

Introduction

The report is based on “Bare Necessities Survey” conducted during December, 2021 – January, 2022. The survey was spread over 308 (Rural: 236 + Urban: 72) Central sample villages / blocks of 76th round NSS, covering 3672 households (2,808 in rural areas and 864 in urban areas). The basic objective of the Survey on Bare Necessities is to assess the present status of the five dimensions of bare necessities, namely i) Drinking water, ii) Sanitation, iii) Housing, iv) Micro environment and v) Other facilities in the State. The sampling design and methodology is similar to 76th round of National sample survey. Results of the survey relating to 26 indicators have been furnished at **Table-1(Page No-9)**.

Reference Period: Reference period of data collection was last 365 days from the date of survey.

I. DRINKING WATER



PRINCIPAL SOURCE OF DRINKING WATER (PSDW)

- I. Almost 93% of the rural households and 99% of urban households have access to safe drinking water. They receive drinking water from safe sources like piped water into dwelling, piped water to yard/plot, piped water from neighbor, public tap/standpipe, tube well, hand pump and protected well (**Fig.1**).
- II. About 83 percent of the households in the rural and 95 percent of the households in the urban areas had sufficient drinking water throughout the year from the principal source in 2021(**Fig.2**).
- III. Piped water into dwelling as a PSDW among households increased from 3% to 7% in rural Odisha and from 30% to 50% in urban Odisha during the period 2018 to 2021(**Fig.3**).
- IV. Piped water to yard /plot as a PSDW has increased from 2% to 8% in rural and from 11% to 17% in urban Odisha during 2018 to 2021. (**Fig.4**)
- V. During 2012, 20 percent of rural households had PSDW within their premises, the same increased to 40 percent in 2021, recording an increase of 20 percentage point. The corresponding rate of increase for urban households was from 72 percent in 2012 to 85 percent in 2021(**Fig. 5**).
- VI. During 2012, 2 percent households in rural and 16 percent households in urban Odisha used tap for taking out stored drinking water. During 2021, it has moved to 7 and 50 percent in rural and urban Odisha respectively (**Fig.8**).

Fig. 1: HHs (%) by safe PSDW: 2021 BNI Survey

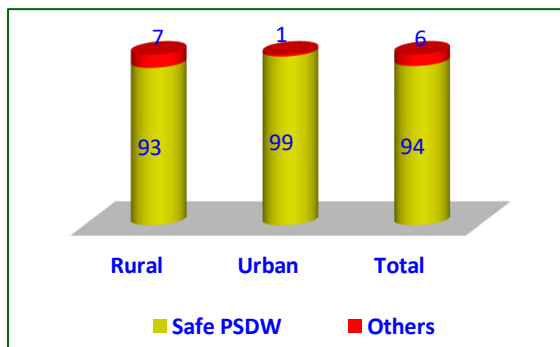


Fig.2: HHs (%) getting sufficient drinking water from the principal source: 2018-2021

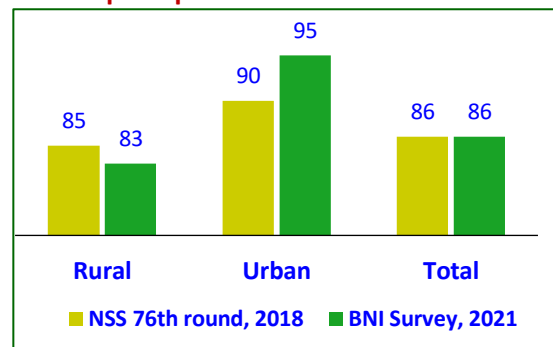


Fig. 3: HHs (%) having Piped water into dwelling

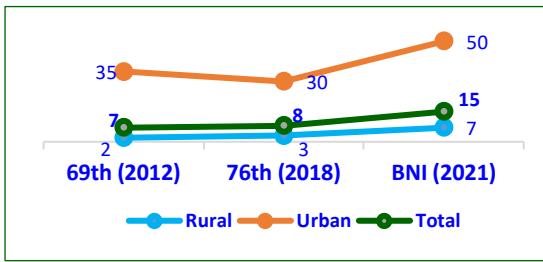


Fig. 4: HHs (%) having Piped water into yard/plot

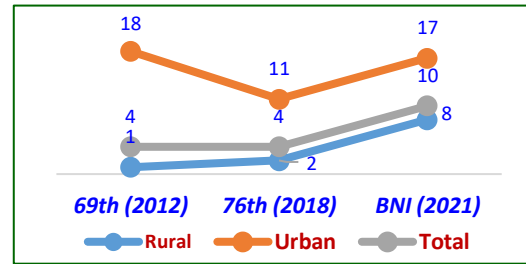
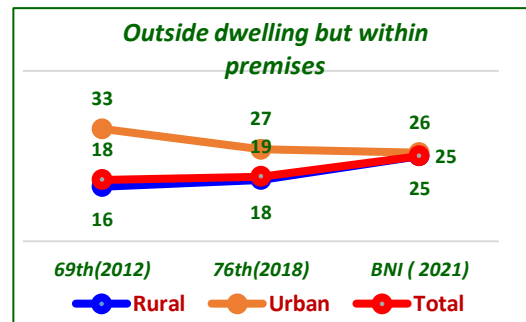
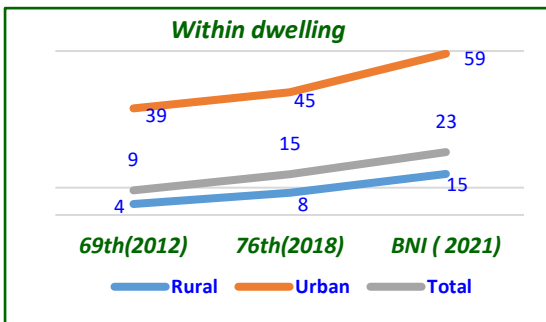


Fig. 5: Distance to reach PSDW (within dwelling/within premises)



Nature of access

Method of taking out of stored drinking water from main container

Fig. 6: HHs (%) having exclusive access to PSDW

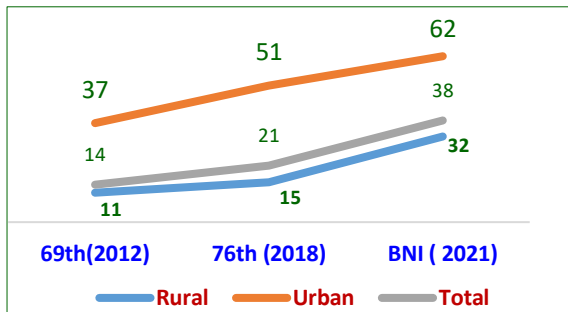
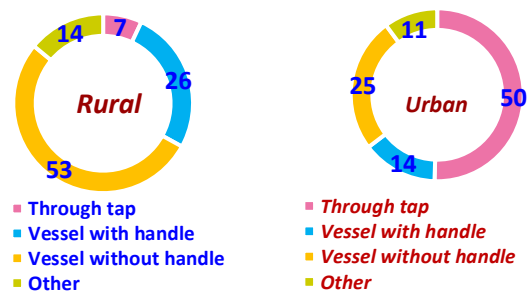
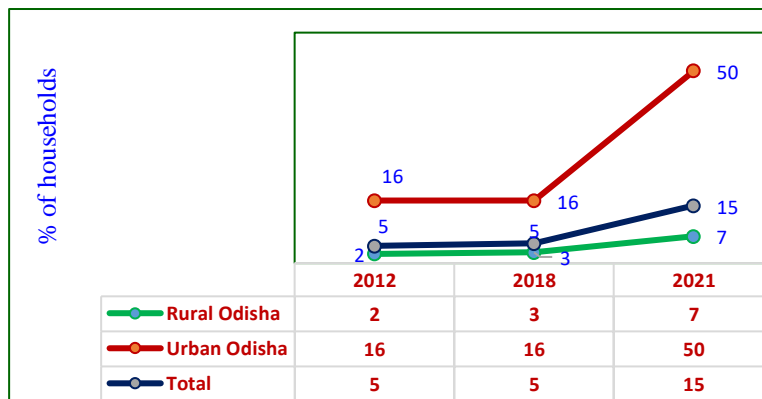


Fig.7: HHs (%) by method of taking out of stored drinking water : BNI survey 2021



METHOD OF TAKING OUT STORED DRINKING WATER : THROUGH TAP: 2012-2021

Fig. 8: HHs (%) taking out stored drinking water through tap :2012-2021



II. SANITATION

ACCESS OF HOUSEHOLD LATRINE

- I. About 73 percent of the households in the rural and 89 percent of the households in the urban areas had access to latrine (Fig.9).
- II. The proportion of rural households having exclusive use of latrine had increased by more than 5 times from 2012 to 2021 i.e., 12% to 69% and by 1.5 times i.e. 50 to 73% among households in urban Odisha (Fig. 10).
- III. The major type of latrine used by the households was to septic tank in both rural and urban areas{(Fig.11(a))}.

Fig-9: HHs(%) having access to latrine

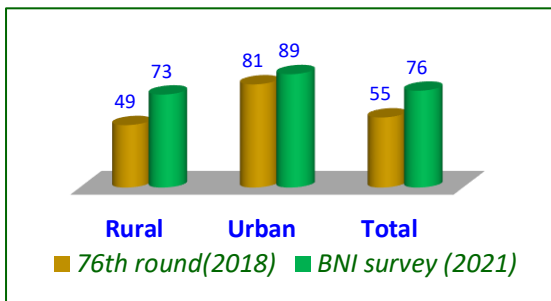
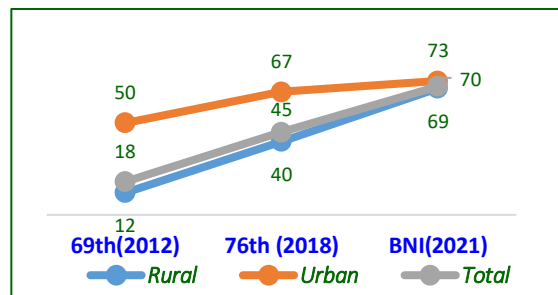


Fig-10 : HHs(%) having exclusive access to latrine:2012-2021



TYPE OF LATRINE USED BY THE HOUSEHOLDS

Fig. 11 (a): HHs (%) having access to latrine by type of latrine:2012-2021

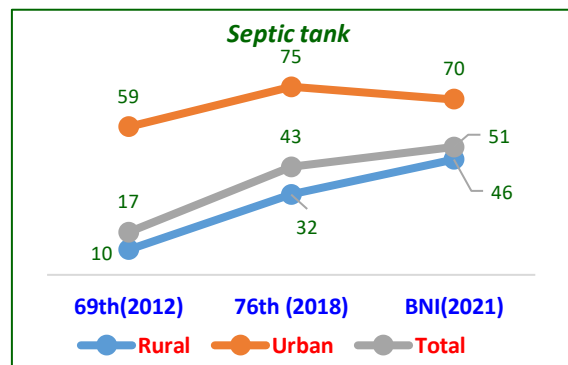
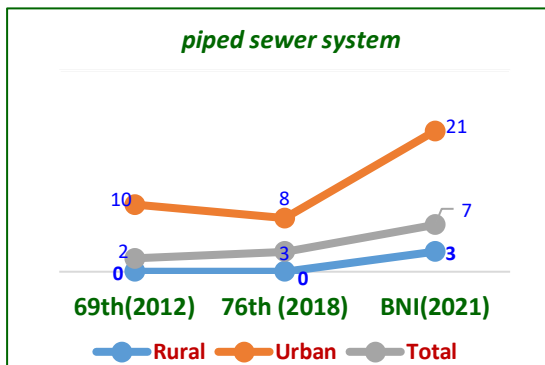
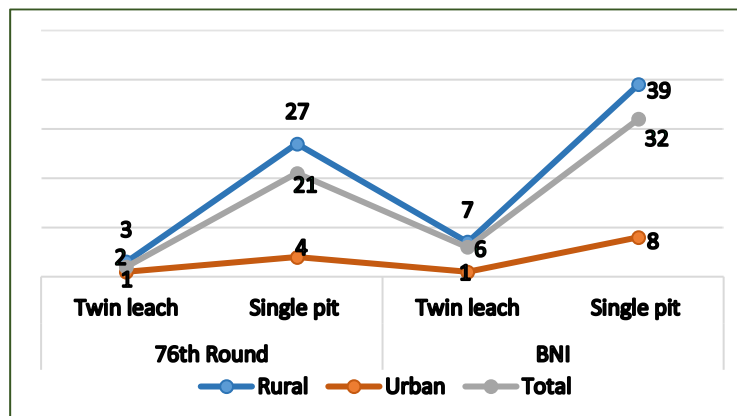


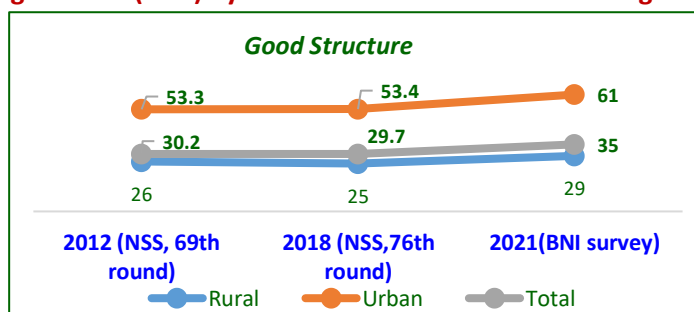
Fig. 11 (b): HHs (%) having access to latrine by type of latrine used



- I. About 98 percent of the households in the rural and 67 percent of the households in the urban areas had own dwelling unit.
- II. During 2012, 26 percentage in rural and 53 percent in urban households had lived in houses with 'good' condition of structure whereas during 2021 it has increased to 29 percent in rural and 61 percent in urban. (Fig.12).
- III. The proportion of independent type of dwelling unit has increased from 75% in 2012 to 93% in 2021. In rural Odisha, a considerable increase of 18 percentage points and similarly in urban areas, a corresponding increase of 25 percentage points over the same period have been noticed{Fig.13-(a) ,13(b)}.
- IV. In rural Odisha, Proportion of households living in pucca structures has increased from 44% in 2012 to 63% during 2021. Similarly, for urban Odisha it has increased from 86% to 90% (Fig.15).

CONDITION OF STRUCTURE OF HOUSE

Fig-12: HHs (in %) by condition of structure of dwelling unit:



TYPE OF DWELLING UNIT

Fig-13(a): HHs (%) by types of dwelling units, BNI Survey 2021

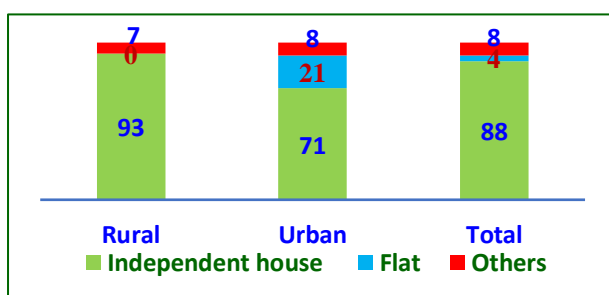
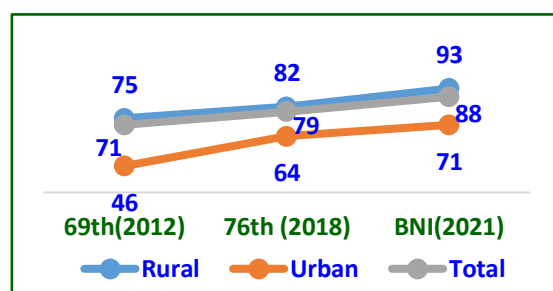


Fig-13(b): HHs (%)s having independent house:2012-2021



DISTRIBUTION OF HHs (%) BY STRUCTURE TYPE OF DWELLING UNIT

Fig.-14: HHs (%) by structure type of dwelling unit

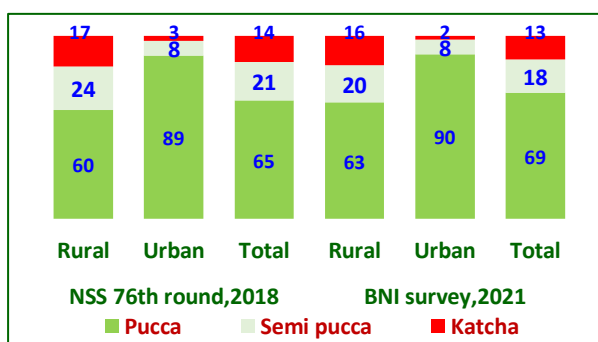
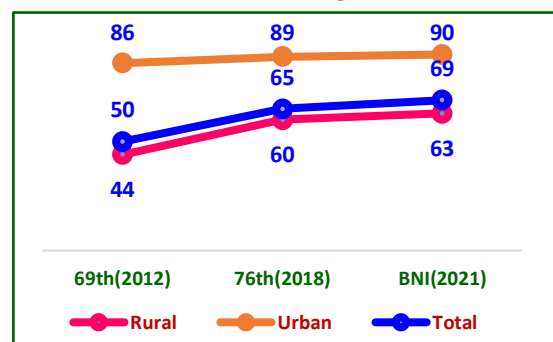


Fig. 15: HHs (in %) having pucca structure (pucca wall/roof) dwelling unit :2012-2021



IV. MICRO ENVIRONMENT

- I. In 2012, as many as **89 percent rural households did not have any 'drainage facility'**, the proportion has come down to **60 percent in 2021**. The corresponding proportions for urban households were about **30 percent, 2012** and it comes down to **12 percent 2021**. Only **13 percent urban households had open kutcha drainage system**. {Fig.16(a), 16(b)}.
- II. In rural Odisha % of HH reporting to have severe problem of flies and mosquitoes has declined from **46 % in 2012 to 23% in 2021**. In urban Odisha the correspondence decline was from **42 % in 2012 to 31% in 2021**{Fig 17(a)}.
- III. In rural Odisha, during 2012, 8 percent households had reported that local bodies/state governments had taken some effort to tackle the problems of flies/mosquitoes; the same proportion has increased to **39 percent in 2021**. In urban Odisha the correspondence increased from, **37 percent in 2012 to 48 percent in 2021**. {Fig 17(b) }

DRAINAGE SYSTEM HHs (%) WITH/WITHOUT DRAINAGE SYSTEM

Fig. 16 (a): HHs (%) with no drainage system : 2012-2021

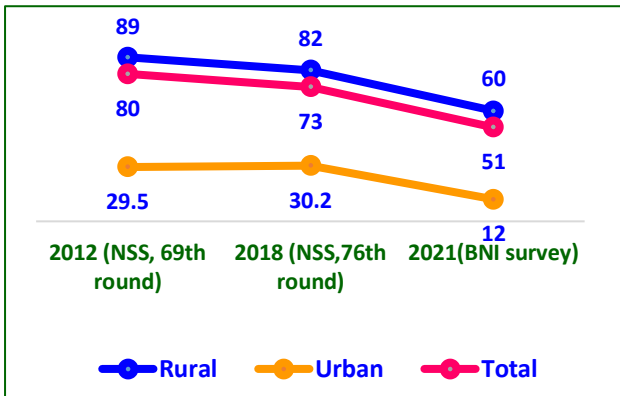


Fig 16 (b) HHs (%) with open Kutcha drainage

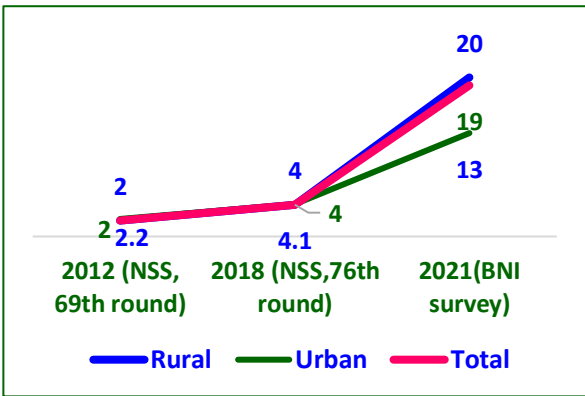


Fig. 17(a): % of hhs having severe problem of flies/mosquitoes

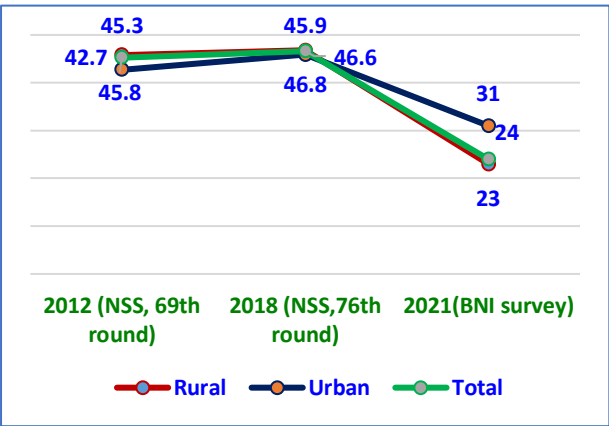
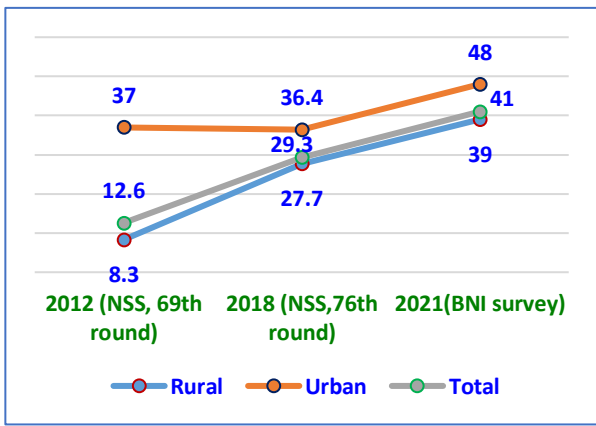


Fig. 17(b): Local bodies Govt steps to tackle the problem of flies and mosquitoes (HH %)

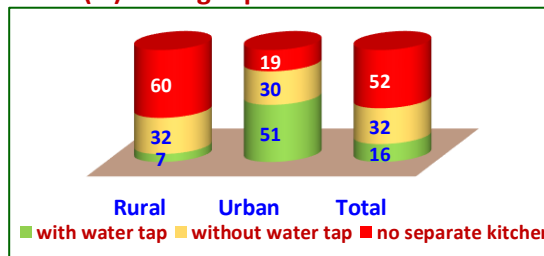


V. OTHER FACILITIES

AVAILABILITY OF SEPARATE KITCHEN

- I. During 2021, about 40 percent households in rural and 81 percent households in urban Odisha had a separate kitchen in their dwelling {(Fig. 18,19(a),19(b)}.
- II. 16 percent and 49 percent households in rural and urban Odisha respectively had dwelling units with ‘good ventilation’ and 59 percent and 38 percent households in rural and urban Odisha respectively had dwelling units with ‘satisfactory ventilation’.
- III. About 25 percent of the households in the rural and 82 percent of the households in the urban areas had access to bathroom during 2021 {Fig.20(a)}.
- IV. During 2021, 45 percent in rural households had attached bathroom while the corresponding proportion of households in urban was more i.e., 75 percent{Fig:20(b)}
- V. Among the households, about 97 percent in the rural and about 99 percent of the households in the urban had electricity for domestic use (Fig.21).
- VI. The proportion of households using electricity for domestic purpose increased by 22 percentage point in rural and 2 percentage point in urban during 2012 to 2021 (Fig .21)
- VII. Among the households, about 36 percent in the rural and 88 percent in the urban used LPG as fuel for cooking(Fig.22).
- VIII. During 2012 only 4 % households in rural Odisha were using LPG as their major fuel of cooking whereas the corresponding figure for 2021 was 36%, an increase of 32 percentage point over 9 years. Similarly, in urban Odisha during 2012, 44% households were using LPG as their major fuel of cooking and it has increased to 88% in 2021 i.e. recording an increase of 44 percentage points (Fig.22.)

Fig -18: HHs (%) having separate kitchen :BNI survey 2021



HHs (%) having no separate kitchen/ separate kitchen with water tap: 2012-2021

Fig. 19(a): Having no separate kitchen

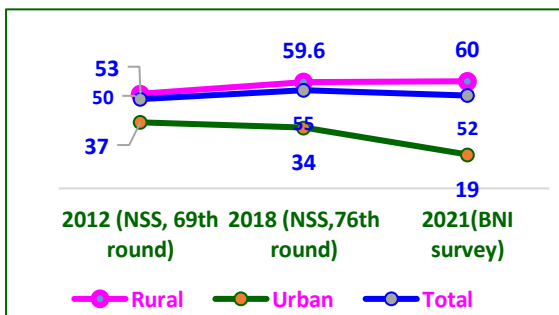
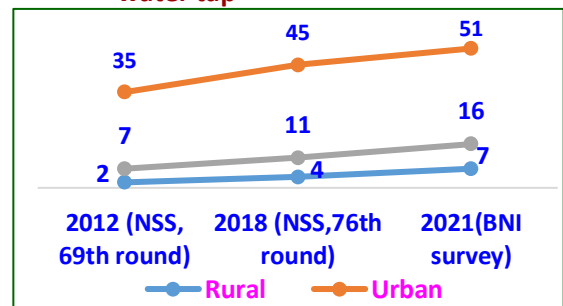


Fig-19(b): Having separate kitchen with water tap



BATHROOM FACILITY
Access of household to bathroom

Fig 20(a): HHs (%) which had no access to bathroom :2012-2021

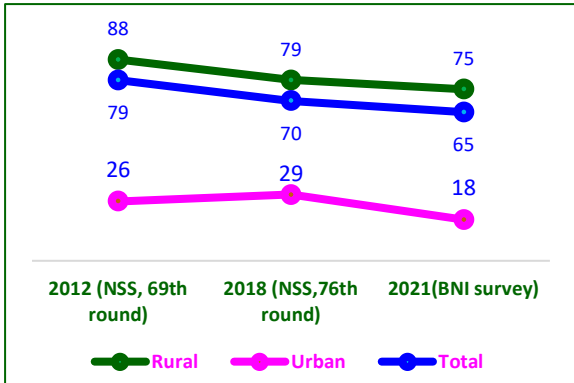
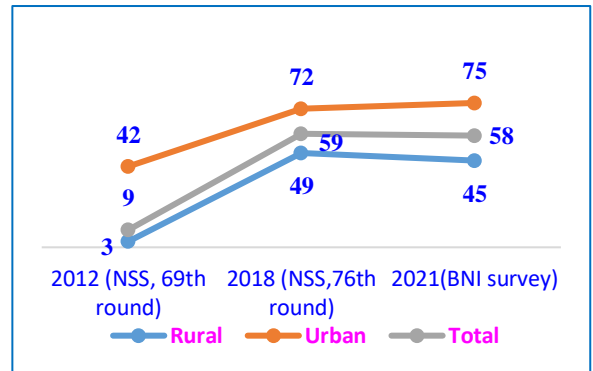
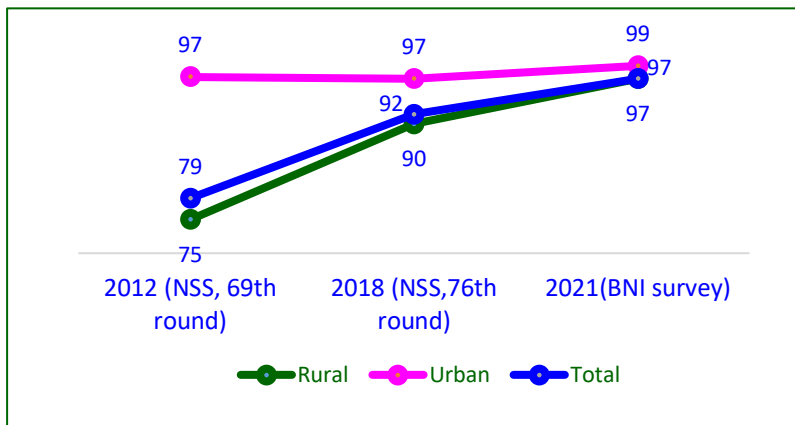


Fig. 20(b): HHS (%) which had access to attached bathroom: 2012-2021



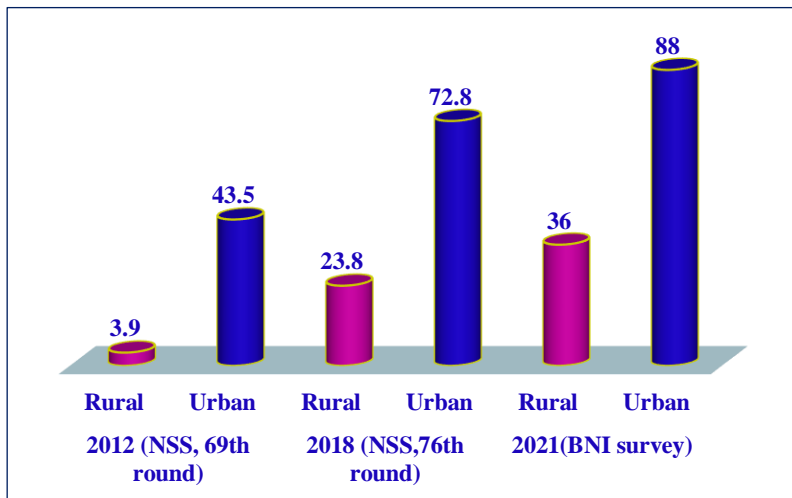
Electricity for domestic use

Fig. 21: HHs (%) having electricity for domestic use:2012-2021



USE OF FUEL FOR COOKING BY THE HOUSEHOLD

Fig 22: HHs (%) used LPG as major source of energy for cooking: 2018-2021



STRATEGIC AREA OF FOCUS

The survey results show overall improvement of all the 26th indicators in five dimensions. From the results of BNI survey, 2021-22 undertaken by Directorate of Economics and Statistics, Odisha, a better scenario has emerged in comparison to 69th and 76th round of NSS. Government are implementing various schemes for provision of facilities for bare necessities. However, there is a need to saturate the basic facilities for all households.

- I. More and more households need to be covered under piped water into dwelling.
- II. Similar focus should be given to piped water to yard/plot and within dwelling.
- III. More steps should be taken for waste water treatment. This will cause the production of large amounts of fresh reusable water, thus helping to reduce water scarcity and environment pollution and improvement in health.
- IV. Households having exclusive access to latrine need to be universalized.
- V. In the rural area focus should be on latrine with septic tank and in the urban areas the focus should be on sewerage system.
- VI. The cities in Odisha need to focus on decentralized solid waste management practices. Alappuzha (Kerala) begged cleanest city award 2016 basing upon a survey report by Centre for Science & Environment. This city has focused on decentralized waste management through segregate at source level, biogas plant and decentralized composting system. This model may be considered for implementation in Odisha.
- VII. In the Govt. housing programme there should be provision for more pucca structure houses with facility for “good ventilation” and separate kitchen for better hygiene and the Government guidelines for different housing schemes may be redesigned accordingly.
- VIII. Priority should be given to development of a decentralized drainage system in rural and urban areas. More focus should be given for underground / covered pucca drainage system for betterment of civic lives.
- IX. More programmes and special drives should be taken by local authorities to prevent the problem of mosquito and flies for better lives in rural and urban areas especially in slum areas to prevent diseases borne by house flies and mosquitoes.
- X. Efforts should be made for spreading awareness about electrical safety measures with specific focus on electricity wiring through conduit in rural and urban households to avoid lightning strikes, damage to power lines and electrocution.



TABLE-1:

COMPARISON OF BARE NECESSITY INDICATORS OVER 9 YEARS

Indicator	2012 (69th round ,NSS)			2018 (76th round, NSS)			2021 (BNI Survey)			Percentage Point Change over 9 years		
	R	U	T	R	U	T	R	U	T	R	U	T
Indicators on Drinking Water facility												
%HH with Principal source of drinking water												
1. Piped water into dwelling	1.7	35.2	6.7	2.7	29.8	7.6	7	50	15	5.3	14.8	8.3
2. Piped water to yard/plot	1.4	17.6	3.8	2.3	10.5	3.8	8	17	10	6.6	-0.6	6.2
%HH by distance to the principal source of drinking water												
3 Within dwelling	3.6	38.9	8.9	7.9	45.4	14.6	15	59	23	11.4	20.1	14.1
4. Outside dwelling but within premises	15.5	33.2	18.2	17.5	26.9	19.1	25	26	25	9.5	-7.2	6.8
% households by method of taking out of stored drinking water												
5. Through tap	2.4	16.3	4.5	2.8	16.3	5.1	7	50	15	4.6	33.7	10.5
% households by access to principal source of drinking water												
6. Exclusive use of HH	10.5	36.7	14.4	14.8	50.5	21.1	32	62	38	21.5	25.3	23.6
Indicators on Sanitation facility												
% households by access to latrine												
7. Exclusive use of HH	12.4	49.6	18	40.2	66.9	45	69	73	70	56.6	23.4	52
%households having access to latrine by type of latrine used												
8. Piped sewer system	0	10	2	0	8	3	3	21	7	3	11	5
9. Septic tank	10	59	17	32	75	43	46	70	51	36	11	34
10. Twin leach pit	NA	NA	NA	3	1	2	7	1	6			
11. Single pit	NA	NA	NA	27	4	21	39	8	32			
Indicators on Housing facility												
% of households living in houses by condition of structure												
12. Good	26.1	53.3	30.2	25.4	53.4	29.7	29	61	35	2.9	7.7	4.8
% of households living in houses by type of dwelling												
13. Independent house	75	45.7	70.7	82.4	63.5	79	93	71	88	18	25.3	17.3
%Households having pucca dwelling												
14. Pucca dwelling	44.1	86.4	50.4	59.5	89.2	64.8	63	90	69	18.9	3.6	18.6
Indicators on Micro Environment												
% households living in a house by drainage system of the household												
15. No drainage	89	29.5	80.1	82	30.2	72.8	60	12	51	-29	-17.5	-29.1
16. Open katcha	2	2.2	2	4	4.1	4	20	13	19	18	10.8	17
% households living in houses reported that during last 365 days they faced problem of flies/mosquitoes												
17. Severe	45.8	42.7	45.3	46.8	45.9	46.6	23	31	24	-22.8	-11.7	-21.3
% households reported that effort made by local bodies /State Govt to tackle problem of flies /mosquitoes												
18. Yes	8.3	37	12.6	27.7	36.4	29.3	39	48	41	30.7	11	28.4
Indicators on Other facilities												
% households living in a house having separate kitchen												
19. With water tap	1.8	34.9	6.8	3.9	45.1	11.3	7	51	16	5.2	16.1	9.2
20. No separate kitchen	52.6	36.7	50.2	59.6	34.1	55	60	19	52	7.4	-17.7	1.8
% households living in houses by type of ventilation												
21. Good	12.6	36.3	16.2	18	43.3	22	16	49	22	3.4	12.7	5.8
% households by access to bathroom												
22.No bathroom	88.2	25.9	78.9	79	28.5	70	75	18	65	-13.2	-7.9	-13.9
23. Attached to dwelling unit	3	42.3	8.9	48.5	72.1	58.6	45	75	58	42	32.7	49.1
% households living in a house having electricity for domestic use												
24. Yes	75.2	97.3	78.5	90.3	97	91.5	97	99	97	21.8	1.7	18.5
25. Type of electric wiring(temporary)	52	16.4	45.4				27	42	30	-25	25.6	-15.4
% HH using type of fuel for cooking												
26. LPG	3.9	43.5		23.8	72.8	32.6	36	88	45	32.1	44.5	

List of Abbreviation

BNI	-	Bare Necessity Indicators
HHs	-	Households
LPG	-	Liquefied Petroleum Gas
NSS	-	National Sample Survey
PSDW-		Principle source of drinking water