35.9
Pucca	27.5	16.8	52.3
Total percent	100	100	100
Number of households	37,716	26,370	11,346

Type of house occupied by family shows that 30 percent of the household head reported that they were living in *kachha* houses, 42 percent household residing in *semi-Pucca* houses where as only 28 percent of the household residing in a *Pucca house* in Maharashtra.

Table 2 reveals that the living condition of the household like type of residence, having an electricity connection in houses, sources of drinking water facility and which type of gas using for cooking were shown. The study shows that overall 27.5 percent of the household head having *Pucca* house for living. The *Pucca* house refers to the wall; roof and floor are in permanent condition called *Pucca* house.

**Table 2. Percentage distribution of household having Basic amenities by Districts**

Districts	Household having				Number of household
	Living in Pucca House	Electricity	Using gas for cooking	Drinking water facility	
Ahmednagar	39.3	80.1	35.7	81.7	1,021
Akola	29.2	76.9	31.5	90.8	1,050
Amravati	21.7	74.0	22.2	92.8	1,050
Aurangabad	20.2	82.1	23.5	78.3	1,048
Beed	14.7	67.2	9.5	69.4	1,043
Bhandara	28.1	77.7	18.3	77.9	1,052
Buldhana	16.0	76.7	13.9	83.4	1,047
Chandrapur	25.1	73.9	28.4	79.3	1,057
Dhule	23.7	74.0	28.1	93.3	1,037
Gadchiroli	11.9	35.3	4.3	68.0	1,546
Gondiya	20.9	66.1	8.5	77.9	1,050
Hingoli	13.8	70.8	5.8	80.9	1,064
Jalgaon	32.9	83.5	37.9	90.4	1,025
Jalna	19.4	71.2	15.1	72	1,059
Kolhapur	34.1	94.6	40.6	91.5	1,062
Latur	32.7	80.9	15.8	94.2	1,081
Mumbai	64.4	98.8	76.1	99.6	1,076
Mumbai Sub-urban	58.3	99.5	81.9	99.9	1,069
Nagpur	50.4	93.5	55.2	86.4	1,075
Nanded	16.7	73.0	14.7	85.9	1,073
Nandurbar	7.3	63.0	14.6	86.1	1,270
Nandurbar	32.0	73.4	44.2	81.7	1,014
Nashik	30.3	67.1	11.9	92.3	1,036
Osmanabad	22.1	75.7	14.8	90.5	1,063
Parbhani	47.6	91.6	66.1	90.3	1,018
Pune	39.1	90.9	36.7	76.1	1,033
Raigarh	33.9	91.0	18.4	61.6	994
Ratnagiri	33.0	86.6	37.0	92.5	1,062
Sangli	27.1	87.3	29.3	89.3	1,061
Satara	30.8	94.4	15.7	40.8	1,043
Sindhudurg	40.6	75.2	29.0	88.7	1,035
Solapur	49.1	89.4	59.5	87.3	1,063
Thane	30.7	83.6	32.0	76.6	1,087
Wardha	12.8	77.4	11.9	67.7	1,047
Washim	15.4	70.0	16.7	69.4	1,305
Yavatmal					
Maharashtra	27.5	77.6	26.6	81.7	37,716

The district level situation of *Pucca* houses is so bad in the lowest 7.3 percent in the Nandurbar district and the highest 64.4 percent in Mumbai were having *Pucca* houses. The proportion of households having *Pucca* houses is found to be less than the state average 27.5 percent in 16 districts. The below state average districts were Nandurbar 7.3 percent,

Gadchiroli 11.9 percent, Washim 12.8 percent, Hingoli 13.8 percent, Beed 14.7 percent, Yavatmal 15.4 percent, Buldhana 16 percent, Nanded 16.7 percent, Jalna 19.4 percent, Aurangabad 20.2 percent, Gondiya 20.9 percent, Amravati 21.7 percent, Parbhani 22.1 percent, Dhule 23.7 percent, Chandrapur 25.1 percent, and Satara 27.1 percent having *Pucca* houses. The household having *Pucca* houses and it is above state average in the districts like Bhandara 28.1 percent, Akola 29.2 percent, Osmanabad 30.3 percent, Wardha 30.7 percent, Sindhudurg 30.8 percent, Nashik 32 percent, Latur 32.7 percent, Jalgaon 32.9 percent, Sangli 33 percent, Ratnagiri 33.9 percent, Kolhapur 34.1 percent, Raigarh 39.1 percent, Ahmednagar 39.3 percent, Solapur 40.6 percent, Pune 47.6 percent, and Thane 49.1 percent. Further the study shows that more than 50 percent of the household having *Pucca* houses in Nagpur, Mumbai sub-urban, and Mumbai districts.

Further Table 2 shows that overall 77.6 percent of the households have electricity connection in their houses in Maharashtra. The district level analysis shows that in Gadchiroli district only 35 percent of the households have electricity connection and it is lowest in the state. The district has an electricity connection lower than state average were Nandurbar 63 percent, Gondiya 66 percent, Osmanabad and Beed district both 67 percent of the households having an electricity connection. The districts range from 70 to 79 percent of the households having the connection of electricity were Yavatmal 70 percent, Hingoli 70.8 percent, Jalna 71.2 percent, Nanded 73 percent, Nashik 73.4 percent, Chandrapur 73.9 percent, Amravati 74 percent, Dhule 74 percent, Solapur 75.2 percent, Parbhani 75.7 percent, Buldhana 76.7 percent, Akola 76.9 percent, Washim 77.4 percent and Bhandara 77.7 percent of the households have connection of electricity in their houses. In the range of 70-80 percent the district Ahmednagar, Latur, Aurangabad, Jalgaon, Wardha, Sangli, Satara and Thane were having electricity connection in their houses. Further the study shows that more than 90 percent of the households having electricity connection in eight districts namely Raigarh, Ratnagiri, Pune, Nagpur, Sindhudurg, Kolhapur, Mumbai and Mumbai Suburban.

As far as women and children's health is concerned the fuel used for cooking is an important indicator. The use of kerosene and wood may increase the carbon contents percent in the air and it may increase many health problems in women and children. In this connection each of the household head asked which type of fuel they were using for cooking. The result shows that overall 26.6 percent of the households were using liquefied petroleum gas for cooking. The lowest use of LPG is in the Gadchiroli district i.e. 4.3 percent and highest use in the Mumbai Suburban i.e. 81.9 percent households. Further the use of LPG less than 10 percent in the district like Hingoli, Gondiya and Beed. The range of 10-15 percent of the households using LPG in the districts like Washim, Osmanabad, Buldhana, Nandurbar, Nanded and Parbhani districts.

Around 16 percent of the households from Sindhudurg district were using LPG for cooking followed by Latur 15.8 percent Yavatmal 16.7 percent, Bhandara 18.3 percent and Ratnagiri 18.4 percent. The percentage ranges from 20 -30 percent in the

district like Amravati 22.2 percent, Aurangabad 23.5 percent, Dhule 28.1 percent, Chandrapur 28.4 percent, Solapur 29 percent, and Satara 29.3 percent of the households were using LPG for cooking. In the range of 30-40 percent the districts were Akola 3.5 percent, Wardha 32 percent, Ahmednagar 35.7 percent, Raigarh 36.7 percent, Sangli 37 percent and Jalgaon 37.9 percent of the households were using LPG for cooking. Only two districts lie in the range of 40-50 percent i.e. Kolhapur 40.6 percent and Nashik 44.2 percent of the households were using LPG for cooking. More than 50 percent of the households was using LPG for cooking from the districts namely Nagpur 55.2 percent, Thane 59.5 percent, Pune 66.1 percent, and Mumbai 76.1, percent and Mumbai Suburban 81.9 percent.

Safe drinking water is the important in everyday life. People use to say that "Water is life" it shows that how much importance we have been given to drinking water. The use of safe drinking water in the household is very much important to combat water born diseases. So government of India and Maharashtra runs a number of programs for providing safe drinking water for civilian. In the DLHS-3 series of questions were asked to capturing practice of drinking water of the households. The study shows that overall 82 of the households having drinking water facility. Though we are very near to achieve MDG on water the Sindhudurg district is showing lowest i.e. only 40 percent of the households having drinking water facility. Further the districts like Ratnagiri 61.6 percent, Washim 67.7 percent, Gadchiroli 68 percent, Yavatmal 69.4 percent and Beed 69.4 percent of the households having drinking water facility. The district ranges in the 70- 80 percent of the households having drinking water facility are namely Jalna 72 percent, Raigarh 76.1 percent, Wardha 76.6 percent, Bhandara 77.9 percent, Gondiya 77.9 percent, Aurangabad 78.3 percent and Chandrapur 79.3 percent. The 80 to 90 percent of the households were having drinking water facility in the districts like Hingoli 80.9 percent, Nashik 81.7 percent, Ahmednagar 81.7 percent, Buldhana 83.4 percent, Nanded 85.9 percent, Nandurbar 86.1 percent, Nagpur 86.4 percent, Thane 87.3 percent, Solapur 88.7 percent and Satara 89.3 percent. The Remaining 12 districts namely Pune, Jalgaon, Parbhani, Akola, Kolhapur, Osmanabad, Sangli, and Amravati, Dhule, Latur, Mumbai were found more than 90 percent of the households having drinking water facility among Mumbai Sub-urban rank top i.e. 99.9 percent.

The availability of any toilet facility for household is very important indicator concern to health. The Fig-1 clearly shows that the Maharashtra as a whole shows that only 47.4 percent of the households having any toilet facility. While looking for district level analysis lowest district is Gadchiroli 12.1 percent, Beed 15.5 percent and Nandurbar 19.6 percent of the households having any toilet facility. The district ranges from 20 to 40 percent of the households having toilet facility namely Buldhana 22.1 Percent, Osmanabad 22.8 Percent, Parbhani 23.4 Percent, Hingoli 24.8 Percent, Washim 26.8 Percent, Dhule 30.8 Percent, Nanded 31.1 Percent and Yavatmal 31.2 Percent, Latur 34 percent and Aurangabad 38.3 percent. The district range in 40 60 percent of the households was having toilet facility namely Solapur 40.9 percent, Akola 41.1 percent, Chandrapur 43.5 percent, Jalna 43.5 percent, Jalgaon

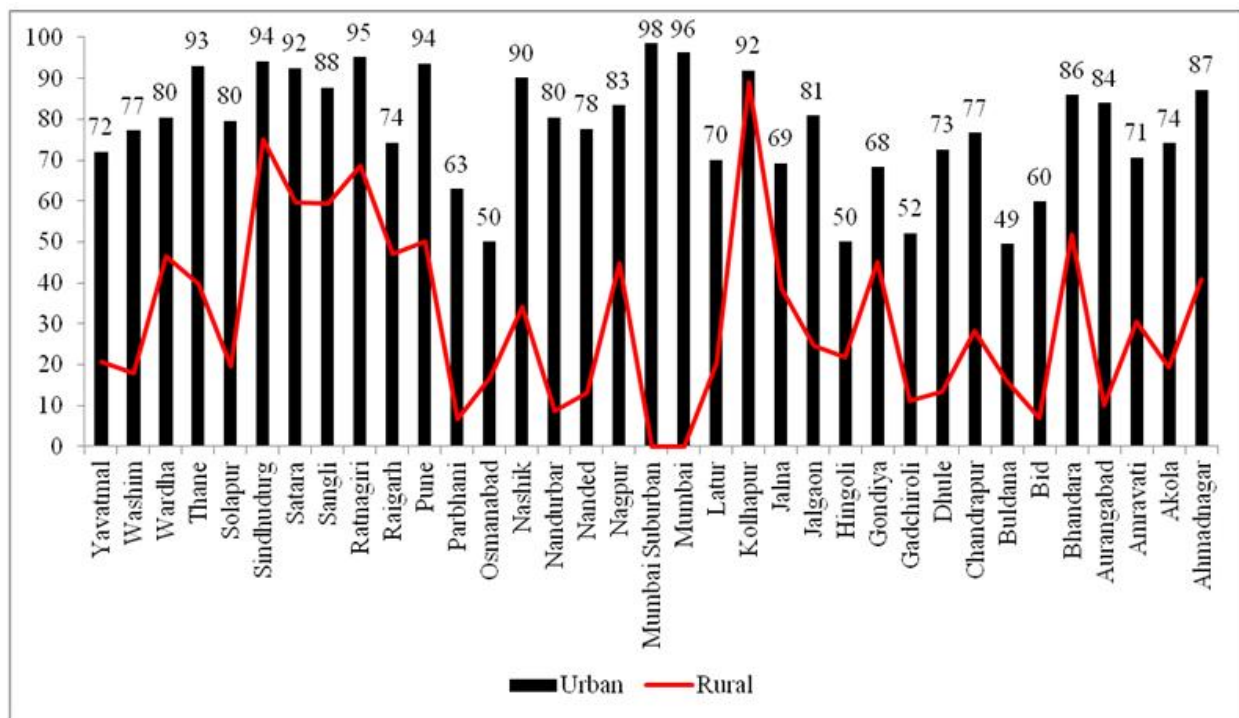


Figure 1. Households Having Toilet Facility by districts and Type of Residence

Table 3. Percent Distribution of Household by Housing Characteristics having Selected Durable Goods by Residence in Maharashtra

Housing Characteristics	Total	Rural	Urban
Having Electricity Connection	77.6	69.8	95.8
Sources of Drinking Water			
Improved sources*	81.7	74.8	97.7
Not improved sources	18.3	25.2	2.3
Sanitation Facility			
Improved sources**	46.1	31.1	80.8
Not improved sources	53.9	68.9	19.2
No toilet /open space	52.6	67.5	17.9
Fuel Used for Cooking			
Liquefied petroleum gas(LPG)	26.6	9.5	66.5
Electricity	0.3	0.2	0.4
Kerosene	3.5	1.1	9.1
Wood	62.7	80.6	20.9
Others	7.0	8.6	3.2
Number of households	37,716	26,370	11,346

\*Include piped water into dwelling/ yard/plot, public tap/standpipe, tube well or bore-well or hand pump, cart with a small tank and bottled water.  
 \*\*Flush to sewer/septic/pit/pit with slab/ pit ventilated improved/other

43.7 percent, Amravati 46.5 percent, Gondiya 48.2 percent, Ahmednagar 52.3 percent, Raigarh 53.6 percent, Wardha 54.9 percent and Nashik 55 percent. The districts perform better that is more than 60 percent of the household were having toilet facility namely Bhandara 60.4 percent, Satara 64 percent, Sangli 69.4 percent, Ratnagiri 72.9 percent, Nagpur 75.1 percent, Pune 76.2 percent, Sindhudurg 77.2 percent, Thane 77.9 percent, Kolhapur 88.8 percent, Mumbai 95 percent, and Mumbai Sub-urban 98.6 percent.

Table 3 reveals the housing characteristics with selected durable goods like electricity connection, sources of drinking

water, sanitation facility, fuel used for cooking and number of rooms having the households in Maharashtra. The study shows that around 30 percent of the households from rural area do not have electricity connections in their houses in Maharashtra. Almost 82 percent household has improved sources, 18 percent of the households have not improved sources of drinking water. As usual in rural area the situation of drinking water is not satisfactory still 25 percent of the household were not having access to improved sources of drinking water. The situation of sanitation facility in rural area shows that only 31 percent of the households were using improved sources and 68 percent of the households do not have toilet facilities.

## Conclusion

The study concludes that the Government of India and Maharashtra running various programs to increase the socioeconomic condition and to provide basic facilities like drinking water, toilet and gas facility to the poor people. The state as a whole only 28 percent of the households were living in *Pucca* houses. Water and sanitation are becoming a very serious concern of government programmers, but the households from more than fifty percent not having improved sources of sanitation facility. Sanitation involves both behaviors and facilities (UNICEF-2008) in case of behavior DLHS-3 not collected information but the available facility also not up to the mark. Maharashtra has improved in many areas like education industry and health but still 68 percent of the rural households do not have any type of toilet facility. Water sanitation are basic and essential amenities which has direct influence on health and social condition so there is a need to construct program to provide basic needs like safe drinking water, toilet facility, gas and electricity connection at the same time emphasis on social education may help households to help themselves.

## Limitation of the Study

The study based on the secondary data collected by International Institute for Population Sciences (IIPS) Mumbai the there is wide scope to carry out research on the behaviors of individuals and community with response to sanitation which will give a clear picture on use of sanitation facility in rural and urban area also it can link with the beneficiary of the sanitary scheme run by the Government.

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