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Social differentials and availability of Household basic amenities in urban and rural areas of Himachal Pradesh: A NSSO study, 2014-15

Saroj Kumar Rana

(Research scholar)[1]

[1] *Desh Bhagat University, MandiGobindgarh, Punjab, India)*

ABSTRACT

Under the Millennium Development Goals, the Indian government has worked towards improving access to safe drinking water and sanitation. Basic amenities like drinking water, sanitation, electricity and drainage is integral for a decent quality of life. Basic amenities are now became necessity for every households and has been internationally and internationally recognised, and it considered as the important anchor in the formation of many policies government in India and world. Rural households showed improvement in the access of to basic amenities, but still continue to face high levels of deprivation as compare to urban areas in India. Objective is to access the availability of basic amenities of households among social group of rural and urban areas of Himachal Pradesh. A stratified two-stage sampling design was adopted during the study. First stage sampling, the selection of census village in the rural areas and urban frame survey block in the urban sector. The second stage sampling was selection of the households. The study extracted data for Himachal Pradesh households from the study conducted by NSSO, Government of India. The study covered households in 7688 rural and 761urban households respectively. Overall average expenditure was Rs.12,228(SD=7839), followed by rural household Rs.10,541 (SD=6133) and Rs.13,930 (SD=8935). Monthly state level per capita expenditure was Rs.3164 followed by rural (Rs.2,126) and urban (Rs.3,164). OBC showed more households size than SC/ST and Other. Richest quintile access more to basic amenities than other quintiles, also other (forward categories) access more basic amenities. Urban households access more to improve sanitation, water and cooking fuel than rural households in Himachal. The results show unequal distribution of basic amenities with rich households having higher access to better basic amenities.

Key words: *Basic Amenities, Monthly per capita expenditure (MPCE), Sanitation, Social differential, Wealth quintile (WQ)*

I.INTRODUCTION

Approximately 70% of the earth's surface is covered with water. The oceans constitute 98% of this water, thus implying, only 2 % of the water is fresh. Of this fresh water 1.6% becomes inaccessible due to its existence in the form of polar ice caps and glaciers. The groundwater, further, constitutes of only 0.36%. Hence only 0.036% of water is available in the lakes and rivers, for direct consumption. This meager amount of water is put to use by the human kind for various purposes, such as, domestic, industrial and trade, agricultural, public, etc

According to the 1990 census, only 55.54% population had access to an improved water source. This further improved to 74.39% of fully covered and 14.64% partially covered rural habitation. [Government of India planning Commission 2007].

Poverty which is associated with socially perceived deprivation with respect to basic human needs (GOI, 2009) is considered as one of the major evils of our society. The 'basic human needs' approached to development mainly emphasises on providing basic material needs to people (Hicks and Streeten, 1979; Goldstein, 1985)[1-2].The 'basic human needs' approach describes two distinct aspects of 'poverty', poverty line approach and multidimensional poverty approach. Sanitation is an integral component of public hygiene and health in India. It contributes to clean and improved environment, social development and generates significant economic benefits. Because of accelerated high population growth and density, tremendous stress occur on existing land, housing, infrastructure facilities (water, sewerage, solid waste management, electricity) and services (health, education, public distribution systems, etc). For good health on earth, we need provision of safe, sufficient, acceptable and affordable water, especially drinking water; clean and hygienic sanitation; regular waste disposal and various other amenities. According to UN secretary general: "Safe drinking water and adequate sanitation are crucial for poverty reduction, sustainable development and achieving any and every one of the Millennium Development Goals" UN, 2015.[4] For the development of India's rural areas, the Bharat Nirman (2005) was launched. Under Bharat Nirman, action is proposed in the areas of irrigation, road (Pradhan Mantri Gram Sadak Yojana), rural housing (Indira Awaas Yojana), rural water supply, rural electrification (Rajiv Gandhi Grameen Vidyutikaran Yojana) and rural telecommunication connectivity. There are also programmes of Ministry of Rural Development, Drinking Water and Sanitation, etc. such as Rajiv Gandhi National Rural Drinking Water Programme, Total Sanitation Campaign (which is renamed as Nirmal Bharat Abhiyan in May 2012) and others. Under smart cities initiative, focus will be on core infrastructure services like adequate and clean water supply, sanitation and solid waste management, efficient urban mobility and public transportation, affordable housing for the poor, power supply, robust IT connectivity, governance, especially e-governance and citizen participation, safety and security of citizens, health and education and sustainable urban environment (PIB, 2015)[5]. Urban poor are much more vulnerable than the rural poor (Chattopadhyay and Roy 2005[6]; Chattopadhyay and Guruswami, 2011[7]) for many reasons: limited living space, poor safety, high living costs, poor water and sanitation facilities, higher risk of pollution, health hazards and lack of social support in the cities. Like central schemes, government of Himachal Pradesh also launch various schemes for rural poor like housing , sanitation and water etc. Access to safe drinking water and sanitation is not only an important measure

of the socio-economic status of the household but is also fundamental to the health of its members Safe drinking water is essential for child survival. Globally the world is on track to meet the MDG on safe drinking water. India too is on track with 82.7 percent rural and 91.4 percent urban populations having sustainable access to safe drinking water (Census of India, 2011).

In 2015, 88% of the total population had access to at least basic water, or 96% in urban areas and 85% in rural areas. The term "at least basic water" is a new term since 2016, and is related to the previously used "improved water source". In India in 2015, 44% had access to "at least basic sanitation", or 65% in urban areas and 34% in rural areas. In 2015, there were still 150 million people without access to "at least basic" water and 708 million without access to "at least basic" sanitation.[8]

More than 90% of the urban population has access to drinking water, and more than 60% of the population has access to basic sanitation. However, access to reliable, sustainable, and affordable water supply and sanitation (WSS) service is lagging behind. *Are the Services Reliable?* No Indian city receives piped water 24 hours a day, 7 days a week. Piped water is never distributed for more than a few hours per day, regardless of the quantity available. Raw sewage often overflows into open drains(World Bank, 2011).

The World Bank finances a number of projects in urban and rural areas that are fully or partly dedicated to water supply and sanitation. In urban areas the World Bank supported or supports among others the USD 1.55 bn National Ganga River Basin Project approved in 2011, the Andhra Pradesh Municipal Development Project (approved in 2009, US$300 million loan), the Karnataka Municipal Reform Project (approved in 2006, US$216 million loan), the Third Tamil Nadu Urban Development Project (approved in 2005, US$300 million loan) and the Karnataka Urban Water Sector Improvement Project (approved in 2004, US$39.5 million loan). In rural areas it supports the Andhra Pradesh Rural Water Supply and Sanitation (US$150 million loan, approved in 2009), the Second Karnataka Rural Water Supply and Sanitation Project (approved in 2001, US$151.6 million loan), the Uttarakhand Rural Water Supply and Sanitation Project (approved in 2006, US$120 million loan) and the Punjab Rural Water Supply and Sanitation Project (approved in 2006, US$154 million loan).[8]

II.DATA AND METHODOLOGY

Aim: To access the availability of basic amenities of households among rural and urban areas of Himachal Pradesh.

Study area

Himachal is in the western Himalayas. Covering an area of 55,673 square kilometres (21,495 sq mi),[3] it is a mountainous state. Most of the state lies on the foothills of the Dhauladhar Range. At 7,025 m Shilla is the highest mountain peak in the state of Himachal Pradesh.[9]

The drainage system of Himachal is composed both of rivers and glaciers. Himalayan rivers criss-cross the entire mountain chain. Himachal Pradesh provides water to both the Indus and Ganges basins.[10] The drainage systems of the region are the Chandra Bhaga or the Chenab, the Ravi, the Beas, the Sutlej, and the Yamuna.

These rivers are perennial and are fed by snow and rainfall. They are protected by an extensive cover of natural vegetation.[10]

Study design

The present study based on secondary data analysis of a nationwide survey collected by the National Sample Survey Organisation (NSSO), India.

Data source

The source of data was the representative nationwide survey collected by the National Sample Survey Organization (NSSO) in its 71st round (2014) on 'Health' and 'Education'. NSSO is a national organisation under the Ministry of Statistics In India. The data was collected in all states of India from January 2014 to June 2014. For this study unit levels data extracted for the Himachal Pradesh state for the mentioned above period.

Methodology

A stratified two-stage sampling design was adopted for the study. First stage sampling, the selection of census village in the rural areas and urban frame survey block in the urban sector. In second stage, household was selected by using random sampling. Survey covered total of 4577 villages and 3720 urban blocks were surveyed from which 36,480 and 29,452 households were sampled in rural and urban areas respectively. Survey covered 65,932 households and 333,104 persons were interviewed all over 36 states of India. The study extracted data for Himachal Pradesh households. The study covered households in 7688 rural and 761urban respectively.

Data analysis

Data was analysed using SPSS version 21.0 for analysis (SPSS Inc. SPSS Statistics for Windows, Version 21.0. Chicago). Wealth quintiles are calculated for all households using monthly per capita consumption expenditures. This segregated the households into five groups, ranging from the bottom 20% of the sample with lowest consumption expenditure, to the top 20% households of the sample with highest consumption expenditure. Study covered basic household amenities like type of latrine, drainage system, type of cooking and type of water and characteristics like religion, caste, family size, and nature of house type, urban and rural areas. The average rate of basic amenities was represented by using proportion.

Definition of basic Amenities

Improved drinking water sources:

Improved drinking water sources include public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection. It comprises piped water on premises such as piped household water connection located inside the user's dwelling, plot or yard

Improved sanitation facilities:

It include, Flush or pour-flush toilet/latrine to (piped sewer system, septic tank, pit latrine), Ventilated improved pit (VIP) latrine, Pit latrine with slab, Composting toilet.

Improved cooking fuel:

It include LPG and electricity source of improve cooking fuel, where other sources like crop residue, cow dung, coal, lignite, charcoal, fire wood and any other is regard as non improve method of cooking fuel.

III.RESULT

Average monthly household expenditure

Average expenditure was Rs. 12228(SD=7839), followed by rural household Rs.10541 (SD=6133) and urban households Rs. 13930(SD=8935). In rural, average of other category (Rs.13393) showed more monthly expenditure as compared to OBC (Rs.10813) and SC/ST (Rs.8086). In urban, average of other category (Rs.13930) showed more monthly expenditure as compared to OBC (Rs.13600) and SC/ST(Rs.9975). (Table1)

Monthly per capita expenditure (MPCE)

Monthly per capita expenditure was Rs.3164 followed by rural (Rs.2126) and urban (Rs. 3164). In rural, other category (Rs.2668) showed more per capita expenditure as compared to OBC (Rs.2108) and SC/ST (Rs.1684). In urban, average of other category (Rs.3769) showed more monthly expenditure as compared to OBC (Rs.2669) and SC/ST (Rs.2130). (Table1)

Average household size:

Average household size was 5, followed by rural (5) and urban (5), In rural, OBC category (6) showed more average households size as compared to other (5) and SC/ST(5). In urban, OBC category (6) showed more average households size as compared to other (5) and SC/ST(5). (Table1)

Table 1: Average monthly expenditure, Monthly per capita expenditure and Household size among social group

		SC/ST		OBC		Other		Overall	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Rural	Average Monthly HH's Expenditure	8086	3874	10813	5254	13393	7367	10541	6133
	MPCE	1684	850	2108	993	2668	1280	2126	1143
	Average HH's size	5	2	6	2	5	2	5	2
Urban	Average Monthly HH's Expenditure	9975	6330	13600	8440	15784	9482	13930	8935
	MPCE	2130	1236	2669	1572	3769	2498	3164	2216
	Average HH's size	5	2	6	3	5	2	5	2
Rural+Urban	Average Monthly HH's Expenditure	8761	4973	12201	7148	14834	8776	12228	7839
	MPCE	1843	1026	2388	1341	3332	2167	2642	1835
	Average HH's size	5	2	6	2	5	2	5	2

MPCE=Monthly per capita expenditure, SD=standard deviation

Religion and social group

Sikhism (55.5%) and Hinduism (40.8%) were the main religion among social groups followed by Islam (2.3%), Christianity (1.2%), other (0.3%). In rural, other category have mostly Sikhism (82.3%) and Hinduism (14.9%),

SC/ST has Sikhism (74.2%) and Hinduism (22.6%), where as OBC have Sikhism (64.9%) and Hinduism (29.8%). In Urban, other category have mostly more Hinduism (68.9%) and Sikhism (26.5%), SC/ST have and Hinduism (42.3%) and Sikhism (53.1%), where as OBC have and Hinduism (55.2%), Sikhism (42.3%). (Table2)

Social group and Household size

Majority of households size with more than 3 member in their houses (79.2%) followed by 3 member households (13.1%) and one member (7.7%). In rural, SC/ST house have more than 3 member (82.8%) followed by 3 member households (13.2%) and one member (4%). OBC have more than 3 member in their houses (85.5%) followed by 3 member households (6.9%) and one member (7.6%) and other category have more than 3 member in their houses (79.2%) followed by 3 member households (13.1%) and one member (7.7%). In urban, SC/ST house have more than 3 member (77.3%) followed by 3 member households (15.5%) and one member (7.2%). OBC have more than 3 member in their houses (82.3%) followed by 3 member households (12.3%) and one member (5.4%) and other category have more than 3 member in their houses (73.9%) followed by 3 member households (15.1%) and one member (11%) respectively. (Table2)

Social group and House type

Majority of households have houses with self-employed (43.2%) followed by regular wage/salary earning (26.9%), casual labour (23.4%) and other (6.4%) respectively. In rural, SC/ST showed type of houses as self-employed (25.2%) followed by regular wage/salary earning (15.2%), casual labour (55.9%) and other (3.7%) respectively, OBC showed type of houses as self-employed (45.0%) followed by regular wage/salary earning (16.8%), casual labour (29.8%) and other (8.4%) respectively and Other self-employed (69.8%) followed by regular wage/salary earning (15.3%), casual labour (7.3%) and other (7.6%) respectively. In urban, SC/ST showed type of houses as self-employed (25.3%) followed by regular wage/salary earning (39.7%), casual labour (28.4%) and other (6.7%) respectively, OBC as self-employed (46.9%) followed by regular wage/salary earning (33.1%), casual labour (16.2%) and other (3.8%) respectively and Other showed type of houses as self-employed (46.5%) followed by regular wage/salary earning (39.4%), casual labour (6.4%) and other (7.8%) respectively. (Table2)

Social group and wealth quintile

Majority of households belongs to 5^{th} quintile (34.5%) followed by 4^{th} quintile (25.6%), 3^{rd} quintile (18.2%), 2^{nd} quintile (15.4%) and 1^{st} quintile (6.3%) respectively. In rural, quintile trend in SC/ST was found as 1^{st} quintile(10%) , 2^{nd} quintile(28.7%), 3^{rd} quintile (28.4%), 4^{th} quintile (22.3%) and 5^{th} quintile (10.6%), quintile trend in OBC was found as 1^{st} quintile (6.9%) , 2^{nd} quintile (10.7%), 3^{rd} quintile (19.8%), 4^{th} quintile (38.9%) and 5^{th} quintile (23.7%), where as quintile trend in other was found as 1^{st} quintile (3.8%) , 2^{nd} quintile(10.1%), 3^{rd} quintile (12.2%), 4^{th} quintile (29.5%) and 5^{th} quintile (44.5%) respectively. In urban, quintile trend in SC/ST was found as 1^{st} quintile (11.3%) , 2^{nd} quintile (21.6%), 3^{rd} quintile (22.2%), 4^{th} quintile (18.6%) and 5^{th} quintile (26.3%), quintile trend in OBC was found as 1^{st} quintile (3.8%) , 2^{nd} quintile (8.5%), 3^{rd} quintile (18.5%), 4^{th} quintile (30.8%) and 5^{th} quintile (38.5%), where as quintile trend in other was found as 1^{st} quintile (3.4%) , 2^{nd} quintile (9.2%), 3^{rd} quintile (11.7%), 4^{th} quintile (23.1%) and 5^{th} quintile (52.6%) respectively. (Table2)

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Table 2: Households characteristics among social group of urban and rural area

		Rural				Urban				Rural +Urban			
		SC/ST	OBC	Other	Overall	SC/ST	OBC	Other	Overall	SC/ST	OBC	Other	Overall
Religion	Hinduism	22.6	29.8	14.9	21	55.2	42.3	68.9	60.8	34.3	36	47.4	40.8
	Islam	0.3	3.8	2.8	1.8	1	3.1	3.4	2.8	0.6	3.4	3.2	2.3
	Christianity	2.9	1.5	0	1.6	1	1.5	0.5	0.8	2.2	1.5	0.3	1.2
	Sikhism	74.2	64.9	82.3	75.7	42.3	53.1	26.5	35.1	62.8	59	48.7	55.5
	other	0	0	0	0	0.5	0	0.7	0.5	0.2	0	0.4	0.3
Household size	One Member	4	7.6	8.3	6.3	7.2	5.4	11	9.1	5.2	6.5	9.9	7.7
	Three member	13.2	6.9	11.8	11.6	15.5	12.3	15.1	14.7	14	9.6	13.8	13.1
	More than 3 members	82.8	85.5	79.9	82.2	77.3	82.3	73.9	76.2	80.8	83.9	76.3	79.2
House type	self-employed	25.2	45.0	69.8	45.3	25.3	46.9	46.5	41.1	25.2	46.0	58.1	43.2
	regular wage/salary earning	15.2	16.8	15.3	15.5	39.7	33.1	39.4	38.4	27.4	24.9	27.3	26.9
	casual labour	55.9	29.8	7.3	33.2	28.4	16.2	6.4	13.7	42.1	23.0	6.8	23.4
	others	3.7	8.4	7.6	6.0	6.7	3.8	7.8	6.8	5.2	6.1	7.7	6.4
Wealth Quintiles	1st Quintile	10	6.9	3.8	7.2	11.3	3.8	3.4	5.5	10.5	5.4	3.6	6.3
	2nd Quintile	28.7	10.7	10.1	18.6	21.6	8.5	9.2	12.2	26.2	9.6	9.5	15.4
	3rd Quintile	28.4	19.8	12.2	20.8	22.2	18.5	11.7	15.5	26.2	19.2	11.9	18.2

	4th Quintile	22.3	38.9	29.5	27.9	18.6	30.8	23.1	23.3	21	34.9	25.7	25.6
	5th Quintile	10.6	23.7	44.4	25.5	26.3	38.5	52.6	43.5	16.2	31	49.4	34.5

Social group and types of Latrine

Majority of households has Septic tank/ flush system (72.7%), Pit (15.9%), services (1,6%)and Others (0.4%) where as 9.4%) households do not have latrine in their houses. In rural area, SC/ST has Septic tank/ flush system (46.7%), Pit (27.2%), services (0.6%)and Others (1.1%) whereas(24..4%) households do not have latrine, OBC households has Septic tank/ flush system (50.4%), Pit (29.8%), Services (0.86%) whereas (19.1%) households do not have latrine, Other has Septic tank/ flush system (72.2%), Pit (24.0%), Services (1,0%)and (15.4%) households do not have latrine. In urban area, SC/ST has Septic tank/ flush system (76.8%), Pit (9.8%), Services (3.1%)and Others (1.0%) whereas (9.3%) households do not have latrine , OBC households has Septic tank/ flush system (89.2%), Pit (5.48%), Services (3.1%) whereas (2.3%) households do not have latrine, Other has Septic tank/ flush system (93.8%), Pit (3.2%), Services (3.1%)and (1.1%) households do not have latrine. (Table3)

Social group and Drainage type

Majority of households has open pucca (45.8%) followed by under gound (34.7%), covered pucca (10.7%), covered pucca (10.7%), open kutcha (5.9%) and 2.9% households do not have drainage. (Table3)

Social group and Source of water

Majority of households has tap water (63.1%) followed by Tube-well/hand pump (36.4%), Tankers (0.1%), River/canal (0.1% and other sources (0.3%) respectively**.** In rural, SC/ST households has tap water (65.3%) followed by Tube-well/hand pump (33%), Tankers (0.3%), River/canal(0.6%) and other sources (0.9%) respectively, OBC has tap water (57.3%) followed by Tube-well/hand pump (55.2%), respectively and Other has tap water (56.3%) followed by Tube-well/hand pump (43%), Tankers (0.1%), River/canal (0.3)% and other sources (0.4%) respectively. In urban, SC/ST households has tap water (67.5%) followed by Tube-well/hand pump (32.5%) respectively, OBC has tap water (68.5%) followed by Tube-well/hand pump (30.8%) and other sources (0.8%), respectively and Other has tap water (71.6%) followed by Tube-well/hand pump (28.4%) respectively. (Table3)

Social group and Source of cooking

Majority of households has cooking sources as LPG (60.8%) followed by Firewood and chips (27.5%), Gobar Gas (0.9%) dung cake (9.7%), kerosene (0.9%), Electricity (0.1%) respectively. In rural areas, SC/ST households has Firewood and chips (53.6%) followed by LPG (26.1%), Gobar Gas (2%) dung cake (17.5%), kerosene (0.6%), Electricity (0.3%), OBC households has LPG (36.6%) followed by Firewood and chips (43.5%), dung cake (19.1%), kerosene (0.8%)respectively, Other households has LPG (36.58%) followed by

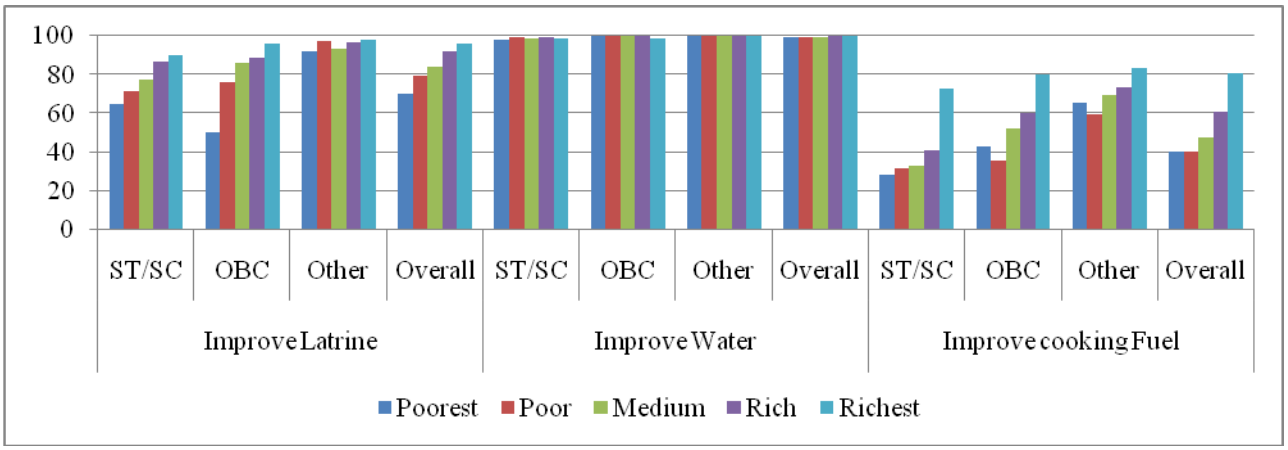
Firewood and chips (44.1%), Gobar Gas (2.4%) dung cake (15.3%), respectively. In urban areas, SC/ST households has LPG (65.5%) followed by Firewood and chips (26.3%), dung cake (5.7%), kerosene (2.6%), OBC households has LPG (86.2%) followed by Firewood and chips (11.5%), dung cake (0.8%), kerosene (0.9%) and electricity (0.8%) respectively, Other households has LPG (94.1%) followed by Firewood and chips (3.4%), dung cake (1.9%) and respectively. (Table3)

Table 3: Basic amenities of households among social group of urban and rural area

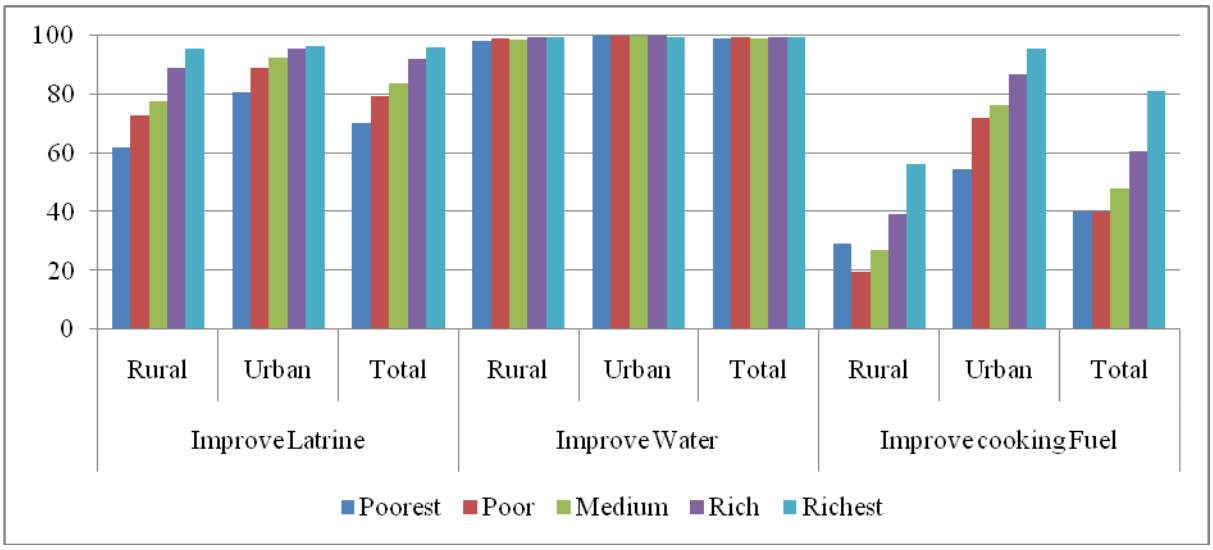
		Rural				Urban				Rural +Urban			
		SC/ST	OBC	Other	Overall	SC/ST	OBC	Other	Overall	SC/ST	OBC	Other	Overall
Type of latrine	Latrine: service	0.6	0.8	1.0	0.8	3.1	3.1	1.8	2.4	1.5	1.9	1.5	1.6
	Pit	27.2	29.8	24.0	26.4	9.8	5.4	3.2	5.3	21.0	17.6	11.4	15.9
	Septic tank/ flush system	46.7	50.4	72.2	56.9	76.8	89.2	93.8	88.7	57.5	69.7	85.2	72.7
	No latrine	24.4	19.1	2.8	15.4	9.3	2.3	1.1	3.4	19.0	10.7	1.8	9.4
	Others	1.1	0.0	0.0	0.5	1.0	0.0	0.0	0.3	1.1	0.0	0.0	0.4
Type of drainage	Open kutcha	15.8	7.6	2.1	9.2	5.2	3.8	0.9	2.5	12.0	5.7	1.4	5.9
	Open pucca	62.5	61.8	70.8	65.5	40.2	35.4	16.7	25.9	54.5	48.7	38.2	45.8
	Covered pucca	4.3	8.4	6.3	5.7	6.2	18.5	19.0	15.6	5.0	13.4	13.9	10.7
	underground	10.9	19.1	20.1	15.8	42.3	42.3	62.5	53.9	22.1	30.7	45.7	34.7
	no drainage	6.6	3.1	0.7	3.8	6.2	0.0	0.9	2.1	6.4	1.5	0.8	2.9
Source of water	Tap	65.3	57.3	44.8	56.3	67.5	68.5	71.6	70	66.1	62.8	61	63.1
	Tube-well/hand pump	33	42.7	55.2	43	32.5	30.8	28.4	29.8	32.8	36.8	39	36.4

	Tankers	0.3	0	0	0.1	0	0	0	0	0.2	0	0	0.1
	River/canal	0.6	0	0	0.3	0	0	0	0	0.4	0	0	0.1
	Others	0.9	0	0	0.4	0	0.8	0	0.1	0.6	0.4	0	0.3
Source of cooking	Coke, coal	0	0	0.3	0.1					0	0	0.1	0.1
	Firewood and chips	53.6	43.5	33	44.1	26.3	11.5	3.4	10.6	43.8	27.6	15.2	27.5
	LPG	26.1	36.6	49	36.5	65.5	86.2	94.1	85.4	40.1	61.3	76.1	60.8
	Gobar gas	2	0	2.4	1.8					1.3	0	1	0.9
	dung cake	17.5	19.1	15.3	16.9	5.7	0.8	1.6	2.5	13.3	10	7	9.7
	Kerosene	0.6	0.8	0	0.4	2.6	0.8	0.9	1.3	1.3	0.8	0.6	0.9
	Electricity	0.3	0	0	0.1	0	0.8	0	0.1	0.2	0.4	0	0.1

Improve latrine: Both end of income distribution poorest and rickets showed significant trend of improve latrine. Based on Social groups, significant trend was observed for SC/SC and OBC where static trend was observed for other (forward class). Improve water showed similar trend in all categories of social group where as in improve cooking fuel significant trend were observed among social groups. Top quintile ie richest quintile showed more access to improve cooking fuel.(Fig1)



Significant trend was observed between two end of distribution poorest and richest in urban and rural households to access the basic amenities. Urban households access more basic amenities (Latrine, water and cooking fuel) than rural households (Fig.2)



IV.DISCUSSION

The study revealed that majority of 72.7% households used Septic tank/ flush system in HP. Among social groups, other categories access more improve latrine (Septic tank/ flush system and pit). The Scheduled Caste(SC),Scheduled Tribe(ST)and Other Backward Class(OBC)households have a lower probability of using toilets when compared with households from general caste Hindu, Muslims, and Christians. Srinivasan and Mohanty (2004).

Providing access to sanitation facilities in rural areas of India has been on the agenda of the Government of India for the past three decades. The inadequate availability of drinking water and good sanitation, in rural India, leads to innumerable deadly diseases, harms the environment, and also affects vulnerable populations, such as persons with disabilities and women, exposing them to sexual violence, Arjun Kumar (2015)[11].

Based on census 2001[12], 78.1% of the households were deprived in latrine facilities and 78.3% according to Nation sample survey in 2002. According to Census 2011, 69.3% of the households deprived in latrine facilities in the house, whereas as 66.4% and 59.4% during NSS in 2008/9 and 2012 [13]. Urban and rural areas of district showed more access of tap water from treated source, urban areas in HP showed more access to availability of latrine with premises area than rural[13].Agricultural Labourers (83.1%) were found to be highly deprived in access to Latrine facilities in the house followed by Other Labourers (68.1%), Self Employed in Agriculture (65.1%), Self Employed in Non-Agriculture (53.0%) and lowest for Others (41.28%) (Kumar: 2014b)[14].Across Socio-Religious groups, the levels for no latrine facility in the house was found very high for SCs (77.4%) followed by STs (76.5%), OBCs (70.4%) and lowest for Others household (44.5%) among social groups, and Hindus (69.9%) witnessed highest levels of deprivation among religious groups followed by Muslims (50.6%) and Other Religious Minorities (38.2%) (Kumar: 2014b).[14]The physical achievement of IHHL, MoDW&S between 2001-2002 and 2010-2011 reports addition of 78.27 million households having Latrine facility within the premise. However, Census reported addition of only 21.2 million households having Latrine facility within the premise during 2001 and 2011. The gap of 57 million households in the addition of households having Latrine facility within the premise during 2001 and 2011, between physical performance of

IHHL, MoDW&S (78.27 million) and Census (21.2 million), is unlikely and also contrary. Other statistics from NSS, Base Line Survey, MoDW&S 2012 and Evaluation Study on TSC by PEO, Planning Commission also suggest their divergence and dissimilarities in the figure provided by the physical perform. 77.3 per cent households had safe drinking water facility. Here, Himachal Pradesh was only worse off compared to Punjab, but was somewhat better off than Haryana and was much better off in comparison to the all-India position. In terms of the proportion of households with toilet facilities, Himachal Pradesh comes out very poorly both in absolute and relative terms.[15]Basic amenities such as drinking water facility, sanitation facilities and drainage arrangement require special attention in both rural and urban areas with more focus towards rural areas. Even for identical economic groups (poor and non-poor), SCs and STs were found lagging behind in reducing the gap with lower rate of improvement than others and also in the existing levels in 2008–2009[16].Households located in slums and small and medium towns/cities and those belonging to Poor, Scheduled Tribe, Scheduled Caste and Wage Labourers (Casual Labourers) groups were highly deprived of access to basic amenities, and disparities among various socioeconomic groups were observed to be increasing. [17].The percentage of households having no toilet facility is extremely high in rural areas[15].At state level in case of rural(69.3%), the figures are as high as SC (77%) and ST(84%) in census 2011. In urban India, the deficits are lower and there is no difference between the figures for SC and ST population. In case of households having drinking water sources outside the premise, the figures are less but the SC and ST figures are much larger compared to the national average [18]. Same pattern across social groups in case of the percentage of households not having electricity for lighting, but here there is no difference between ST SC population in urban areas, as noted in case of toilet facilities.

V.CONCLUSION

Household assets and amenities reflect a households quality of life. Provision of electricity, clean drinking water, road condition, sanitary condition, health and hygiene, accessibility to cleaner fuel and smokeless stove for domestic use in households determines the overall development of a region. Since, basic amenities position in urban and rural areas of Himachal Pradesh is not worse in order to take necessary action. Urban areas showed more access as compared to rural area. Social inequality showed some pattern in access to basic amenities.

Poor households as compared to non-poor households and Scheduled Tribe and Scheduled Caste households as compared to Others households were found to have slower annual rate of decline in the deprivation in access to Latrine facilities in the house, resulting in their high levels of deprivation in terms of the existing levels and in their persistence in the access gap. The rate of decline per annum improves for all the categories of social groups as we move from bottom to top MPCE quintile classes, but the pattern across social groups remains the same. Hence, sanitation in rural India requires an attention along with appropriate policy measures, with an emphasis upon backward states and targeted social and economic groups.

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None.

Competing interests

The author declare that he has no competing interests.

Availability of data and materials

The source of data is a representative nationwide survey data collected by

The National Sample Survey Organization (NSSO) is conducted after 10 years and data collected is representative nationwide. Data is available on public domain and can be procured from NSSO by paying a nominal charge.

Consent for publication

Not applicable.

References:

[1]Norman Hicks, Paul Streeten, Indicators of development: The search for a basic needs yardstick, World Development, 1979, vol. 7, issue 6, 567-580

[2]Joshua S. Goldstein, Basic human needs, The plateau curve, World Development, 1985, vol. 13, issue 5, 595-609.

[3] G.Bhan, A.Jana,2013 of Slums or Poverty Notes of Caution from Census 2011. Economic & Political Weekly, 48 (18).

[4]UN, The Human Right to Water and Sanitation, Media Brief, 2015.

[5]Press Information Bureau, Government of India Cabinet. Retrieved from,2015ttp://apps.searo.who.int /PDS_DOCS/B4755.pdf.

[6] A,Chattopadhyay,T.K.Roy, Are urban poor doing better than their rural counterpart in India?, A study of fertility, family planning and health, Demography India,2005, 34(2),299-312.

[7] Aparajita Chattopadhyay, M.Guruswamy, 2011, Urban Versus Rural Poverty in India: Evidence from National Family Health Surveys, Economic Affairs, Volume: 56 (2): 223-230

[8]Wikipedia

[9]Statistical Facts about India, indianmirror.com, retrieved 26 October 2006

[10]Rivers in Himachal Pradesh,Suni Systems (P). Retrieved 28 April 2006.

[11] Arjun Kumar, Devalaya and Shauchalaya,Addressing Socio-Economic Inclusions", Journal of Studies in Dynamics and Change (JSDC), 80-87,2015b.

[12]Census of India, 2001

[13]Census of India, 2011

[14] Arjun Kumar, Devalaya and Shauchalaya, Addressing Socio-Economic Inclusions, Journal of Studies in Dynamics and Change (JSDC), 80-87, 2014b.

[15] C.S.O., 1997, p. 663.

[16] Arjun Kumar, Aspects of Caste, Ethnicity and Poverty in Rural and Urban India—1993 to 2008–2009, Journal of Land and Rural StudiesVol 2, Issue 1, 2014

[17] Arjun Kumar,Indian Urban Households' Access to Basic Amenities: Deprivations, Disparities and Determinants, Margin—The Journal of Applied Economic Research, Vol 9, Issue 3, 2015

[18] Census of India, Government of India,2011