ASSESSMENT STUDY OF IMPACT AND SUSTAINABILITY OF NIRMAL GRAM PURASKAR

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for

Department of Drinking Water and Sanitation
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Study conducted by

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This report is the product of a study commissioned by Department of Drinking Water and Sanitation (DDWS), Ministry of Rural Development, Government of India, in order to assess the impact and sustainability of Nirmal Gram Puraskar (NGP), a part of Total Sanitation Campaign and to also answer the questions: should NGP be continued and if so, for how long and with what modifications?

The focus of this study was to draw learning from the implementation experience so far, for improved effectiveness in the future. The study team is immensely grateful to women, men and children of 664 Gram Panchayats of 56 districts across 12 states of Andhra Pradesh, Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Karnataka, Kerala, Rajasthan, Tripura, West Bengal, Uttar Pradesh and Maharashtra; the anganwadi workers, teachers, health workers and panchayat members of these Gram Panchayats and government officials at various levels, who spared their valuable time to contribute to the study by narrating their experiences, opinions and assessment of NGP.

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ACRONYMS

ANM	Auxiliary Nurse Midwife
APL	Above Poverty Line
ASHA	Accredited Social Health Activist
AWW	Anganwadi Worker
BCC	Behaviour Change Communication
BDO	Block Development Officer
BP	Block Panchayat
BPL	Below Poverty Line
CBO	Community Based Organisation
CCDU	Communication and Capacity Development Unit
CEO	Chief Executive Officer
CLTS	Community Led Total Sanitation
CM	Chief Minister
CRSP	Central Rural Sanitation Programme
CSC	Community Sanitary Complex
CSID	Central Statistical Information Department
DDC	District Development Commissioner
DDWS	Department of Drinking Water and Sanitation
DM & DC	District Magistrate and District Collector
DPRO	District Panchayati Raj Officer
DSEL	Department of School Education and Literacy
DWSC	District Water and Sanitation Committee
DWSM	District Water and Sanitation Mission
EE	Executive Engineer
E-n-C	Engineer-in-Chief
FGD	Focus Group Discussion
GO	Government Order
GoI	Government of India
GP	Gram Panchayat
HH	Household
HSL	Household Sanitary Latrine
ICDS	Integrated Child Development Scheme
IDI	In depth Interview
IDI	In-depth Interview Schedule
IEC	Information Education Communication
IHHL	Individual House Hold Latrine
JP	Janpad
LWM	Liquid Waste Management
MDG	Millennium Development Goals
MVSSP	Maharishi Valmiki Sampoorn Swachata Puruskar
NAREGA	National Rural Employment Guarantee Act
NGO	Non-Governmental Organisation
NGP	Nirmal Gram Puraskar

NREGS	National Rural Employment Guarantee Scheme
NRHM	National Rural Health Mission
O & M	Operation and Maintenance
OBC	Other Backward Classes
ODF	Open Defecation Free
PC	Production Centres
PHC	Public Health Centre
PHED	Public Health Engineering Department
PHU	Public Health Unit
PIP	Project Implementation Plan
PPS	Probability Proportional to Size
PR & RDD	Panchayati Raj and Rural Development Department
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institution
PTA	Parent teacher Association
RGNDWM	Rajiv Gandhi National Drinking Water Mission
RSM	Rural Sanitary Mart
SC	Scheduled Caste
SDM	Sub Divisional Magistrate
SGBSA	Sant Gadge Baba Swachchhata Abhiyan
SGRSY	Swarnjayanti Gram Swarozgar Yojana
SGSY	Swarnajayanti Gram Swarozgar Yojana
SHG	Self Help Group
SIS	Structured Interview Schedule
SLSC	State Level Scrutiny Committees
SLWM	Solid and Liquid Waste Management
SSA	Sarva Shiksha Abhiyan
SSHE	School Sanitation and Hygiene Education
ST	Scheduled Tribes
SWM	Solid Waste Management
SWSM	State Water and Sanitation Mission
ToR	Terms of Reference
TSC	Total Sanitation Campaign
UNICEF	United Nations International Children's Emergency Fund
UTI	Urinary Tract Infection
VHWSC	Village Health Water and Sanitation Committees
VIP	Ventilated Improved Pit
VWSC	Village Water and Sanitation Committee
WSC	Women sanitary Complex
WSP	World and Sanitation Programme
ZP	Zilla Panchayat

EXECUTIVE SUMMARY

Sanitation is one of the most pressing global development issues in the contemporary world. Posing grave health challenges, exacerbating socio-economic and gender differences and thwarting the process of inclusive growth and development, lack of proper sanitation facilities has serious repercussions for any country. Given the strong direct and indirect linkages of sanitation with socio-economic and health aspects, it has been appropriately included in the United Nations Millennium Development Goals (MDGs). Out of eight MDGs, three are directly linked to sanitation: Reduce child mortality, combat disease and ensure environmental sustainability. Even the first goal, eradicate extreme poverty, is linked to sanitation as high health and coping costs associated with illnesses caused by inadequate sanitation drain productivity and incomes, contributing to poverty.

Millennium Development Goal 7:
ENSURE ENVIRONMENTAL SUSTAINABILITY
Target 7.C:
Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.

1.0 RURAL SANITATION IN INDIA

1.1 Milestones: Spirit of Total Sanitation Campaign

In India, rural sanitation is a state subject. However, the efforts of the states are supplemented by the Central Government through technical and financial assistance under the Central Rural Sanitation Programme (CRSP), launched in 1986. Keeping in view the experiences of the central and state governments, civil society groups and other implementing agencies, in 1999, as parts of reform initiatives CRSP was improved and titled as Total sanitation Campaign (TSC) to change into a demand driven and people centered programme. There was a shift from a high subsidy to a low subsidy regime. TSC is one of the eight flagship programmes of the Government of India. TSC projects have been sanctioned in 607 rural districts of the country.

1.2 Nirmal Gram Puraskar

To encourage Panchayati Raj Institutions (PRIs), block and districts to take up sanitation promotion, a post achievement, award-cum-fiscal incentive scheme, 'Nirmal Gram Puraskar' (NGP) was initiated in Oct 2003.

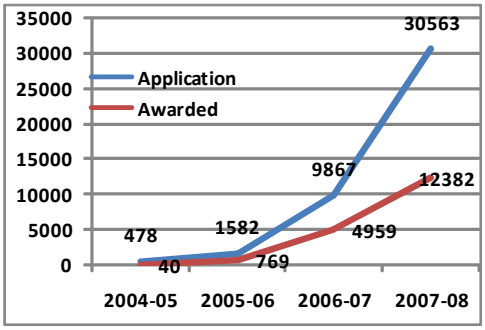
The eligibility criteria for the PRIs to receive NGP include:

Gram Panchayats, Blocks and Districts, which achieve 100% sanitation coverage in terms of:

- 100% sanitation coverage of individual households
- 100% school and anganwadis sanitation coverage
- Free from open defecation and
- Clean environment maintenance (liquid and solid waste management)

The first Puraskar was given in 2005. The figures given below shows the rapid increase in applications and NGP awardees.

Fig 1: NGP Awardees: the increasing trend

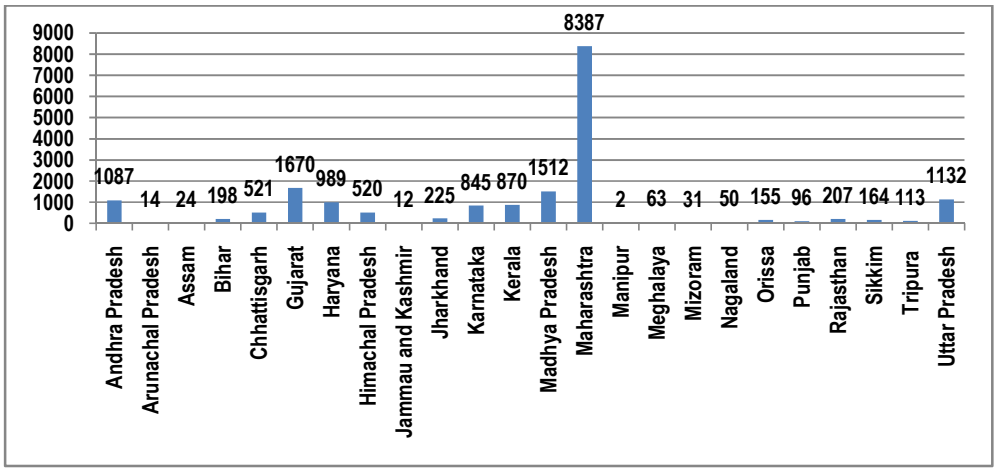


Beyond Nirmal Gram: Monitoring for Sustainability (Excerpts from Eleventh Five-Year Plan)

Once the village, block, or district Panchayat has received the Puraskar, there is a responsibility thrust on them, to maintain the Nirmal Gram status. The sustainability features specially, community involvement with women and children would sustain the Nirmal Gram status. Such Nirmal Grams have to move now to the next stage of sustained SLWM and proper street drainages.

The number of NGP awardees among various states is presented below.

Fig 2: State wise NGP awardees (in count)



2.0 THE STUDY, FOCUS ISSUES AND METHODOLOGY

The Department of Drinking Water and Sanitation, Ministry of Rural Development envisaged a comprehensive 'Assessment Study of Impact and Sustainability of Nirmal Gram Puraskar' in the country. The main purpose of the study was to assess the impact of NGP on the pace of progress of sanitation availability and usage in the country under TSC and its related impacts on health, education, gender empowerment, social inclusion in rural areas on different user groups particularly the rural poor. This study also focused on the durability and sustainability of the provision and usage of sanitary facilities over time. The rationale of the present evaluation study was to provide important evidence on whether the NGP component of the TSC to be continued and if so till when and with what modifications so as to reach the goal of 100% sanitation coverage and usage in rural areas of the country by 2012. The subsequent chapters provided a national level report on assessment of impact of NGP.

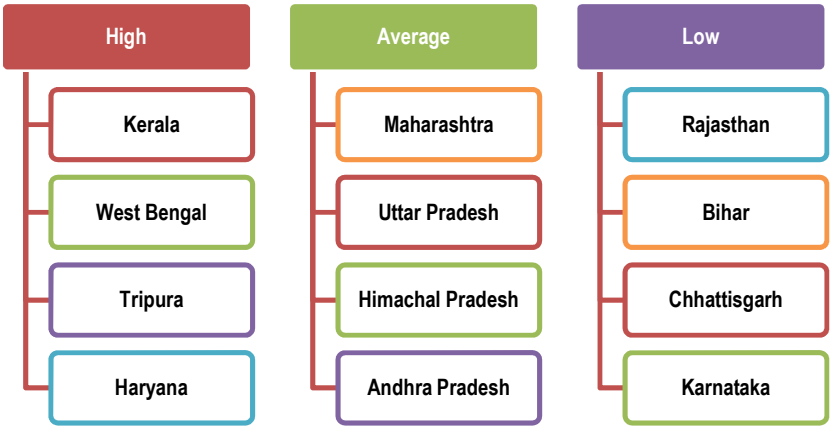
Following focus issues were to be studied through fifty indicators of performance, sustainability and impact.

2.1 Focus Issues

1. **Current Status of NGP Criteria (Coverage, Usage, ODF & Resolution, Garbage Disposal and Drainage Systems)**
   - F1.1. Status of Coverage, Durability and Functionality
   - F1.2. Status of Usage and 'Nirmal' status (ODF and Resolution, Garbage Disposal & Drainage Systems)
2. **Impact and Hygiene Factor**
   - F2.1. Impact on Health, Education, Economics, Gender and Social Inclusion (seen in light of status of usage & 'Nirmal' criteria, status of water scarcity and source)
   - F2.2. Relation of Impact with Status of Hygiene Practices (Hand Washing, Drinking Water)
3. **Sustainability of NGP Status**
   - F3.1. Critical Factors for Achieving NGP Status
   - F3.2. Reasons for Non-coverage and Non-Usage by Households, Men, Women, Infants, Adolescent Girls, Disabled and Aged, Relation with Status of Cleanliness, Water Scarcity and Water Source
   - F3.3. Factors Critical for Better Sustainability of NGP Status and Sustainability of Impact
   - F3.4. NGP Award Money Utilisation
4. **Measures and Modifications for Sustained NGP Status**
   - F4.1. Measures Needed to Strengthen the Impact and Sustainability
   - F4.2. NGP to Continue (for How Long and with What Modifications) or Not (Including improvement in coverage & pace of progress and improvement in usage)

2.2 Methodology and Sampling Framework

The study was undertaken in twelve states, which were categorised (as per the TOR) by their performance under the TSC programme, viz. high, average and low performing. However, no priority was assigned to any state based on its categorisation while selecting the NGP Gram Panchayats (NGP-GPs) for the study.



Since the awardees were distributed over four different years, the awardees from 2008 and those of years 2005, 2006 and 2007 together were taken for study. A list of districts where NGP-GPs were available for both time points was identified as 'list of common districts' for each state. Approx. 32% of the common districts i.e. 56 districts (out of 176 total common districts) were selected through Probability Proportional to Size (PPS) methodology keeping numbers of NGP-GPs as the size variable. Six to seven NGP-GPS were selected from each time-point in each district, through PPS with population as the size variable. 393 blocks were covered through 664 selected NGP-GPs.

In Rajasthan, as the number of NGP-GPs in the 2007+ time group was very less, five districts had to be selected instead of three districts allotted to the state, in order to fulfil the prescribed coverage of 18 NGP-GPs from each time point. The 2005-07 NGP-GPs are likely to be relatively high performing across the states as compared to 2008 NGP-GPs. And as comparatively fewer numbers were found for the 2005-07 time groups in Rajasthan, they are also likely to be higher performing in the time group itself. This might be a factor why Rajasthan, as a state, has shown relatively better performance among the twelve study states. This limitation needs to be kept in view, while considering the findings of the study for Rajasthan.

Circular systematic sampling was used for selection of the prescribed number (fifteen per NGP-GP) of households, after giving proportionate representation to SC/ST/Others in the per-GP sample and including at least two households each of SC/ ST if available. For getting equal representation and views of both genders, it was ensured that at least 50% of the household respondents were female. This was also ensured by keeping a separate section in the household Structured Interview Schedule to be responded to - preferably by a female of the household.

For 360^0 assessment, information and data was collected from all stakeholders. An observation checklist was included in the structured interview schedules for households and school and anganwadis. Primary data was collected also through in-depth interviews, observation checklist for the Panchayat area and Community Sanitary Complex (CSC - if any) and Focus Group Discussions. After pretesting in two states, the finalised tools were translated in six languages (Hindi, Telugu, Kannada, Marathi, Malayalam and Bengali). The field work was done in all states simultaneously from August 25, 2010 till October 4, 2010.

Thus, the total sample of 30,238 respondents included 12 states, 56 districts, 664 NGP-GPs, which had received NGP during 2005-2008 period (332 GPs from NGP-2008 and 332 from 2005-07).

Table 1: Overall summary of total sample size

Stakeholders	Sample size	Stakeholders	Sample size
Individual households	9960	Community Based Organisation (CBO) and NGOs	13
Focus Group Discussion	59	Self-Help Groups	438
Elected PRI members	1279	Women or Youth groups	450
School teachers	1383	Block Co-ordinators	261
Children (in groups)	14062	District Water and Sanitation Mission Officials including PRI Representatives	77
Anganwadi workers	1184	State Concerned Officials and CCDU officials	17
PHC/ PHUs Staff	311	Community Sanitary Complexes	134
Health Workers	610		
		Total sample size	**30238**

3.0 PROFILE OF SAMPLE HOUSEHOLDS AND INSTITUTIONS

Among the 9960 households surveyed, more than one third (36%) had wage labour (either as agricultural labourer or as daily wage labourer) as the primary occupation of the household. Another third reported farming (on sharing or ownership basis) as their primary occupation. Less than one tenth (around 9%) households were woman-headed. More than one fourth (26%) belonged to SC, 8% to ST and 44% to OBC, around 12% to various religious minorities. More than one fifths (20%) had *Kuchha* houses, while more than two fifths (42%) had *Semi-Pucca* houses. While 5.4% did not own their homestead land, around 57% did not have agricultural land either on ownership or on sharing basis. In case of their ration card status, 7% had no ration cards, 7 % had either Annapurna or Antyodaya type of ration card, while 42% belonged to BPL category and 45% to APL category. Overall, among the household respondents - approx. 51% were female, interviewed purposively by design.

Among the schools surveyed, less than 90% were government schools, less than 9% were government-aided-private schools, while less than 2% were unaided-private schools. More than 93% were Co-education schools, around 4% were girls' schools and 2% were boys' schools. More than 75% schools had primary sections.

Among Anganwadis surveyed, 45% were situated in school premises. Among the total school and anganwadi surveyed, 11% were running in rented premises.

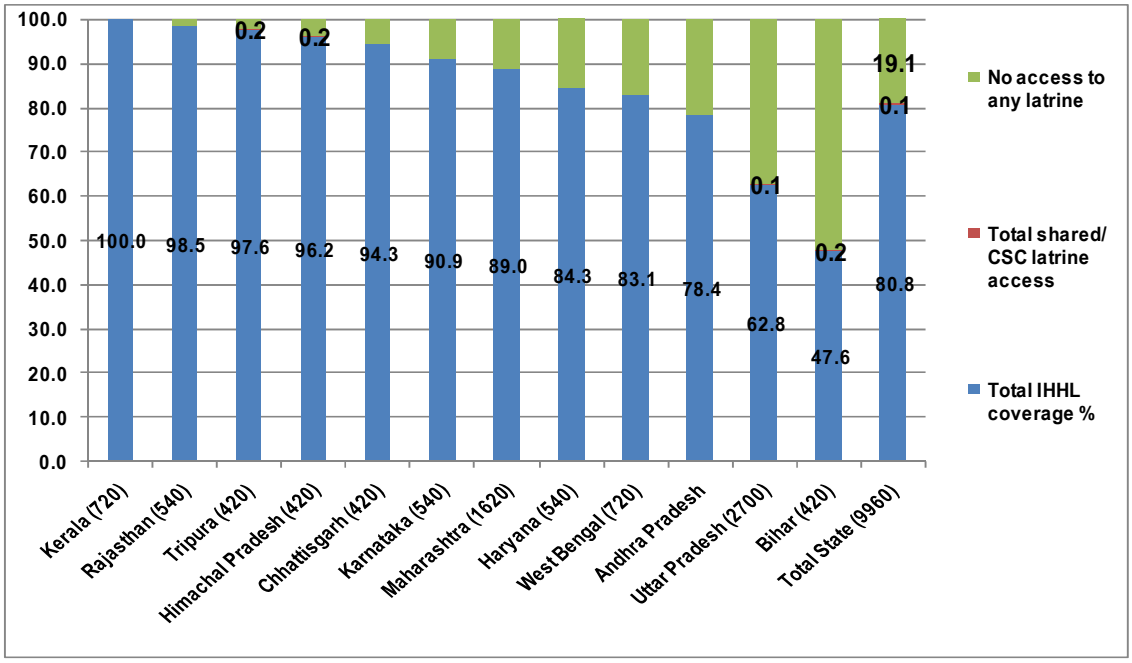
Among the PRI members interviewed at Panchayat level, around 35% were female (as specific effort was made to interview a female PRI if available in a NGP-GP, apart from the current Sarpanch/ Pradhan). Among the village level institutions (SHGs, Women's groups/ youth groups, other CBO/ NGOs) around 65% were working on either water or sanitation.

4.0 CURRENT STATUS OF NGP CRITERIA

4.1 Coverage of sanitation facilities

1. **Households having latrine**

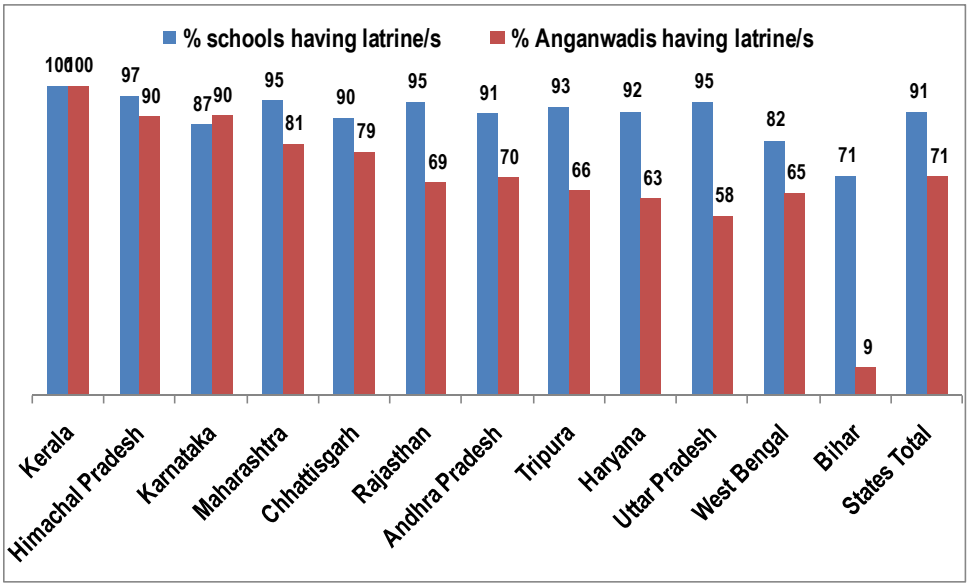
Fig 3: Households having latrine: Individual Household Latrine (IHHL) or Shared/ CSC



Overall, around 81% of the total sample NGP-GP households reported access to any type of latrine, i.e. either an Individual Household Latrine (IHHL - 80.8%) or a shared latrine/ a specified latrine within a Community Sanitary Complex (CSC – 0.1%). 19.1% of the total sample NGP-GP-households reported lack of access to any latrine.

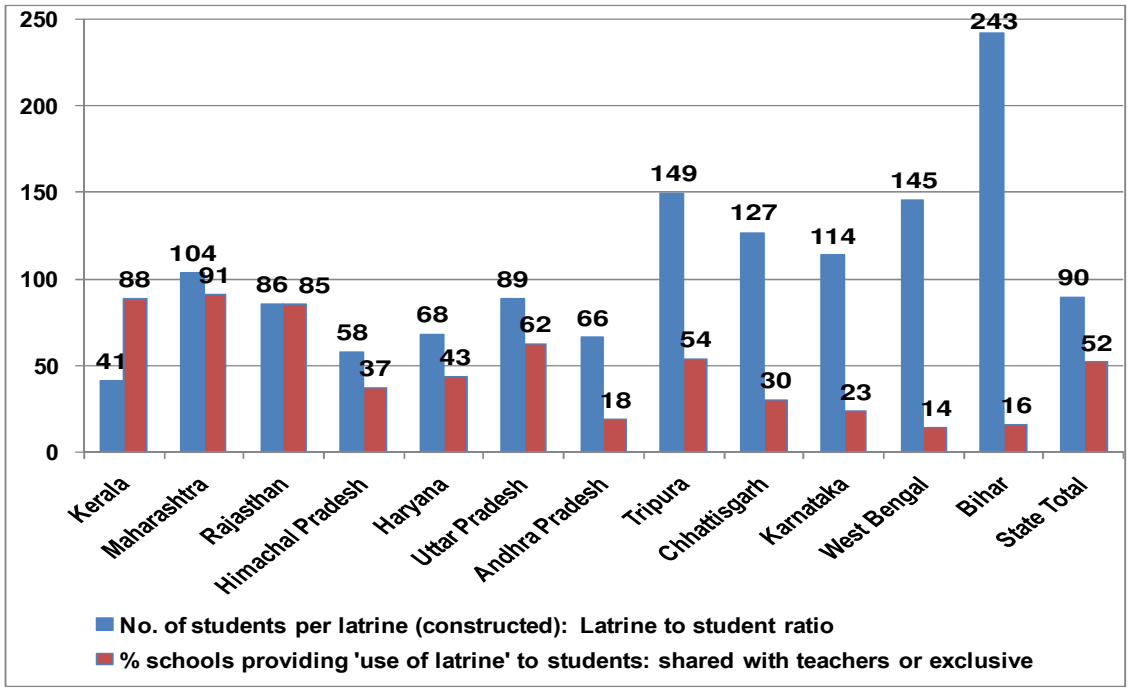
4.2 Coverage, access and adequacy of sanitation facility among schools and anganwadis

Fig 4: Institutions having latrine



Overall, 91% schools and 71% anganwadis had at least one latrine. Around 2.1 latrines and 3 urinals are constructed on an average in the total sample schools. Whereas, less than one on an average (0.8) latrine was found in the total sample anganwadis, while 45% of anganwadis were situated in the premises of a school.

Fig 5: Latrine to student ratio and percent schools providing access (reported use of at least one latrine) to students (in number of students enrolled per latrine and in percentage of sample schools respectively)



Overall, latrine to student ratio reaches just less than 1:90 i.e. **only 1 latrine is constructed per 90 students on an average in any school** (where the latrine could be meant for both children and teachers) and actual extent of access to latrine allowed to children for use is much lower. Effectively, **only a little more than half the schools (less than 52%) report at least one constructed latrine reportedly being used by students (exclusive or shared with teachers).**

While almost 93% schools were co-education schools, and 7% were either Girls' school or Boys' schools, only 22% of total sample schools had latrines that were reportedly accessed/ used (reported by teachers and children), as separate latrine for girls or boys. In other words, around 78% of sample schools did not provide separate access to latrine for girls and boys.

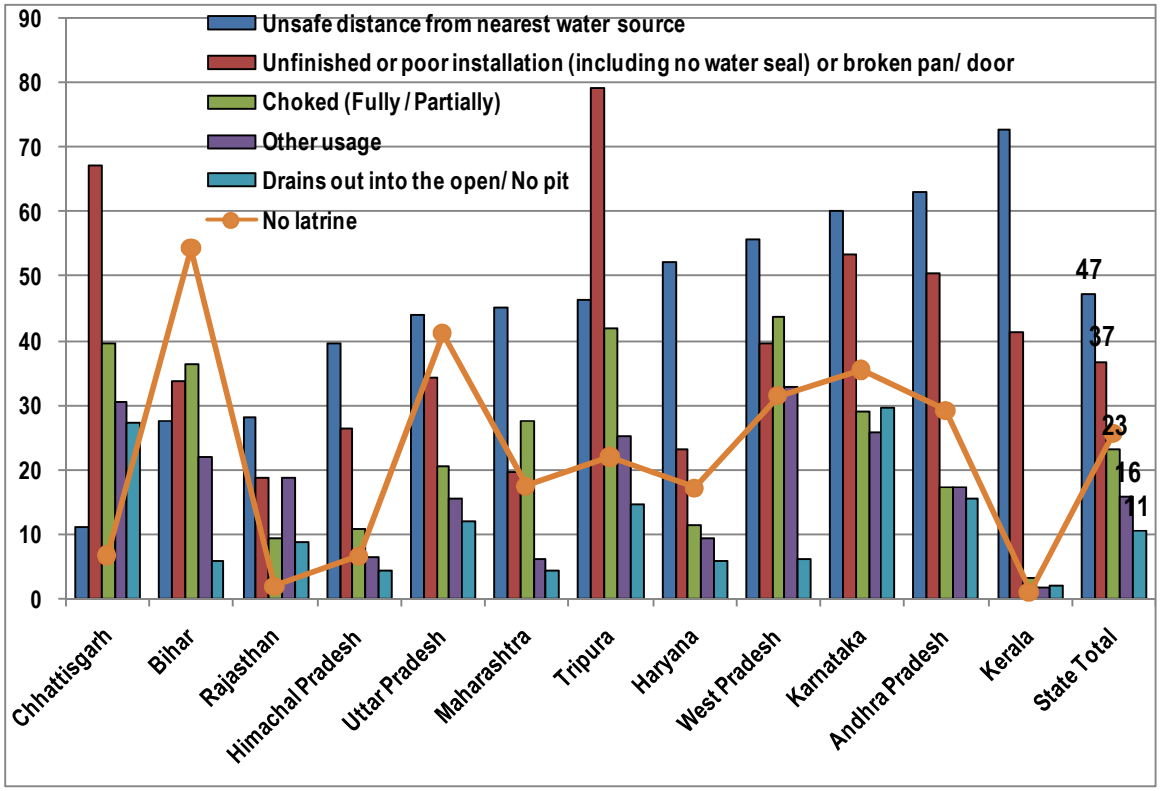
Overall, around 2.1 latrines per school and 3 urinals per school were found on an average in the total sample.

4.3 Usage of sanitation facilities

1. Functionality, technical and financial aspects of household latrines

The figure below gives the five criteria chosen for functionality and the percentage of households found to have dysfunctional latrine on each independent criteria.

Fig 6: Households with dysfunctional latrine on five criteria (in percentage of households)



Unfinished or poor installation was found to an extent of 37% of the sample households. Fully/ partially choked latrine account for 23% of the households (adding up to 42% when combined with no latrine). Around 16% households had a latrine that was either filled with debris or used as animal-shed or storage space.

If the dysfunctionality is to be looked at from the point of view of latrines being constructed for protecting water sources from faecal contamination, following are the findings.

- While 11% households had either no pit (as reported by households) or were found draining in open (as observed),
- An overwhelming 47% latrine had their pits at a distance less than 9.5 meters from the nearest water source (the safe distance, as a general rule is around 10 meters).

Both these findings pose questions about sustainability of health impact, if any, and whether the health impact can be attributed mainly to latrine construction. From the qualitative data as well, people seemed to notice the impacts on health (decrease in diarrhoea and water borne diseases) mainly from the time when there was a significant improvement in their water-supply, such as roll out of piped-water-supply in their villages. In Kerala, the state having highest percentage of households that have latrine pit at an unsafe distance from the water source (as almost all the households had a small well inside the premises of the household), the practice of boiling drinking water was given more credit for health impacts than other factors.

Nearly 58% of the total sample household respondents had single (leach) pit latrines, 16% had double (leach) pit latrines, 6% had latrines with septic tanks and 20% households reported either no pit or no latrine at all. Overall, Rs. 7030/- is the mean cost of a latrine. The mean percent share contributed by the household amounts to 61% of the total cost of latrine.
Around 57% latrine had rural pan, 9% had no walls, 17% had no door, 7% had wall made up of tarpaulin/ polythene sheet/ jute or cloth. 60% of the households reported availability of a mason for repairing of IHHL if required.

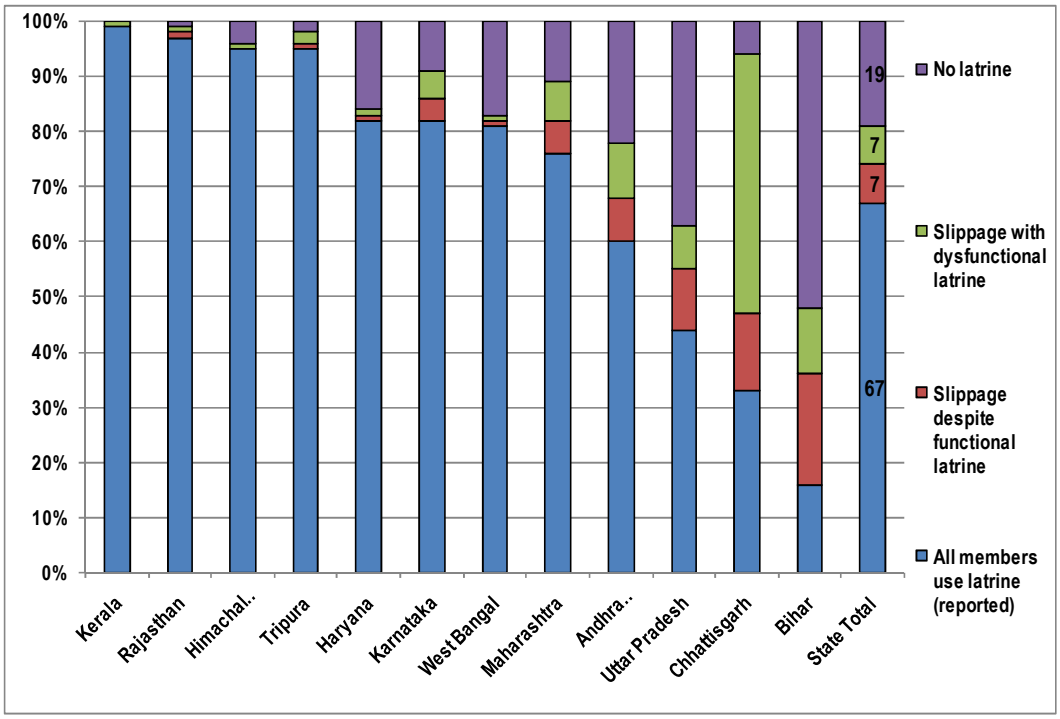
Around 27% households have individual hand pumps as source of water for drinking and cooking purpose, followed by community hand pumps with 26% and tap/ piped water connection inside premises (18%). Nearly 14% households' access to a well, while 9% to community piped water connection outside premises. In around 70% of the household's women and children are the ones who fetch water. Around 35% households spend more than half hour per day on fetching water.

Overall, more than 61% households have been observed to have a latrine with a water facility or a container having actual water (running or stored respectively). More than 19% households were observed to either have no water facility or container in or around their latrine or no water found (running/ stored) in the facility or container that existed in or around the latrine. More than 19% household do not have access to any latrine.

2. Usage of household latrines and open defecation free status

Following figure presents the usage of latrine as reported by the households.

Fig 7: Households reporting regular usage of latrine by all members (including safe disposal of faeces of less than 2-year old children) or no regular usage by at least one member (in percentage)



Among the practices followed for disposal of faeces of children below 2 years of age, 'disposal of child faeces in latrine' and 'children using latrine', when combined together into 'safe practices', accounted for overall 28% of the eligible households (that had children below 2 years of age and also had a latrine). This was then included in the reported usage by the rest of the household members and the following picture emerged.

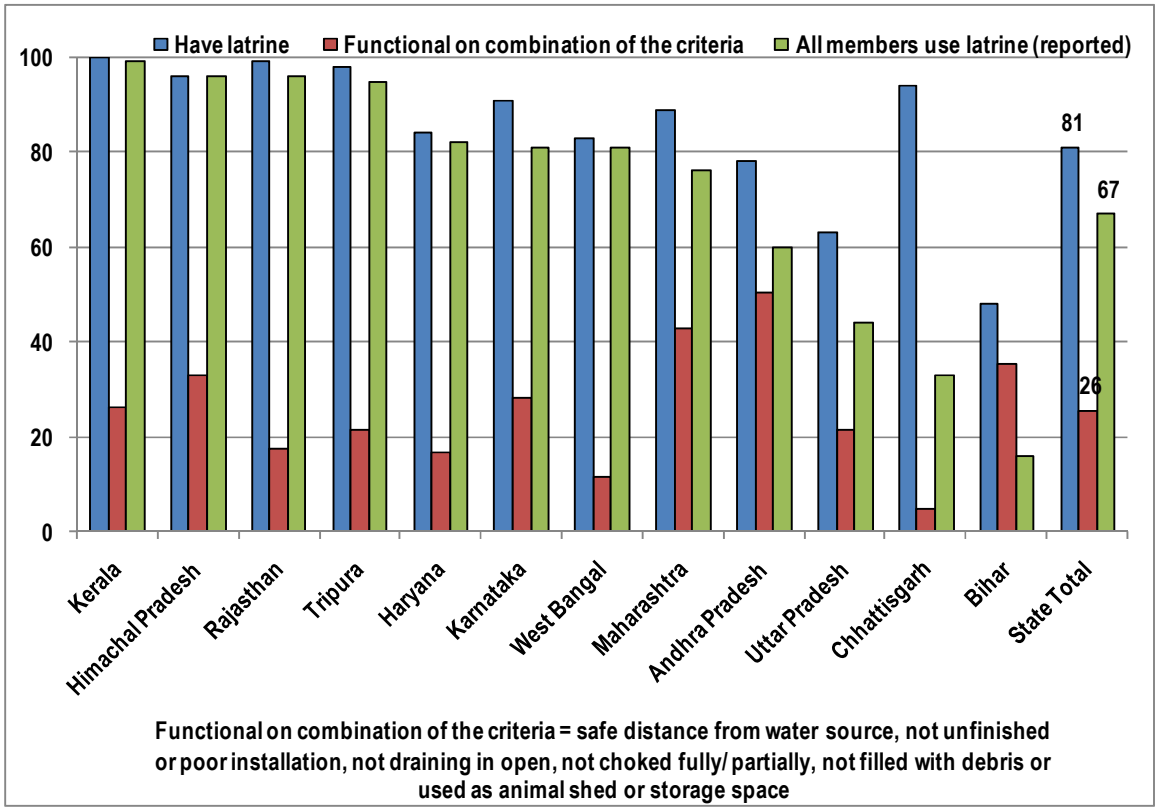
Overall, around 67% of the sample households had all the members not going regularly for open defecation (reportedly using latrine and disposal practice of <2 year children's' faeces involved latrine), while around 19% of the households did not have access to any latrine (and hence were presumed to be going for open defecation). This left around 14% of the households, among which, at least one member was reportedly going regularly for open defecation despite having a latrine.

Out of these 14%, around 7% households reported slippage despite being observed to have a functional latrine as defined on the combination of criteria described earlier (Functional on combination of the criteria = safe distance from water source, not unfinished or poor installation, not draining in open, not choked fully/ partially, not filled with debris or used as animal shed or storage space).

Thus, households having no access to any latrine and having at least one member reportedly going for open defecation despite having a latrine - together accounted for around 33.3% of the sample households. This left only 67% of the households that could be termed as 'open defecation free households'

The figure below shows the combined picture of coverage, functionality and usage of latrine among sample households.

Fig 8: Coverage, functionality and usage of household latrines

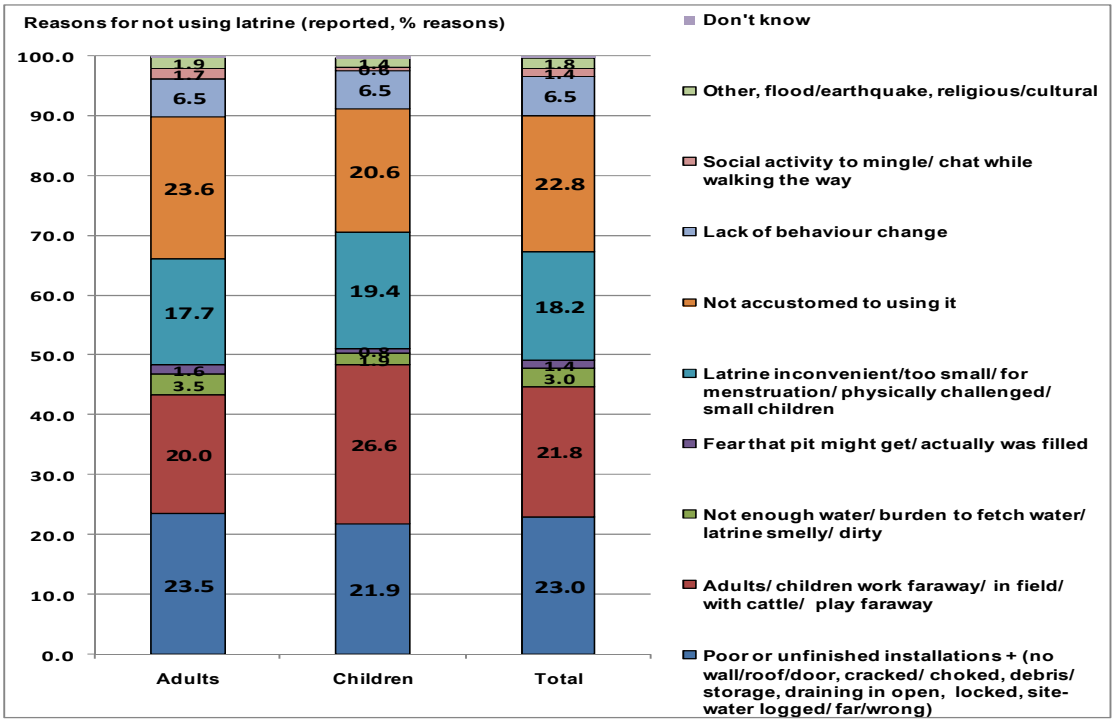


Overall, 81% households had latrine, out of which only 26% households fulfilled the combination of criteria for categorising their latrine as a functional latrine. The point worth noting is that around 67% households report all members using the latrine regularly, which is much higher than the functionality percentage.

3. Reasons for not using latrine (reported)

When household respondents reported the reasons behind some of their household members not using latrine regularly now-a-days, the following picture emerged:

Fig 9: Reasons for not using household latrine (in percentage of response)

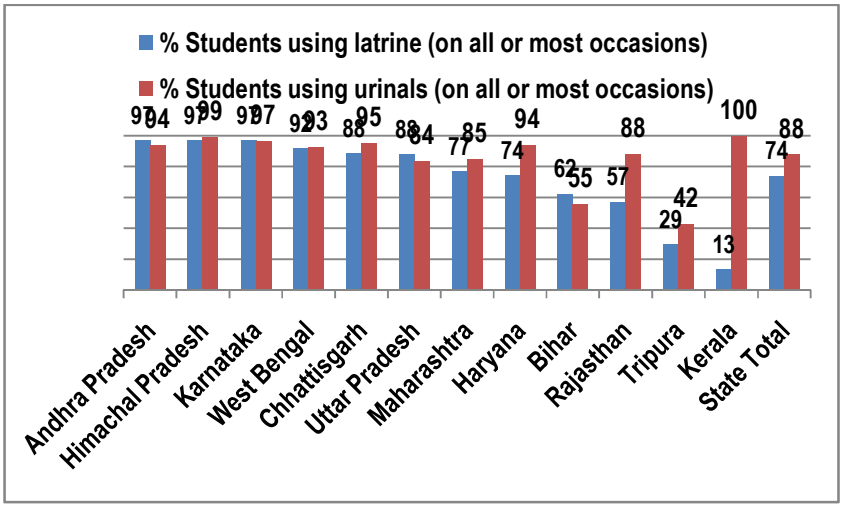


More than 23% reasons related to poor or unfinished installations. Around 22% reasons related to 'Adults work faraway/ in the field or Children play/ go with cattle/ work faraway so they defecate there in the open'. Around 23% reasons related to 'Not accustomed to using it'. Around 7% reasons reported 'lack of behaviour change'. Water related reasons accounted for around 3% of reported reasons. Fear that pit might get filled' and 'Pit/ septic tank was actually full' together accounted for around 1.4% of reasons. 'It is a social activity to mingle/ chat while walking the way to open defecation' accounted for another 1.4% reasons, while other reasons (including site destroyed by flood/ earthquake and religious/ cultural reasons) accounted for another 1.8% of reasons.

4. Usage among school latrines and urinals

When students were asked to report how frequently they used or did not use the school sanitation facility, the response was as follows:

Fig 10: Students using school sanitation facilities



Overall, 88% of students (participants of group-interactions) reported using school urinals, while 74% reported using school latrines.

5.0 COMMUNITY SANITARY COMPLEXES (CSC)

Overall 20% of NGP-GPs were found to have a CSC (shared latrines or full-fledge CSCs). The highest percentage was found among Rajasthan, Maharashtra and West Bengal, having CSCs in 42% of GPs, 40% of GPs and 35% of GPs respectively. In Chhattisgarh, no CSC was found. The average number of latrine per CSC was 3.1 overall and was found highest among Uttar Pradesh (4.4 latrine on an average in a CSC), Haryana (3.1 latrine per CSC) and Bihar (3.1 latrine per CSC). When the PRIs or villagers were asked about the intended users of the CSCs, it was found that 49% of the CSCs were reportedly meant for households (as shared latrine among a group of households or hamlet), 37% were meant for migrating or floating population, 10% for the market place users, 3% for the Bus-stop users, less than 2% were in the area where generally the village-fair took place and around 3% for other purposes. The CSC latrines were analysed on the functionality criteria similar to the criteria described under functionality of household latrine. Out of the 414 latrines found in 134 CSCs, 21% latrine were observed to have poor or unfinished installation (no pan, or no wall/ door, or broken pan or door), 41% latrine had their pits at an unsafe distance (less than 9.5 meters) from the nearest water source, 38% were found choked fully or partially, 19% were found filled with debris or used as storage and 9% were found draining in the open (the percentages are of the individual criteria and hence some latrine had more than one features described here).

6.0 SOLID AND LIQUID WASTE MANAGEMENT (SLWM)

Around 56% households practice safe disposal methods for disposal of solid waste. 36% sample households reported availability of garbage collectors in their Panchayats. Safe disposal is defined as combination of i. Keeping garbage with the cow-dung/ other manure in the open and then use it in the field after it becomes manure - 28% or ii. Putting in waste bin - 23% or iii. Using the non-degradables as the filling for land/ road etc. - 4% or iv. Covered composting/ Vermin compost/ biogas, sending to purchasers of garbage items 2%. Overall 53% Gram Panchayats had observable garbage dumping around the panchayat area/ fields/ on route.

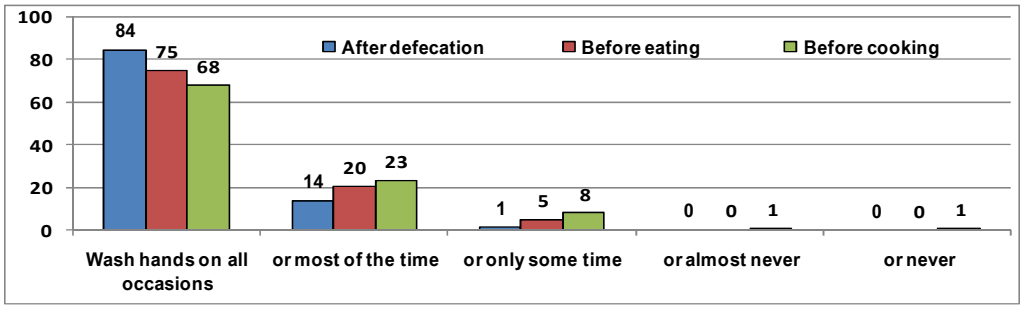
Overall, around 54% of the responses provided by the household respondents related to safe disposal of water from their bathroom, kitchen etc. (grey water) into the drainage around the households. 24% households reported all the water sources of the village having proper platforms and drainage around them. Regarding proper drainages along all or most of the roads, total positive response was reported by 20% of the sample households.

Overall, around 35% sample Panchayats were found to have no observable water logging inside the premises that were visited (school, anganwadi, households and others), while 44% of the sample Panchayats were found to have no observable water logging in or around the panchayat area.

7.0 HAND WASHING AND WATER HANDLING PRACTICES

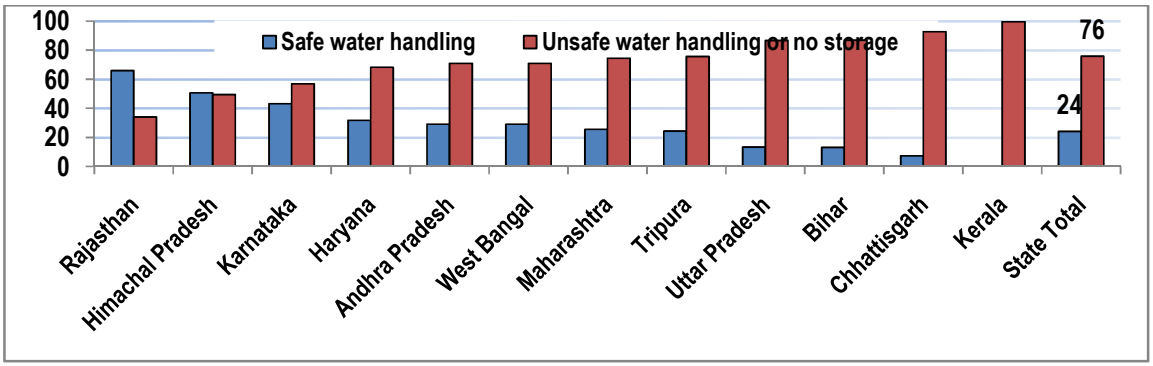
Regarding safe hand washing practices 'after defecation', around 52% households reported that all the household members wash hands on all or most occasions and used either soap or fresh ash. Regarding the same being true for 'before eating food', around 40% responded positively.

Fig 11: Frequency of washing hands reported among households (in percentage)



Out of 83% sample households that store drinking water, only 25% of those 83% use safe water handling practice of either using ladle with long handle for taking out water from the storage vessel (21%) or having a tap attached to the vessel (4%). Out of 76% of the sample schools and anganwadis that store drinking water, only 47% of those 76% practice safe water handling method in terms of 32% using ladle with long handle and 15% using a water storage facility that had tap attached to it.

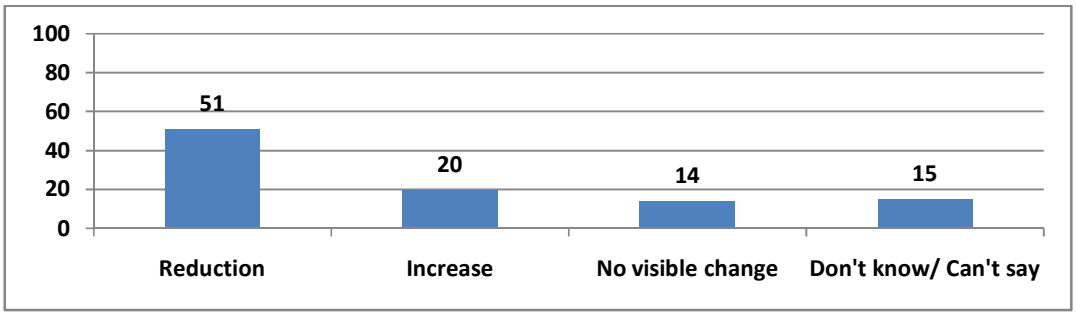
Fig 12: Safe practices for drinking water handling (in percentage of households)



8.0 IMPACT

Incidence of diarrhoea (more than three loose stools during any 24 hours in last two weeks) among household- members - was reported to be 'nil' by around 92% of the households. Reduction, after latrine construction, in the average annual number of days the children of the household suffered with diarrhoea - was reported by 51% of the households.

Fig 13: Households reported change in the number of days the children suffered with diarrhoea in a year (in percentage)



Occurrence of water-borne diseases such as diarrhoea, dysentery, jaundice, intestinal worms, UTI, dengue, malaria, chickengunia, typhoid etc. was reported to be on the decline (after latrine construction) by 61% of the households. The same was supported by 74% health workers reporting a perceived reduction in water-borne diseases. 50% households also reported weight-gain among their children after construction of latrines.

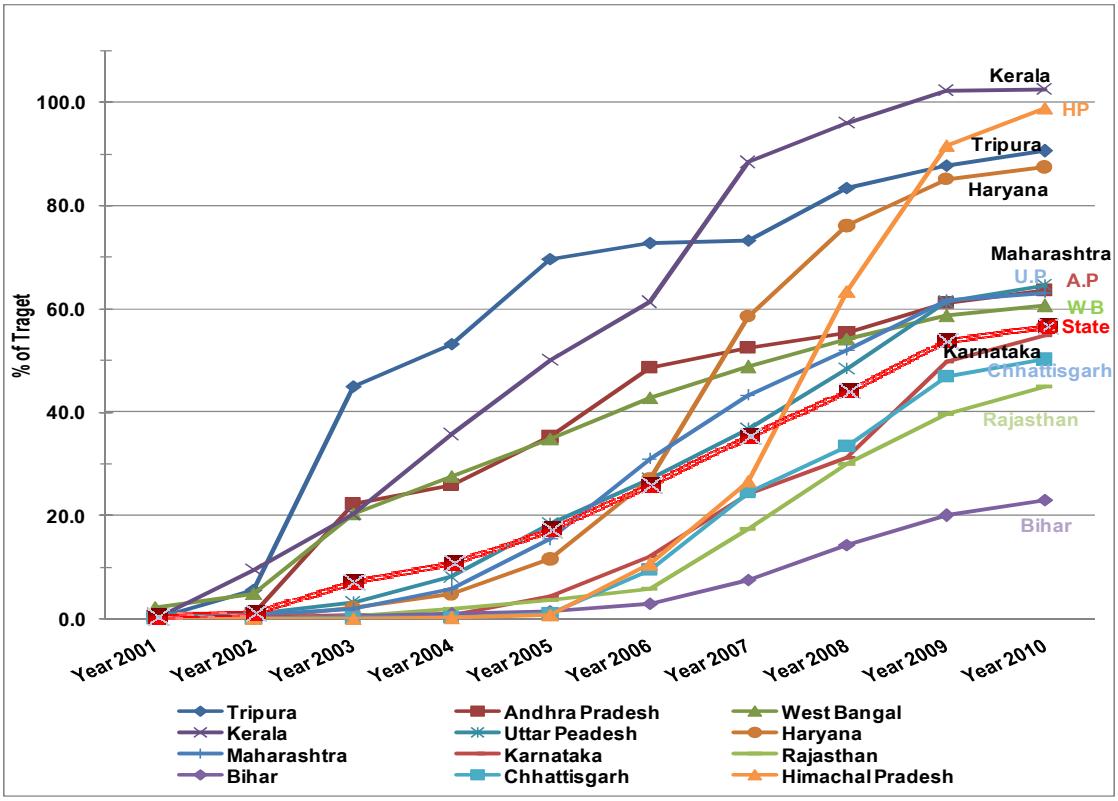
92% health workers also reported that they perceive improvement in the understanding of the household members about water and excreta related diseases in comparison to the same when the majority of the latrine of the panchayat were not constructed (which is assumed to coincide with the time preparation for NGP had not begun). Infant mortality has been on the decline after the latrines were constructed, as perceived by 84% of the health workers. Reduction in maternal mortality is perceived by 74"%. While 77% of the school/ anganwadi workers perceived that the attendance had increased, only 29% households felt the same. The construction of latrines had led to less number of man-days lost of the working adults due to illness according to 51 % of the household respondents, while around 52% said that the annual medical expenses of the household had reduced.

Between 68-75% of the respondents amongst the households, school/ anganwadi and health workers felt that the relations (and attitudes) between both the genders in the panchayat had become better. Enhanced sense of personal security among women and girls was reported by 67% of the household respondents. As high as 68% to 81% of the households, school/ anganwadi and PRI respondents confirm the view that social inclusion of SC/STs have improved (due to the process of NGP preparation).

9.0 IMPACT OF NGP ON TSC

Although the MDGs were formulated in 2000, the baseline for most of the MDG targets, including that on water and sanitation, has been set as 1990.

Fig 14: Cumulative IHHL constructions under TSC against targets (in percentage): Impact of NGP (after 2005) on TSC
Source: Govt. of India, Dept. of Drinking Water and Sanitation (www.ddws.nic.in)

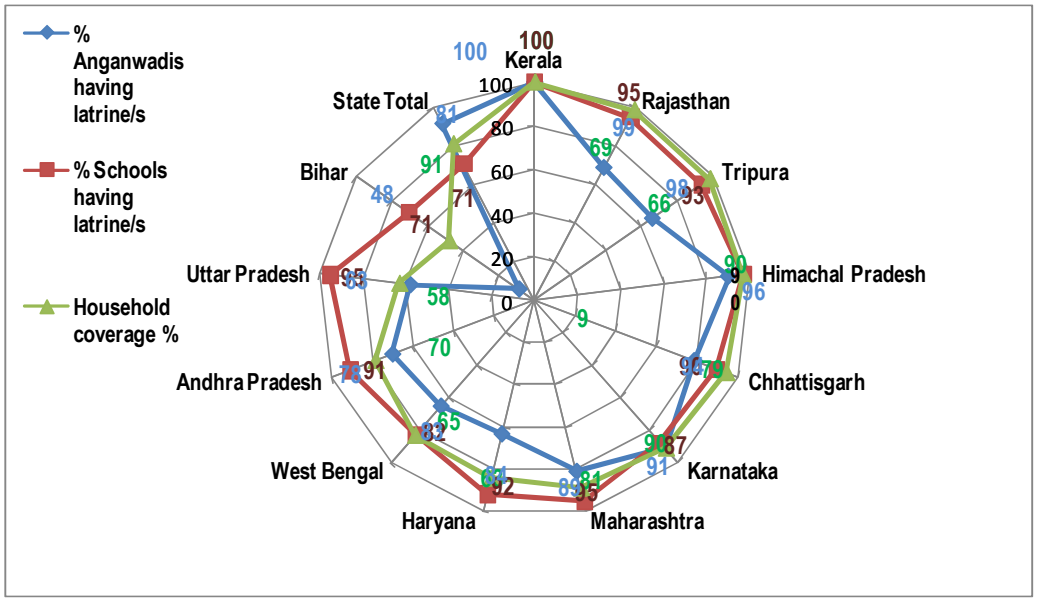


The households that have built their latrine before 2003 (before NGP was launched), were asked about their observation - of whether the pattern of usage of latrine by their household members – had improved or deteriorated, after the NGP year of their Panchayat (the year that their respective Panchayat received NGP was read out of to them). 66% of these eligible households reported that the household pattern of usage had improved (implying the impact of preparation/ IEC activities of NGP).

10.0 NON-TECHNICAL FACTORS CRITICAL FOR ACHIEVING AND SUSTAINING NGP CRITERIA

As far as coverage of 100% households and institutions under sanitation facilities is concerned, NGP status was not found to have sustained in most states. While household coverage stood at 81%, 71% schools and 81% anganwadis were found to have at least one latrine.

Fig 15: Overall coverage among households and institutions (along with state total/ average)



10.1 Reasons for no access to latrine among households (reported)

Overall, when present and past impediments to constructing a latrine are looked together in terms of approximate % of households that reported that reason, following picture emerge: i. **Poverty:** reasons directly related to poverty constitute the single biggest factor, for both present and past, reported by approximately 34.7% (more than one third) of the households. ii. '**Lack of land'** for constructing latrine is reported by approximately 11.7% households (past and present combined) iii. **'Did not think about it' earlier** is the second largest past reason reported by approximately 15.6% households. iv. '**We were neglected (by the PRI) because…' of reasons other than poverty** (neglected because 'we are not favourites/ kin, SC/ST, interior area, woman-headed) constitutes the third largest group of present reasons, reported by approximately 3.5% households. v. **Alternatively felt 'neglect by PRI'** attributed to various present reasons (neglected because 'we are poor' combined with because… other reasons is the single largest present reason reported by approximately 9.9% of the households. vi. **Water scarcity** is also a reason (past and present combined) reported by 4.4% households, especially in Rajasthan, Himachal, Chhattisgarh and Bihar.

10.2 Profile of 'No-latrine households'

No-latrine households are characterised by poverty - with the primary occupation of those household being 'labour for wages' (as daily wage labourers or agricultural labourers) and the type of house being *Kuchha/ semi-pucca* - found accentuated among No-latrine households (more) by 20% as compared to Have-latrine households. If ration card status is to be looked at, 'Not having a ration card at all' is what differentiates the No-latrine households to some extent (accentuated by 6%) from the Have-latrine households. Having BPL/ Annapurna/ Antyodaya ration card is not what differentiates (accentuation of a negligible 0.1%) a No-latrine and a Have-latrine household.

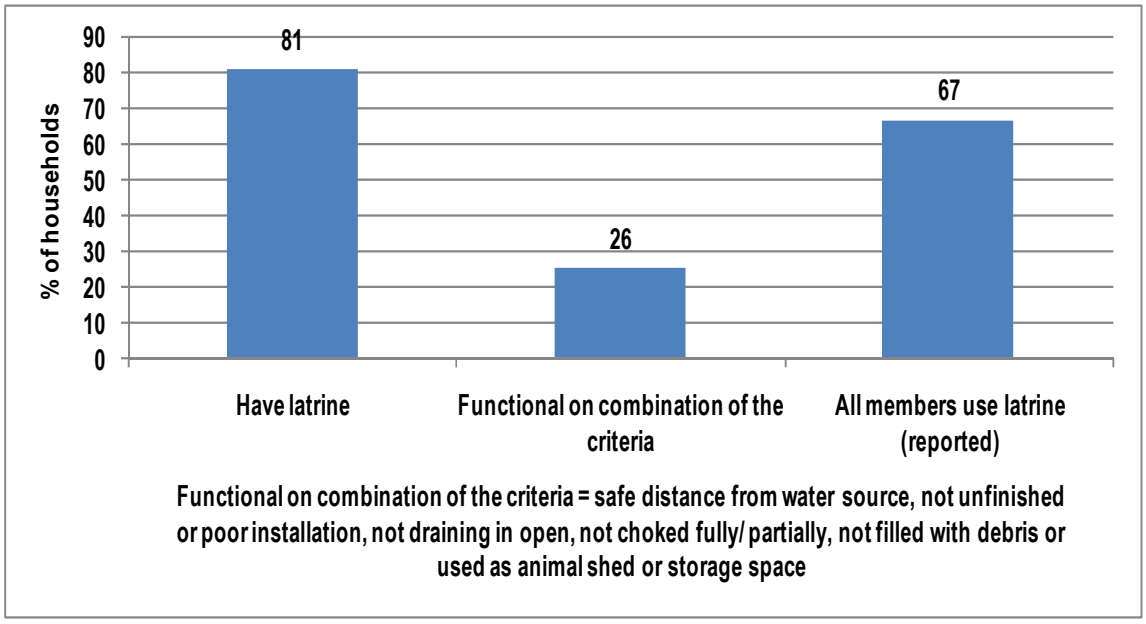
10.3 Motivating factors for constructing Individual Household Latrine (IHHL) - reported

Overall, self-motivation (convenience during seasons or nights, of elderly members and privacy related needs combined with the reasons related to diseases or better health) forms the single largest group of reasons (50%) reported by the households, as the factors that led to decision of latrine construction. This is followed by 'told by' PRI/ villagers/ 'a government order'/ others or by motivator (46 % of the total reasons reported).

Among the probable enabling factors; the other large factors are: i. Perceived improvement in social status and ii. Self-motivational factors (convenience during rainy season/ night/ day; need for privacy, need for aged family members, lack of enough open space for open defecation). The role of IEC activities behind these reported factors might be worth looking into.

The figure below gives the overall status of coverage, functionality and usage among households at an overall level.

Fig 16: Coverage, functionality and usage of household sanitation facility



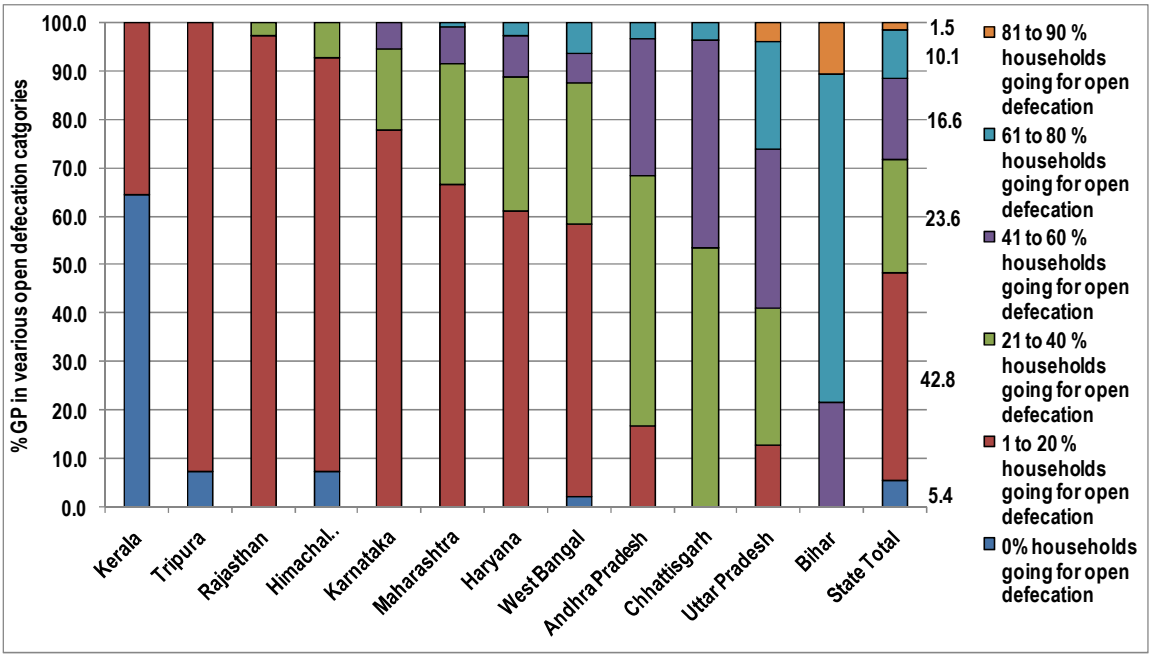
10.4 Sustainability of household latrine usage at Gram Panchayat level

Sustainability of ODF status was analysed in terms of percentage households going for open defecation in an NGP-GP. Various categories were formed in terms of 0% households going for open defecation (total ODF), 1-20% going for open defecation and so on up to 81-90% households going for open defecation. Described below is the sustained ODF status found among the study states.

Table 2: Percentage of Gram Panchayats that fall in various categories of open defecation among households (including households without latrine)

Sample states	Percentage NGP-GPs in the open defecation category						
	0% households going for open defecation	1 to 20 % households going for open defecation	21 to 40 % households going for open defecation	41 to 60 % households going for open defecation	61 to 80 % households going for open defecation	81 to 90 % households going for open defecation	Total count of sample NGP-GPs
Kerala	64.6	35.4	0.0	0.0	0.0	0.0	48
Tripura	7.1	92.9	0.0	0.0	0.0	0.0	28
Rajasthan	0.0	97.2	2.8	0.0	0.0	0.0	36
Himachal Pradesh	7.1	85.7	7.1	0.0	0.0	0.0	28
Karnataka	0.0	77.8	16.7	5.6	0.0	0.0	36
Maharashtra	0.0	66.7	25.0	7.4	0.9	0.0	108
Haryana	0.0	61.1	27.8	8.3	2.8	0.0	36
West Bangal	2.1	56.3	29.2	6.3	6.3	0.0	48
Andhra Pradesh	0.0	16.7	51.7	28.3	3.3	0.0	60
Chhattisgarh	0.0	0.0	53.6	42.9	3.6	0.0	28
Uttar Pradesh	0.0	12.8	28.3	32.8	22.2	3.9	180
Bihar	0.0	0.0	0.0	21.4	67.9	10.7	28
State Total	5.4	42.8	23.6	16.6	10.1	1.5	664

Fig 17: Gram Panchayats in various categories of open defecation among households (in percentage of NGP-GPs)



- Overall, more than 5% NGP-GPs were found to have sustained total open defecation free status (on the criteria of either the household respondents themselves reporting open defecation or the household not having any latrine). Kerala had 65% of its NGP-GPs in this category of total open defecation free.
- More than two fifths of NGP-GPs, i.e. 43% of sample GPs were found to have less than 20% households going for open defecation. Majority of GPs (ranging from 56% to 97% of GPs) in Tripura, Rajasthan, Himachal Pradesh, Karnataka, Maharashtra, Haryana and West Bengal belong to this category.
- Just less than one fourth (24%) of sample GPs had 21% to 40% households going for open defecation. More than half of the GPs in Andhra Pradesh and Chhattisgarh fall in this category.
- 17% of sample GPs had 41% to 60% households going for open defecation. Around 43% of GPs of Chhattisgarh belong to this category.

- 10% of sample GPs had 61% to 80% households going for open defecation. Bihar had 68% of its sample GPs falling into this category.
- 2% of sample GPs had 81% to 90% households going for open defecation. 11% of GPs of Bihar and 4% of GPs of Uttar Pradesh were found to have 81 to 90% households going for open defecation.

10.5 Duration of concentrated efforts at latrine construction and sustained usage

Years since latrine construction, net increase in sanitation usage and duration of concentrated effort at latrine construction

Another point to keep in mind while considering the factors that might be critical for achieving NGP is – 'the year when the toilets have been constructed'. As per the responses received from household respondents about the year of latrine construction, Kerala started with the highest percentage of the sample households (74%) already having a latrine, even before TSC was launched (before 1999). By 2003 calendar year end, (the year during which NGP scheme was announced), Rajasthan and Himachal Pradesh had 42% and 38% of the sample households already having a latrine. Maharashtra, Haryana and West Bengal had between 32% to 30% and Uttar Pradesh, Bihar and Chhattisgarh had between 5% to 10% sample households already having a latrine.

If the pair of years when there was a 5% or more than 5% increase in the households having latrine can be termed as years of concentrated efforts at latrine construction, an attempt is made in this study to assess the link between duration of concentrated effort and net increase in sustained sanitation (end use minus initial construction/ coverage). When the states are arranged in the descending order of the duration of concentrated effort (number of years they show concentrated effort at latrine construction = descending order of column 14), the pattern that emerges in the net increase in sustained sanitation since TSC (column 13) is given in the following table and described below:

Table 3: Link between 'Net increase in sustained usage (in 2010 as compared to 1998)' and the 'Duration of concentrated efforts at latrine construction'

States/Year	1998 Before TSC	1999 TSC	2000	2001	2002 Before NGP launch	2003 NGP launched	2004 Before 1st NGP award	2005 1st NGP awarded	2006	2007	2008	2010 Usage % = All members using latrine regularly 2010	Net increase in sustained sanitation = 2010 Usage % - 1998 Coverage %	Duration of concentrated effort= No. of years having 5% or >5% increase in latrine construction
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Kerala	74	78	79	79	79	88	94	97	98	98	98	98.9	24.6	2+…
Haryana	5	6	14	19	27	32	39	51	59	64	75	82.2	77.4	9
Rajasthan	11	14	22	29	38	42	50	62	74	89	94	96.1	84.8	8
Himachal Pradesh	20	22	28	31	36	38	44	52	61	86	91	95.7	75.7	7
Maharashtra	14	16	24	26	30	32	38	50	63	75	82	75.6	61.7	5
Uttar Pradesh	2	3	6	6	8	10	12	17	28	42	49	43.5	41.6	4
Chhattisgarh	2	3	4	4	5	5	7	15	39	76	88	32.9	30.7	4
Bihar	3	4	5	6	8	9	10	13	20	35	42	15.7	12.6	3
Total	11	13	18	19	23	26	30	37	47	59	66	66.7	55.3	4

The states show an overall pattern of descending order of net increase in sustained sanitation with the following exceptions. i.e. The 'net increase in sustained sanitation' increases (in column 13) seems to increase when the 'duration of concentrated effort increases' (in column 14) increases. There are only two exceptions to this pattern. The fact that majority (more than 74%) coverage among the sample households was already achieved before TSC in Kerala – signifies the longest duration of effort (and hence the maximum sustained usage percentage). Rajasthan shows higher increase in coverage before 2003 (launch of NGP).

This pattern seems to support the theory that longer the duration of concentrated work on sanitation, higher is the results achieved in terms of net increase in sustained usage. The duration is meant to be just one of the indicators for the extent, to which social mobilisation processes/ IEC activities must have been undertaken or would have happened universally with adequate social inclusion and if micro level group formations would have been part of the process.

10.6 Social mobilisation and open defecation free households

There seems to be a correlation between 'Social mobilisation process (% recall of specific activities before and after NGP and processes before NGP - by all household respondents)' and 'Percent households going for open defecation', indicating that in case of households who have been exposed to (or recall) more (higher number of activities), longer (both before and after NGP) and micro-level social mobilsation processes (discussions, micro-level group formations, household visits etc.), open defecation is lower.

To elaborate, the correlation indicates that

in case of households who have been exposed to (or recall)

- more (higher number of) activities and/ or
- longer duration of activities (done both before and after NGP) and/ or
- micro-level social mobilsation processes (i.e. discussions, micro-level group formations, household visits etc.),
- open defecation is lower.

Overall, around 28% of the responses recalled, reported by the sample households, show positive recall of any awareness generation activity done during the years preceding respective NGP years. When asked about similar activities after NGP, significant decrease was found with only 22% of the total recall responses indicating positive recall. Overall, the household respondents recall that the main awareness generation activities that occurred, before the respective NGP year (any activitiy done in last ten years during TSC), include ralllies and marches (23% of the total recall responses), posters/ wall painting (18%), speechs by political leaders or govt. officials (17%), street-plays (17%) and incorporation of sanitation issue in school curriculum (9%). The main process adopted for social awareness or mobilisation recalled by household respondents was PRI contacted/ somebody contacted (23%), discussion in Gram Sabha is the second most frequent response reported at by 20%. It is followed by work through formation of community or habitation level group accounting for 14% and work through anganwadi worker/ school/ PTA amounting to another 10% of the total recall responses.

PRI members are recalled by the household respondents as the persons who led the social mobilisation process across all the states before latrine construction (recalled by 38% of the respondents). This is followed by anganwadi worker recalled as the leading person by 12% of household respondents, Youth and health workers (10% households), school teacher and women/ SHG members (9% households), CBO persons (4% households), and children and others are (2 % and 1% households respectively). Around 9% of households said that nobody came or visited their house to tell them about latrines to be constructed. About 39% of respondents recalled people/ institutions visited twice for explain about latrine. This is followed by three visits recall by 16.6% and more that thrice by 13% sample households.

18% household respondents report that nobody visited their house after construction of latrine (in their house or in the majority of the other houses) to explain about how to continue to use and maintain latrines.

35% of households recalled that resolutions were passed by PRI to maintain ODF status. 48% of sample households reveal that monitoring responsibility for maintaining the ODF status was taken up by a group/ individual. Around 33% (with 80% in Kerala) sample households reveal that PRI had taken the monitoring responsibility for maintaining ODF following by youth 16%, health worker and anganwadi worker 12% , women/ SHG , school teacher, children, CBOs with 10% , 8% and 4% respectively.

11.0 WHETHER NGP SHOULD BE CONTINUED (IF SO, WITH WHAT MODIFICATIONS)

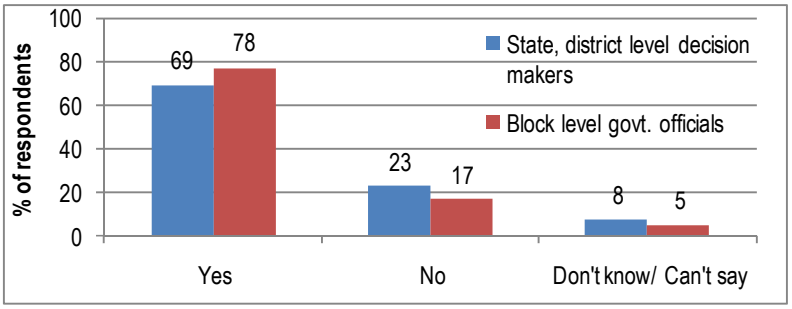
Feedback received from stakeholders about NGP scheme presents the following picture.

11.1 Awareness, utilisation and decision making

While 59% households were aware about their gram panchayat receiving Nirmal Gram Puraskar, around 18% reported that some award-amount was given (they may did or did not know the approximate amount). When these 19% households, which were aware that some award-amount was given, were asked about the activities on which this amount was utilised, responses of around 16% households conformed to the recommended utilisation mentioned under NGP Guidelines. When asked about the who was consulted during the decision making process for amount-utilisation, 80% of their responses (around 15% households) stated that somebody apart from Sarpanch/ Pradhan was consulted for NGP award money utilisation. When these 19% households, which were aware that some award-amount was given, were asked about the kind of decision making process followed, 38% of their responses (around 7% households) reported that decision was taken mainly by the Sarpanch or no particular process was followed. 19% of their responses (around 4%households) reported that PRI member/s had been involved apart from the Sarpanch in taking the decision followed by collective decision/ Gram Sabha (13% responses) and VWSC (7% responses).

11.2 Achievement of NGP objectives

Fig 18: Successful overall in achieving all its objectives: stakeholders' opinion (in percentage)



Majority of the stakeholders rated NGP as being successful either to 'a great extent' or to 'a reasonable extent' in its main objective of adding vigour to TSC. On each of the four specific objectives stated under the NGP guidelines, NGP's performance was also rated well (around 4 out of 5 points) by the respondents. On the question of whether NGP should be continued or not, 97% of government officials and 87% of PRI respondents expressed their affirmative opinion.

11.3 Whether NGP should continue or not

On the question of whether NGP should be continued or not, 97% of government officials and 87% of PRI respondents expressed their affirmative opinion.

- ✓ Almost all the stakeholders i.e. concerned officials, PRI members, village/habitation level groups and health workers/ staff in all sample states were of the view that NGP should continue. Almost all opinions converged on the idea that NGP is very effective in 'filling the last gaps'. NGP has made PRIs more responsive to and proactive for solving people's problem, which was not happening earlier.

- ✓ However, there were very few instances where few PRI members, health workers and officials have stated that NGP should not be continued anymore. Misuse of award amount and slippage to open defecation after receiving the award were cited as the arguments in support for discontinuation of NGP.
- ✓ The findings of the study also support continuation of NGP, albeit with recommendations for following modifications in the NGP guidelines:

12.0 RECOMMENDATIONS: MEASURES NEEDED TO STRENGTHEN THE IMPACT AND SUSTAINABILITY: NGP

1. Enabling environment and sustainability: socio-institutional, technical-financial and environment/ impact sustainability

I. **Complementary Programmes:** Learning needs to be gathered from a systematic study of the schemes that converged/ facilitated/ complemented TSC and/or NGP in various states. How did they lead to different extents of sustainability status? And, how can such schemes be adapted/ scaled for other states. This would suggest the kind of policy environment that might lead to strengthened impact and sustainability.

II. **Decentralisation of power and funds, bottom-up micro-planning:** More powers and funds for comprehensive and bottom-up micro-planning should be provided to Panchayats (making sanitation a part of the comprehensive micro-planning for the Panchayat).

- ✓ ***Supportive finding from the study***: This study of twelve states throws up some examples of some policy environments that seemed to enable sustainability at a prima facie level. For example housing schemes in some states, especially the ones having bottom-up planning approach, with adequate power and fund- decentralization at lower levels or ones with better targeting of marginalized groups - contributed to a large extent in achieving near - 100% coverage among the poorer (or the 'last mile') households. Whereas, IEC activities under drinking water schemes and other activities or the time –plan under other state-specific award schemes in some states contributed to both better construction and usage. Long-standing work of some NGOs and SHGs in some states became the background, in which the final push to the PRIs to take interest and achieve a better coverage was given by the NGP application process while the SHGs/ NGOs continued to strive for better usage. Such learning and proactive/ positive discrimination policies and schemes (meant for the welfare of the marginalised in a particular state) need to be incorporated at the national/ other states - policy level to address the 'last mile' challenges that seem inevitable if 100% coverage is to be even thought of. [Some of the schemes which were glanced through during this study were People's Plan Campaign (by which more than one third of the state development budget was devolved down to local self-governments where local people could determine and implement their own development priorities) and Malinya Mukta Keralam Action Plan in Kerala, Sant Gadge Baba Swachchhata Abhiyan in Maharashtra, Maharishi Valmiki Sampoorn Swachata Puraskar in Himachal Pradesh, State Incentive Scheme on Sanitation in Haryana, Shubhram in Andhra Pradesh and Nairmalya in Karnataka among others.]

III. **School sanitation adequacy indicators:** It is noteworthy that the specific indicator of adequacy of school sanitation facilities i.e. the ratio of latrine to students and urinal to students has been **removed** in 2010 NGP Guidelines. This removal needs to reconsidered and the ratio (given in 2003 NGP Guidelines) may be revised for much higher number of latrine and urinals per student.

2003 Guidelines	2010 Guidelines
Adequacy: Toilets and urinals should be available separately for boys and girls in adequate proportion, one urinal for every 20 to 40 and one lavatory for every 80-120 boys/ (sic) enrolled in the school.	**Adequacy:** Adequate toilets and urinals should be available separately for boys and girls.

✓ ***Supportive findings of the study*:** There is a large variation in that ratio among various states, hence some standardising guideline would pave the way. Further, the actual access allowed to students for using the latrine turns out to be much lower. This issue indicates the need for a deeper investigation.

IV. Geo-hydrological problems, health-impact sustainability and Eco-san:

Stakeholders' recommendations

➢ Awareness about and exposure to various technical solutions should be provided to the PRIs for the different area-specific problems that are encountered. Capacity building of staff through training on new technologies, technical solutions to the problems currently faced, alternative models to address the lack of impact, and exposure visits - should be organised. Technical sensitisation at the district level needs to be a regular phenomenon under the programme.

✓ ***Supportive findings of the study*:** The findings of this study also suggest that majority of the current latrines do not seem to adhere to the safe distance criteria for preventing water contamination. The sustainability of health-impacts being attributable to latrine construction, are challenged by the findings that

- 'Safe' distance (horizontal, surface distance) between latrine pit and the nearest water source is generally not maintained (due to unavailability of space or total ignorance or sheer negligence) and
- Safety of the base of the pit is also not certain. It is not known whether a latrine's base was made safely enough by - one, lining it adequately - and two, by digging it only up to a 'safe' depth, so as to prevent contamination of the water table of the nearest water-source (in fact many households seemed to prefer deeper pits – deeper the better- while being unaware/ ignorant of the possibility of water source contamination due to proximity of the base to the water table level in the surroundings).

In this regard Eco-san, needs to be revisited for mainstreaming, generally for maintaining safety in terms of water contamination, as Eco-san will fulfil the 'safe for water contamination' criteria with the pit converted into an above-the-ground level structure/ box. It will be useful especially for the marginalised sections and areas with geo-hydrological technical difficulties. This might be essential for better sustainability of health related impacts.

✓ Qualitative data from the study also revealed that the stereotype image - of challenges associated with behaviour change for using an Eco-san latrine - needs to be reconsidered, as people admit to already having the habit of 'shifting' for cleaning, while defecating in the open.)

V. Increase in incentive amount

Stakeholders' recommendations

➢ There should be a substantial increase in the incentive amount for latrine construction. The increase in incentive amount needs to be calculated on the basis of state-specific costs and needs of technically challenging situations.

➢ Low-cost models do not enthuse people and generally tend to become the 'unfinished or poor installations'. Various stakeholders, including most of the government officials, suggested an increase in the incentive amount for latrine construction, ranging from 5000 to more than 9000 (with some giving explicit details of the material cost, labour cost, transportation cost varying widely for various contexts). Some suggested that the incentive for poorer families should be, at the least, doubled. Requirement of full subsidy and complete handholding was also mentioned, especially for the 'last mile' cases for 100% coverage, which face multiple difficulties in terms of geographical, technical, social and financial factors.

✓ ***Supportive findings of the study*:** The qualitative data also supports that without compromising on the demand creation and IEC activities, full subsidy for poorest of the poor households (not based on just BPL criteria) needs to be considered.

Poorest of the poor households are found generally in the low-lying areas of a Panchayat prone to water logging, difficult terrain and other geo-hydrological factors that make a leach-pit latrine construction not the best option (creating further ground for consideration of Eco-san option at least for these households).

- ✓ The finding of the study on cost of latrine construction, although based on only 23% of the households, does indicate that the current cost of a latrine seems to be much higher than the presumed cost, and while the households, generally do bear a larger proportion of the cost, the limited responses of a poorest of the poor household may not be able to bear the larger share.

VI. Synchronisation of water and sanitation schemes, implementation by a single agency

Stakeholders' recommendations

- ➢ The government level stakeholders (block, district and state officials) did come up with the suggestion that TSC and schemes related to water supply should be **implemented by a single government agency/ department**, if that is not already the case in a state.
- ➢ Water was also reported by the stakeholders as a critical factor for achieving and sustaining NGP status. Installation of adequate numbers of hand pumps, repair of dysfunctional hand pumps/ piped water supply, construction of water tanks, check dam/ bund, promoting rain water harvesting etc. was mandated by the stakeholders to alleviate water scarcity. It was clearly suggested that at least a certain minimum amount of water supply should be ensured throughout the year. Water purification kits/ systems were also demanded for. More and more use of surface water (if less contaminated in comparison to ground water), more of water harvesting structures and activities related to recharging of water sources were mentioned as a requirement. Stakeholders at panchayat level were of the view that the government should do necessary arrangements for water purification at the source and water testing at regular intervals. Many of the FGD participants opined that piped water supply along with water purification systems (water purifier devices) facilitated at household levels would be the only effective solution for preventing water-borne diseases.

- ✓ ***Supportive findings of the study*:** As found in the FGDs, water seemed a higher priority for households than latrine. The need for a more equitable distribution of water was clearly articulated, as currently, the poor and marginalised sections tend to suffer more with water scarcity, due to distributional inequity.
- ✓ Interactions at government level also made it clear that the choice of "which Panchayat should be 'encouraged' to apply for NGP?" was also guided by "where has the water related scheme been successfully implemented?" In-fact at many levels, better sustenance of NGP status was attributed, in a large measure, to the very successful IEC activities done/ being done under water related schemes.
- ✓ What needs to be considered and investigated further is the hypotheses that 'it would be more cost-efficient and effective if the IEC activities of water and sanitation are combined, need assessment is done jointly and service deliveries of both the schemes are synchronised'. At panchayat level, the benefits are likely to be most visible in terms of increased interest of households in sanitation issues as they get combined with water.

VII. Solid and Liquid Waste Management: Composting technology promotion (why incinerators?)

Stakeholders' recommendations

- ➢ The government level stakeholders suggested that GoI should lay down a detailed technical and operational guideline for SLWM and at least 20% fund of TSC should be used on SLWM.
- ➢ Awareness and capacity building regarding various composting technologies should be arranged.
- ➢ Construction of pucca drains and roads with required slope, construction of underground drainages, soak pits/ trenches can help in prevention of water logging. Cleaning of drains regularly by paid personnel is to be arranged.

Advocating 'incinerators' for 'safe' disposal of sanitary pads in schools needs to be revisited, as it not only antagonistic to 'safe' disposal message given about the practice of 'burning' other solid waste, being harmful to environment, but also seems to strengthen the long-standing traditional taboo attached with menstruation (by burning 'such impure' things instantly, without waiting, whereas the other solid waste can wait for safe/ unsafe disposal).

Further, doing this in an institution like school, which is mandated to be a vehicle for challenging/ reforming such taboos, seems to turn a blind eye to the insult it might be adding for the menstruating adolescent girls, striving to complete their studies, to the injury already being done to all by not having a comprehensive arrangement for safe disposal of all solid waste.

Hence awareness and capacity building regarding various composting technologies for safe disposal of sanitary pads (other than incinerators), which would be similar at both household level and school level - should be considered and arranged.

2. Eligibility criteria of NGP

The criteria for a Panchayat becoming eligible for applying for NGP need to be modified in a way that the criteria themselves might pave the way for better sustainability of ODF status and its impacts.

This is also necessary for preventing NGP from slipping further away from the 'demand driven' mode of TSC and into 'target driven' (target of creating a certain number of NGP-GPs every year) mode than it already is perceived to have.
Based on the various findings of the study, following are the specific recommendations:

I. **Inclusion of process parameters** (of campaign/ demand driven approach in true sense, which might have the potential to cover the 'last mile' for 100% sanitation coverage at panchayat level). One of the process parameters, and hence recommended eligibility criteria, would be –

i. **Taking the time: Time spent on the process** - since the initiation of TSC in that Panchayat to the application of NGP. A time requirement needs to be incorporated under NGP eligibility criteria. It would stipulate a minimum amount of time that should be spent on each of the following.

- Initial IEC phase before latrine construction (with annual IEC to be continued for longer period)
- Trying out various technical options for specific problems of individual households, with tangible evidence of various options being communicated adequately, exposure visits and capacity building undertaken if required.
- Arranging the funds for constructing latrines, with the construction phase lasting over a considerable period of time
- Making the ODF status sustainable (habit formation).

ii. **Going the last mile:** Another example of process indicator worth consideration could be that some incentive/ weightage may also be considered for the kind of process, which might ensure that the proverbial 'last mile' households are not neglected and the myriad of problems faced by the most marginalised households (social, economical, hydro-geological...) are looked into and a specific solution created for them if needed. A GP that would have such examples of specific problem solving done for the most marginalised, through the process indicator suggested here or through any other similar process, might deserve special incentives, even before it might become fully eligible for applying for NGP.

One example of such a process could be one, in which weightage is given for the process, in which construction (or incentive distribution to any household) is taken up only after every household in the village decides to construct a latrine (and the water availability for the household is ensured adequately through the synchronised delivery of water and sanitation schemes).

Another example could be giving weightage to cases where eco-san latrine is chosen for the low-lying areas of the Panchayat (where generally the most marginalised reside), and financial support for choice is shared/ contributed to/ arranged for in such a way that the economically weaker sections do not find it unfeasible to opt for the technical option appropriate for the hydro-geological condition of their household.

iii. **Reaching the unreached**: The extent of social mobilization and inclusion: Formation of micro-level groups (at street level, hamlet levels) and inclusion of economically and socially marginalized (households without ration cards, households practicing wage labour – as daily wage labourers or agricultural labourers - as their primary occupation, households having *Kuchha* or *semi-pucca* type of house, with perceived neglect due to their status of SC/ ST/ minorities, woman-headed households, living in interior areas/ fringes/ low-lying areas, difficult terrain of the panchayat) can have weightage for considering the application.

Inclusion (of socio-economically marginalized) needs to be proved not only in terms of just

- their exposure to IEC activities and inclusion in micro-level group formations,
- but also in terms of specific efforts taken to address their specific technical problems faced due to their difficult terrain/ low lying colony or other such factors most likely to be found among the marginalized households. The technical solutions (of latrine construction) offered to them.
- the financial support extended/ arranged especially for them, keeping in mind not just the cost of the specific technical solution, but also the financial status of those particular households.

II. **Inclusion, capacity building of stakeholders and IEC**: PRIs, SHGs and other micro-level groups should be facilitated and empowered to spearhead the awareness campaign, house visits and other IEC activities. Capacity building of these groups and PRIs must be strengthened and appropriate trainings should be designed for different tiers.
Mechanisms should be developed to ensure effective and functional VWSCs.
Intensive IEC activities and a focus on proper operation & long-term-maintenance of toilets would reduce the lack of awareness about things that need to be done if latrine pits get filled. In the opinion of various stakeholders, awareness regarding water and sanitation related practices done in general and on specific times such as just before the onset of rainy season, would go a long way.

III. **Proving the outcome:** As an important outcome of NGP is supposed to be impact on health, through safe drinking water i.e. non-contamination of water by faecal matter, it would be essential to include this aspect in the eligibility criteria for being 'Nirmal'. It could also become an indicator for the sustained status on NGP over long years. The eligibility may be considered to be proven in terms of water samples being tested for quality. This could be by triangulating data from various levels. These could include

- The results - of the regular testing of water samples incorporated under various water related schemes - might become part of the online MIS system for TSC.
- Verification process of NGP may include water testing done at the time of application, after one year of application/ or at regular intervals as might be deemed fit.

3. Application procedure and verification process

I. **Application process:** The application process needs to be modified

- To ensure participation of and support from wide variety of stakeholders and
- To ensure that adequate time is provided for and spent on preparation (and not done 'while the application is under process at various levels after submission' as found in most of the not-so-well-performing states).

The GP can first register online that it intends to apply for NGP after 2/3/4 years as might be the case. The various stages described below need to be updated online in order to keep track (for verification) of the various processes undertaken and due time being spent on them. Following steps need to be ensured before the application is made:

- Participatory planning of water and sanitation works needs to be undertaken at hamlet level, village level, sub-panchayat level and panchayat level, as a mandatory condition.
- Social audit of/ public hearing covering aspects like fund allocation for latrine construction and other works, utilisation of planned funds and progress of work needs to be mandated.
- Planning of how the NGP amount would be spent if awarded also needs to be done before application is prepared.

The application needs to be accompanied by proofs of these along with copies of the plans (which also have to be duly updated in an online system, if feasible). Applications should be sent only after fulfilling all the conditions laid by the government and after making 100% toilets in the Panchayat. Once the PRIs complete the whole preparation, only then should they apply for the award (instead of submitting application while the preparation/ construction is still on).
The stakeholders at panchayat level also suggested that Gram Pradhan/ Sarpanch should share the information with villagers before and during the application for NGP award. Members of the Panchayat should organise meetings to develop, plan and strategise the development of the village.

II. **Verification process**: Verification needs to be made in a way that is not just more transparent, acceptable, considerate of the efforts and focusing on process indicators, but also in a way that is perceived by the stakeholders to be so. Verification and scrutiny methods need to be modified by taking suggestions from stakeholders and learning from other state-specific award schemes (such as those mentioned in 1.4) that have a good reputation (appear to do justice) and acceptance among stakeholders, especially the villagers. Only the competent agencies with credibility among the stakeholders need to be employed for verification. The agencies should have sound experience in water & sanitation sector and be thoroughly oriented/ acquainted with TSC/ NGP. Some officials clearly mentioned that responsibility for verification of NGP award should be vested with state officials since monitoring teams appointed from different regions do not/ may not have adequate idea of local scenario. Some suggested inclusion of eminent members of society/ women, journalists to be involved in verification, in a manner similar to some of the state-specific-award schemes. Verification needs to include the outcome criteria of safe drinking water- measured by testing water samples of the GP at regular interval of before NGP and after it, for verification of sustenance of NGP status outcome.

4. Puraskar amount, its disbursement and utilisation - Financial Provisions

- NGP award, instead of being given to a single individual like the Sarpanch, needs to become broad-based in acknowledging and encouraging the contributions made by other individuals/ groups and institutions at the hamlet/ village/ sub-panchayat/ panchayat levels. It may also include Women's groups/ SHGs, youth groups/ other village institutions that may have worked to sustain NGP status
- Amount of the award may be linked to funds required for making the sanitation status better, especially the solid and liquid waste management needs of the panchayat planned before the application.
- Stakeholders also suggested that only the memento to be given in an award ceremony, while the cheque should be given in Gram Sabha. PRIs should organise meetings to develop, plan and strategise the utilization of NGP amount for development of the panchayat. Some suggested that utilisation of the NGP amount should be supervised by government officials.

5. Beyond NGP

- A staggered achievement scale (and hence a staggered award system) may be designed to acknowledge the efforts of past 'poor performers' in bringing about the incremental change over their base years. For the 'overachievers' setting the higher level goals by design. This would counter the lack of enthusiasm attributed to "once the 'ultimate' award is achieved, no more work would fetch any further acknowledgement/ recognition".
- The Gram Panchayats, who are close to achieving the final ODF status, may be given some recognition with some awards to enhance their morale. A grading system may be developed for various aspects of 'Nirmal" (like GPs who are close to achieving the ODF or who achieved completely achieved it, or have best management in disposal of solid & liquid waste etc.) and based upon grading, the GPs should be recognised with a reward/ award.
- There should be provision to give awards for different levels of achieving the 'Nirmal' status. One example cited by stakeholders included: first an award for reaching ODF status, then an award on reaching ODF + safe SLWM status, which would include SLWM and other indicators from Human Development Index, followed by an award on becoming a model village with forestation, electrification and so on.

CHAPTER 1

Introduction of TSC and NGP: Why the Study

CHAPTER 1: INTRODUCTION OF TOTAL SANITATION CAMPAIGN AND NIRMAL GRAM PURASKAR

Sanitation is one of the most pressing global development issues in the contemporary world. Posing grave health challenges, exacerbating socio-economic and gender differences and thwarting the process of inclusive growth and development, lack of proper sanitation facilities has serious repercussions for any country. Given the strong direct and indirect linkages of sanitation with socio-economic and health aspects, it has been appropriately included in the United Nations Millennium Development Goals (MDGs). Out of eight MDGs, three are directly linked to sanitation: Reduce child mortality, combat disease and ensure environmental sustainability. Even the first goal, eradicate extreme poverty, is linked to sanitation as high health and coping costs associated with illnesses caused by inadequate sanitation drain productivity and incomes, contributing to poverty.

1.1 TOTAL SANITATION CAMPAIGN (TSC) AND (MDGS)

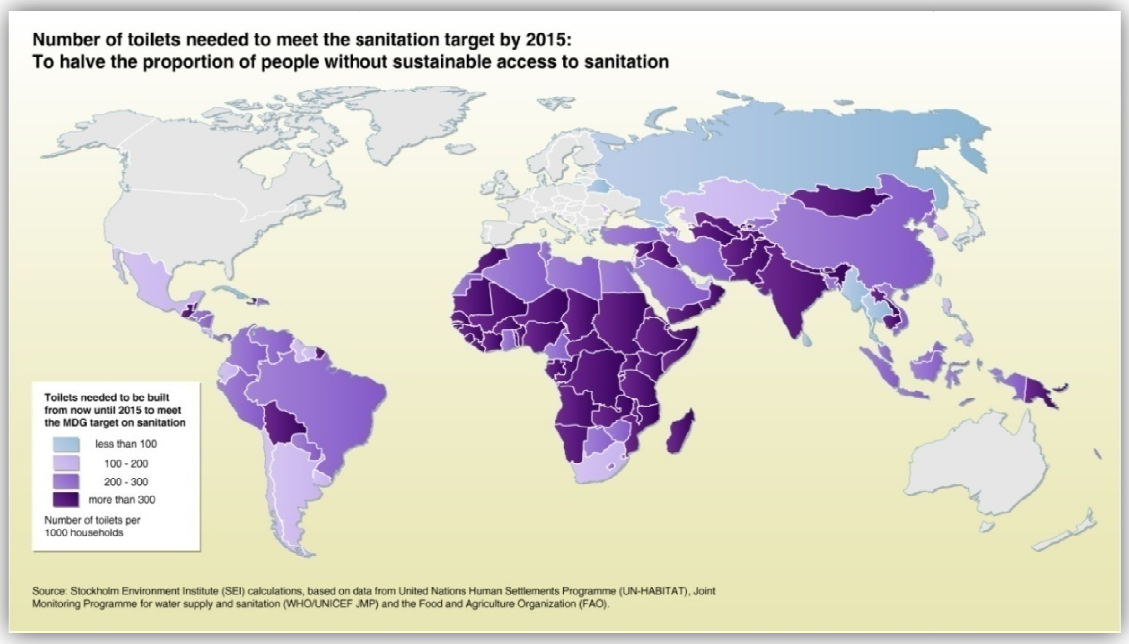
One of the targets under the Millennium Development Goal seven (to ensure environmental sustainability) is to halve, by 2015, the number of people without sustainable access to safe drinking water and safe sanitation. Although the MDGs were formulated in 2000, the baseline for most of the MDG targets, including that on water and sanitation, has been set as 1990. At current rates of progress (65% coverage as of Sep 2010), Government of India (GoI) will not only meet the sanitation MDG but exceed it, as more than 90% rural sanitation coverage may be achieved by 2012.

Toilets needed to meet the MDG sanitation target by 2015

To achieve the environmental sustainability goal (goal 7) there is a need to construct toilets on a large scale. The indicator in the graph displays the current status of the sanitation and the estimate of the number of toilets per household that needs to be constructed, to meet the MDG target on sanitation. The requirement is highest in Sub-Saharan Africa and Southern Asia, especially in India where more than 300 toilets are needs to be constructed per 1000 households

United Nations Millennium Development Goals

MDG7, Target 10, 2002: "Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation." Year of reference: 1990



1.2 RURAL SANITATION IN INDIA: MILESTONES SINCE INDEPENDENCE

Accessibility to proper sanitation facilities is critical to the health of communities. Safe sanitation can go a long way in minimising risk of reducing the incidence of diarrhoea and other water borne diseases. Despite large scale development on various socio-economic parameters, accessibility to safe and hygienic sanitation facilities remains a daunting challenge in India. The problem is existing in both, rural as well as urban areas. Effective implementation of sanitation schemes, increased civil society's participation, enhanced financial allocation and better monitoring and targeting could be the key to achieve total sanitation goal in India.

Rural sanitation is a state subject. However, the efforts of the states are supplemented by the Central Government through technical and financial assistance under the Central Rural Sanitation Programme (CRSP). The CRSP was launched in 1986 with the objectives of improving the quality of life of rural people and providing privacy and dignity to women. The concept of sanitation was expanded in 1993 to include personal hygiene, home sanitation, safe water and disposal of garbage, human excreta and wastewater. The components of the programme included construction of individual sanitary toilets for Below Poverty-Line (BPL) household, conversion of dry latrines to water-pour flush toilets, construction of village sanitary complexes for women, setting up of sanitary marts and production centres, intensive campaign for creating awareness and health education, etc.

Keeping in view the experiences of the central and state governments, civil society groups and other implementing agencies, in 1999, as parts of reform initiatives CRSP was improved and titled as **Total sanitation Campaign (TSC)** as a demand driven and people centered programme. The restructured programme moves away from the principle of state-wise allocation of funds, primarily based on poverty criteria, to a demand driven approach in a phased manner.

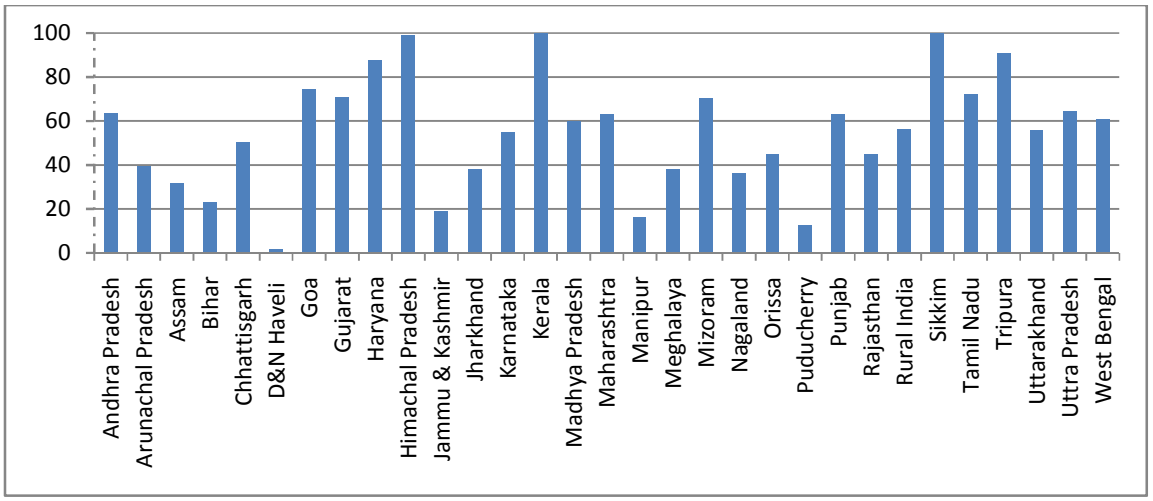
TSC programme is "community led" and "people centred" with emphasis on awareness creation and demand generation from the people for sanitary facilities in households, schools, anganwadis, and the community for cleaner environment. There was a shift from a high subsidy to a low subsidy regime. The TSC concentrates on promoting behaviour change by the community, as against the toilet construction focused approach of earlier programmes and meeting the demand through alternate delivery mechanism. School sanitation has been introduced as a major component to encourage wider acceptance of sanitation among rural masses. The major components of TSC are:

- Start-up Activities
- Information, Education and Communication (IEC) Activities
- Rural Sanitary Marts (RSM) and Production Centres (PC)
- Provision of Revolving Fund in the District
- Individual Household Latrines
- Community Sanitary Complex
- School Sanitation
- Anganwadi Sanitation

1.2.1 Rural Sanitation: Key Statistics

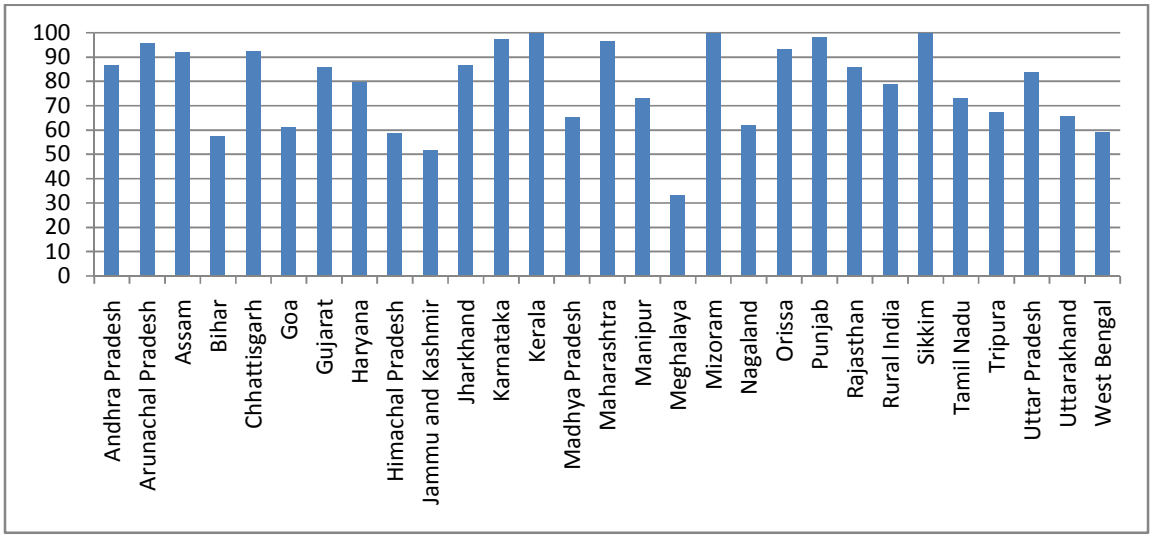
There has been tremendous increase in the access to sanitation facilities by rural households. The sanitation coverage among rural households has increased from 22 per cent in 2001 to 27.3 per cent in 2004 and has more than doubled since then to 67% per cent (of 2001 Census households) as on September 2010. A significant achievement has also been the construction of 10.33 lakh school toilets and 03.47 lakh anganwadi toilets. The 78.61% schools are covered with sanitation facilities and 68.46% anganwadis also have access to toilets. Since 1999, over 7.41 crore (till Sep 2010) toilets have been provided to rural households under the TSC. *(Source: DDWS)*

Fig 1.1: State wise achievement in IHHLs till Sep 2010 (in percentage)



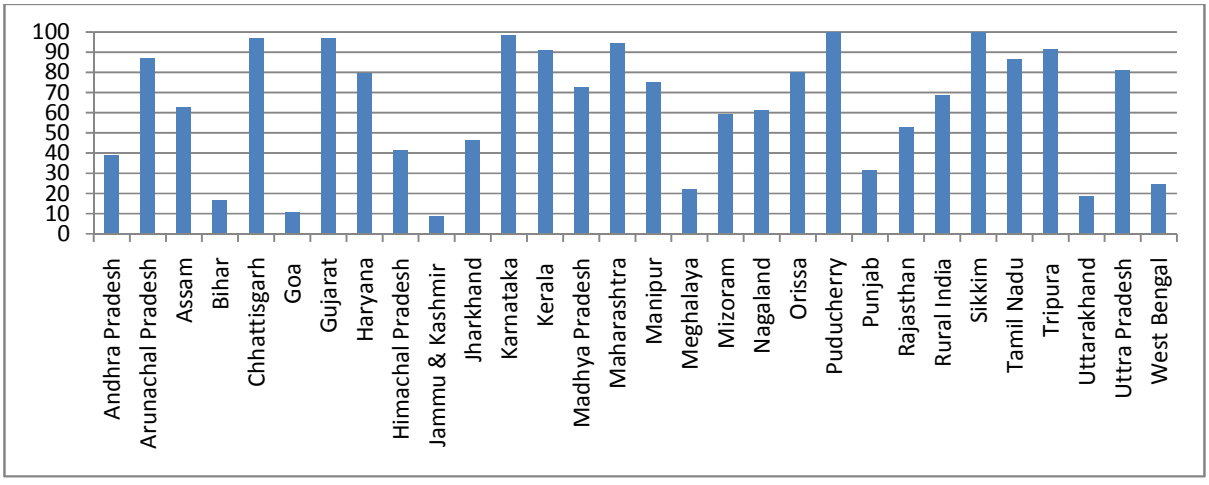
Source: www.ddws.nic.in

Fig 1.2: State wise achievement in school toilets till Sep 2010 (in percentage)



Source: www.ddws.nic.in

Fig 1.3: State wise achievement in anganwadi toilets till Sep 2010 (in percentage)



Source: www.ddws.nic.in

1.2.2 Converging Programmes in 12 Study States

Integrating sanitation programmes with initiatives to improve water availability and health care would increase the likelihood of achieving public health outcomes such as reduction in diarrheal diseases. Parallel to the implementation of the TSC, Government of India is also implementing the rural water supply programmes and the National Rural Health Mission (NRHM) programme. GoIs rural water supply programme seeks to address issues of access to water and its quality in 55,067 habitations, while the main aim of NRHM is to provide accessible, affordable and reliable primary health care in rural areas.

The RGDWM, NRHM and TSC are all identified as social sector flagship programmes by the GoI. In principle, all three programmes are implemented through the same district-level institutions. Many activities of the programmes are complementary, such as community mobilisation, IEC campaigns, capacity development, and there are many complementarities e.g. Anganwadi (crèche) workers are included as motivators for taking up interpersonal communication at the grassroots level.

TSC emphasises convergence with National Rural Health Mission by setting up Village Health, Water and Sanitation Committees (VHWSC). The use of ASHA workers for motivating villagers' for construction of new toilets and paying them is also in practice. In Maharashtra, Rajasthan and Himachal Pradesh Jal Sawraj Yojana have been converged with TSC/NGP. In addition Maharashtra also has Eco Village scheme which has been introduced recently.

The Gram Panchayats who are awarded under NGP are given weightage/preference under Jal Swaraj Yojana and Eco Village Scheme for state government programmes and schemes funding. With Mid Day Meal Scheme, some have taken up advocacy of good hygiene practices like hand washing. All houses constructed under Indira Awas Yojana are to be compulsorily provided with a toilet. Convergence is also being done with Swarnajayanti Gram Swarozgar Yojana (SGSY) to help women SHGs take up sanitary pan and sanitary napkin production, give their members mason training, provide loans for construction of toilets etc. For sustainable garbage disposal and drainage schemes in villages, funds under National Rural Employment Guarantee Scheme (NREGS), Backward Region Grant Fund and 12th Finance Commission are being used along with TSC funds.

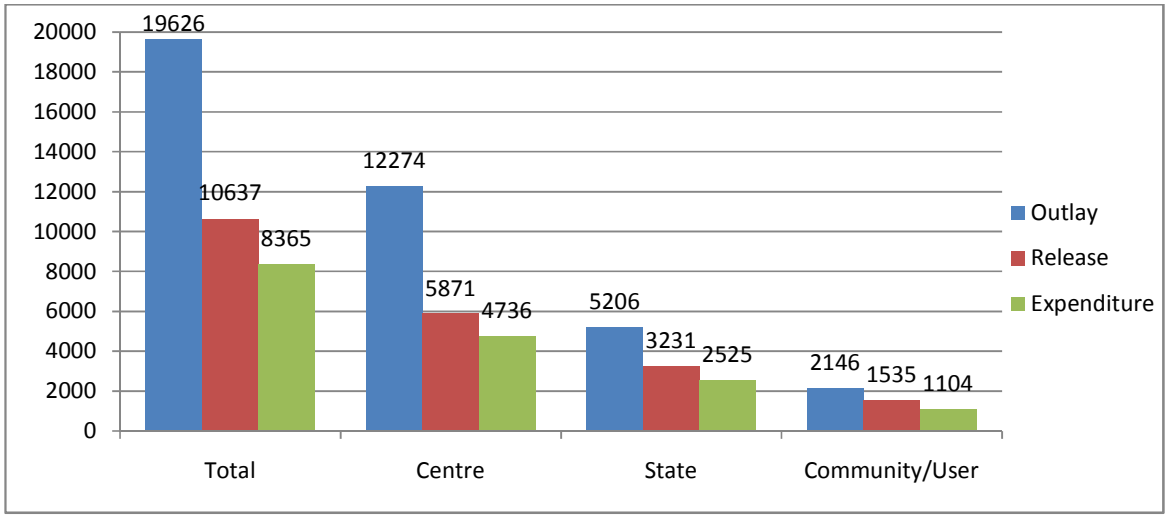
Since school sanitation and hygiene education is an integral part of TSC, convergence is established with Department of School Education and Literacy (DSEL) and the Sarva Shiksha Abhiyan (SSA), the flagship programme of GoI to achieve universal elementary education. The emphasis is on providing a school environment equipped with necessary inclusive sanitary facilities as well as ensuring these facilities are safe and well maintained and help to inculcate improved hygiene behaviours in children. Training of teachers is also organised at district and sub-district levels to impart hygiene education in the schools.

1.2.3 Financial Achievements in Rural Sanitation

TSC is one of the eight flagship programmes of the Government of India. TSC projects have been sanctioned in 607 rural districts of the country at a total outlay of Rs 19,626 crore, with a Central share of Rs 12,274 crore (62.5%). The annual budgetary support for the TSC was increased from Rs 202 crore in 2003-07 to approx. Rs 1,200 crore in 2009-10. The Central outlay for the Eleventh Five Year Plan has been approved at Rs 7,816 crore for TSC including Rs 1,100 crore for the Nirmal Gram Puraskar. With the scaling up of the TSC, combined with higher resource allocation, programme implementation has improved substantially. Given below is the financial progress of the rural sanitation programme.

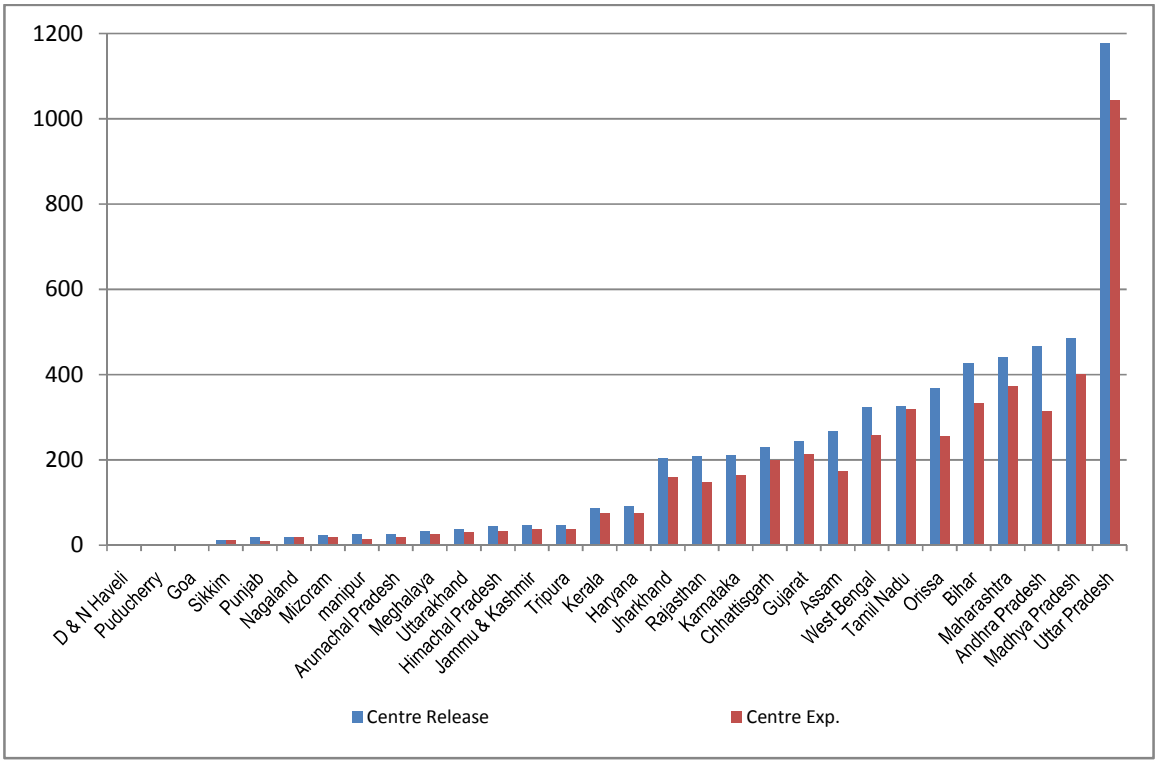
Fig 1.4: Financial progress (INR in crore till financial year 2010-2011)

An expenditure of 42.62% of the total outlay has been done till date for TSC.



Source: www.ddws.nic.in

Fig 1.5: State-wise centre release and expenditure (INR in crore till financial year 2010-2011)



To add vitality to the implementation of TSC, Government of India has separately launched an award scheme 'Nirmal Gram Puraskar' (NGP) for fully sanitised and open defecation free gram panchayats, block and districts. To encourage Panchayati Raj Institutions (PRIs) to take up sanitation promotion, NGP fiscal incentive scheme, under which an award is given to those PRIs that attain a 100 per cent open defecation-free environment, was initiated in Oct 2003. The commencement of the NGP has been an important appealing force in several states, judged by the remarkable growth in the number of PRIs that have received the award since its inception.

1.3 NIRMAL GRAM PURASKAR (NGP) AS A COMPONENT OF TSC

NGP promotes the role of gram panchayats and local communities in achieving community-wide total sanitation status. The first Puraskar (post achievement award scheme) was given in 2005 to give a fillip to the TSC.

There is considerable prestige attached to Nirmal Gram Puraskar, as it is given by the President of India to winning entities. The ever increasing number of applicants and the awardees is testimony to this fact. By providing incentives to community efforts to meet collective gains in sanitation, the scheme helps to raise the status of the winning village, create peer pressure among neighbouring villages, and stiff competition among all tiers of governance within and across states. Mobilisation of Panchayats for sanitation promotion also has positive spill-over effects such as strengthening decentralisation to facilitate the overall socio-economic development of a community.

The eligibility of PRIs to receive the Nirmal Gram Puraskar includes:

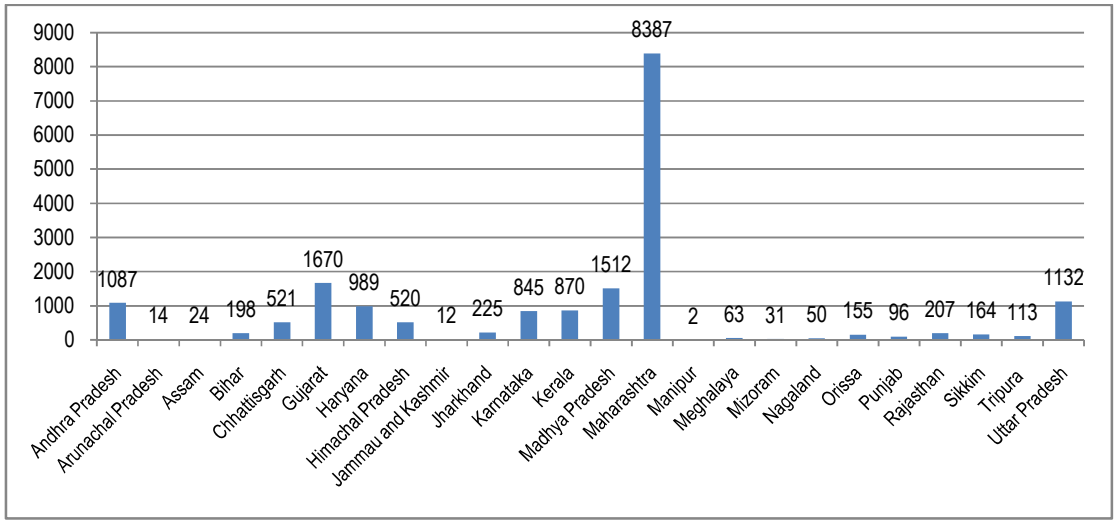
1. **Gram Panchayats, Blocks and Districts, which achieve 100% sanitation coverage in terms of:**
    a. 100% sanitation coverage of individual households
    b. 100% school and anganwadis sanitation coverage
    c. Free from open defecation and
    d. Clean environment maintenance (liquid and solid waste management)

2. **Individuals and organisations, who have been the driving force for effecting full sanitation coverage in the respective geographical area.**

1.3.1 NGP Awardees: The Increasing Trend

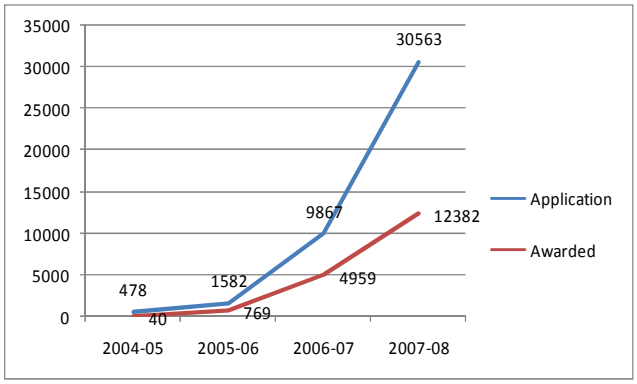
There has been observed remarkable growth in the number of PRIs that have received the NGP incentive. The first round of award was started from 2005 and was given to 40 PRIs of six states out of 478 applications. In year 2006, 769 gram panchayats across 14 states gained NGP status and the application increase was more than 100%. Similarly during the year 2007 and 2008, 4959 & 12382 PRIs were awarded under NGP scheme. In 2008 the application number was more than 30,000 in comparison to 478 in first year. Till date 22443 GPs (approx. 9%) have been awarded with NGP. Approx. 37% of the NGPs are from Maharashtra. Given below are the state wise details of GPs awarded.

Fig 1.6: State wise NGPs awardees (in count)



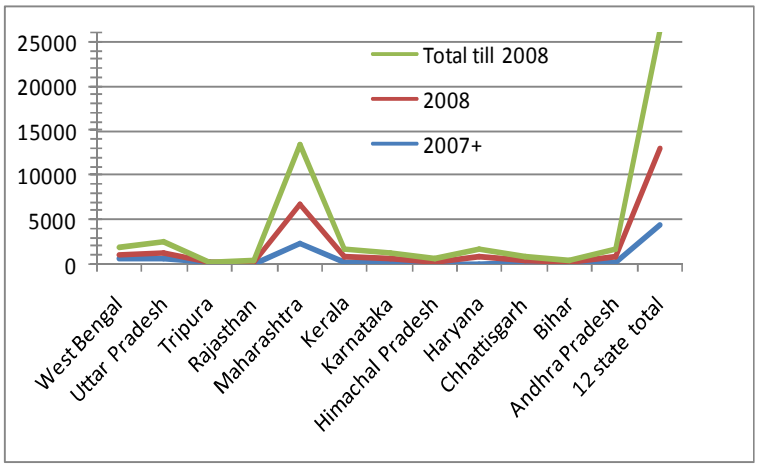
Also given below is the comparative analysis indicating numbers of applications received and against that numbers of PRIs awarded;

Fig 1.7: Year wise status of NGP applications received and awards given (in count)



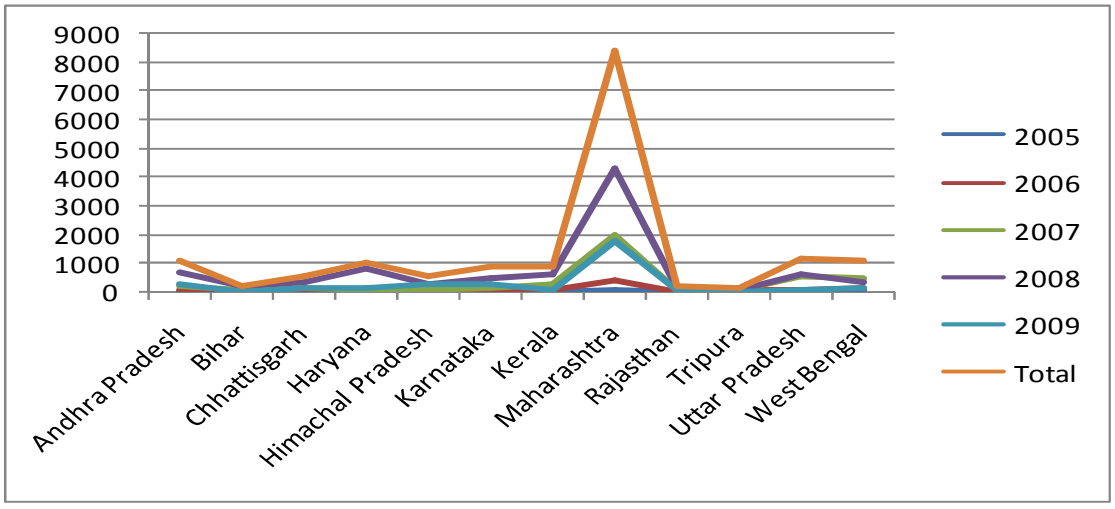
In both time point 2007+ (2005, 2006 and 2007) and 2008, it has been observed that awarded PRIs are very high in Maharashtra, Uttar Pradesh and West Bengal.

Fig 1.8: Given below time group wise (2007+ and 2008) status of PRIs awarded in the study sample states (in percentage)



1.3.2 NGP in Sample States

Fig 1.9: State and year wise status of PRIs awarded under NGP in sample states (in percentage)

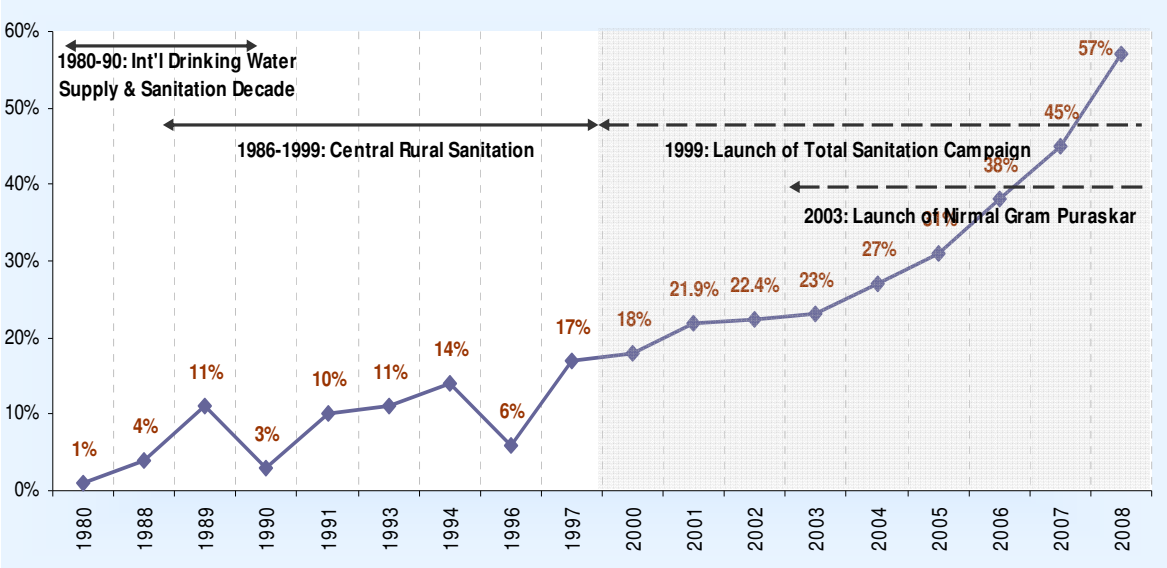


In the TSC average performing states like Maharashtra has highest number of NGP awardees (8387) in all years since 2005.

1.3.3 Impact of NGP on TSC

The award provided a boost to the sanitation programme with a surge in the number of villages attaining 100% toilet coverage and giving sanitation issue the attention it deserves. The introduction of NGP has been a driving force enhancing the pace of progress of TSC, increasing it from just 22 per cent in 2001 to nearly 57 per cent in 2008. NGP seems to have worked in accelerating the coverage, as it was introduced in 2003-04 and the pace of sanitation coverage in most of the states has picked up since 2004-05, a year after the introduction of NGP. Further, to incentivise collective outcomes, Nirmal Gram Puraskar (NGP- Clean Village Award) has played an integral role in scaling up TSC. The NGP scheme has elicited tremendous response, with the number of Panchayats awarded going up from 40 in 2005 to more than 11,000 in 2008. Given below the graph depicting the upward trend in individual household latrine coverage:

Fig 1.10: NGP as catalyst in increasing TSC pace (in percentage)

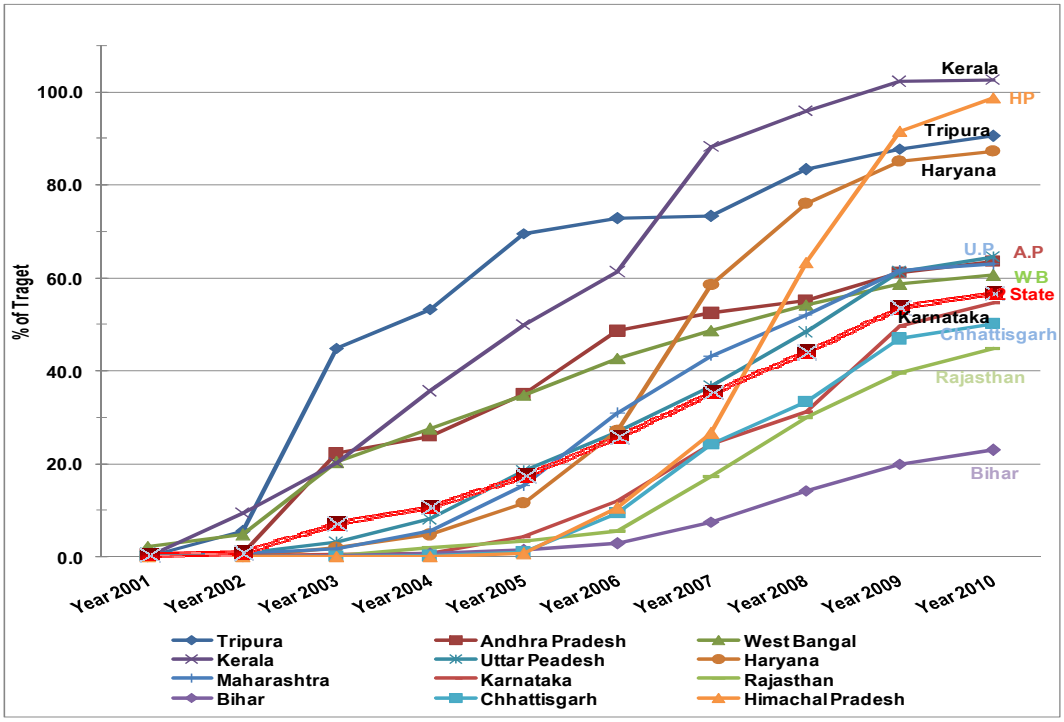


Source: Govt. of India, Dept. of Drinking Water and Sanitation http://ddws.nic.in - Sustaining the Sanitation Revolution – India Country Paper, SACOSAN III, New Delhi, 16-21 November 2008

1.3.4 Impact of NGP on TSC in Sample States

With Kerala, Tripura and Haryana almost archiving the targets, Bihar, Rajasthan and Chhattisgarh are below 50% of the targets. From year 2005-06 onwards the trend of increasing achievements has continued and a sharp increase is observed during last three years wherein NGP awardees have also increased.

Fig 1.11: Cumulative IHHL constructions under TSC against targets (in percentage)



Source: Govt. of India, Dept. of Drinking Water and Sanitation (www.ddws.nic.in)

1.3.5 Changes in NGP Guidelines over the Years

The guidelines prepared by DDWS in 2003 and revised in 2010 have clearly laid down the objectives, eligibility criteria, application submission procedures and verification process. The section below will analyses any changes in the earlier and new guidelines.

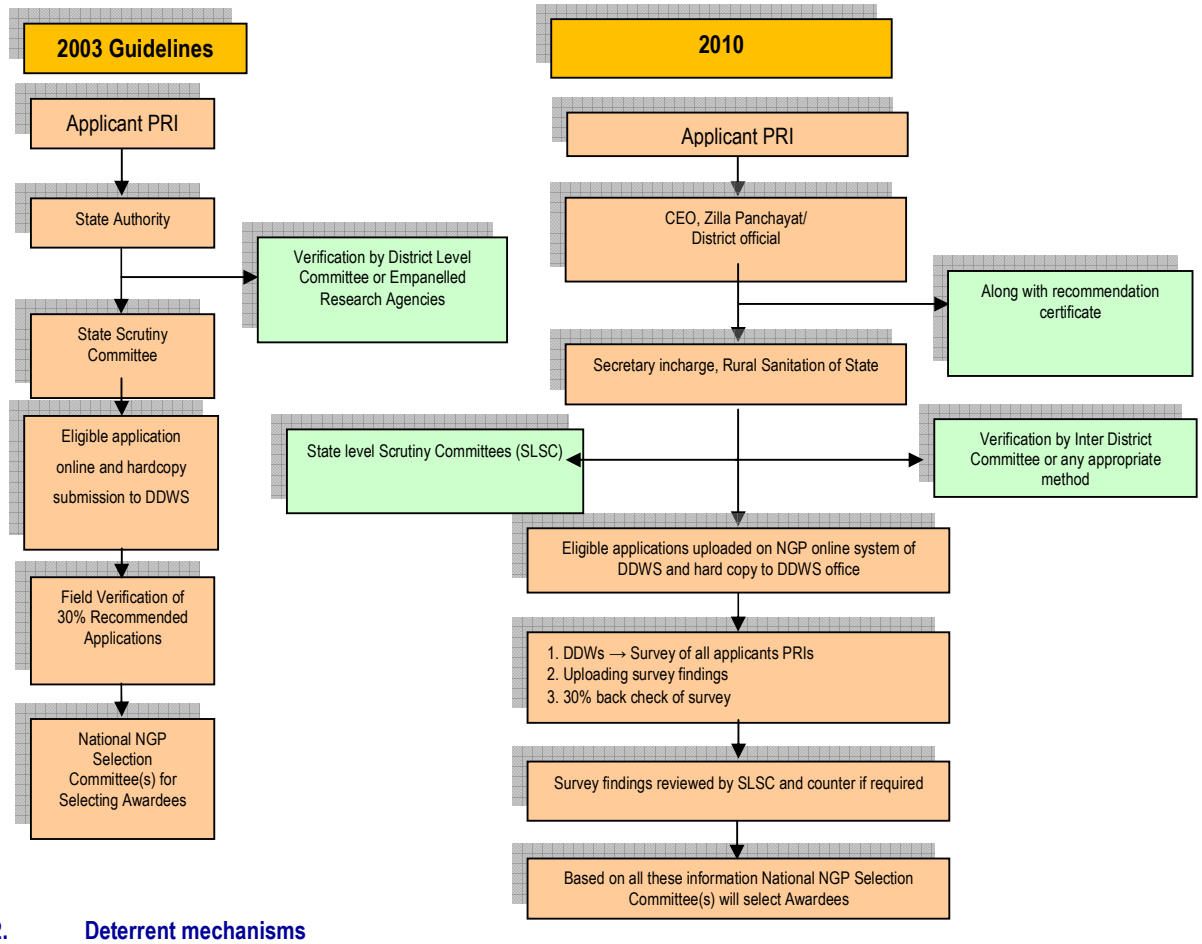
1. Eligibility criteria

More or less the eligibility criteria remain unchanged in both the guidelines. It is noteworthy that numbers of children per toilet and urinal is not specified in 2010 guidelines for indicating adequacy. The criteria of reduction in the number of diarrheal cases and diarrheal deaths in the PRI jurisdiction have now been amended. Achieving objectives of TSC components is very important and mandatory criteria in new guidelines.

S. No.	2003 Guidelines	2010 Guidelines
1.	Not mentioned	The PRI should have achieved objectives for all components as approved in the TSC project for that PRI.
2.	**Adequacy:** Toilets and urinals should be available separately for boys and girls in adequate proportion, one urinal for every 20 to 40 and one lavatory for every 80-120 boys/ enrolled in the school.	**Adequacy:** Adequate Toilets and urinals should be available separately for boys and girls.
3.	The PRI must have a functional mechanism for household garbage disposal and a functional drainage system and cleanliness should be maintained in the inhabited areas. No garbage dumping and water logging should exist within the inhabited gaothan/gramthana/lal dora areas of the villages in the PRI. Prevention of open defecation and increasing use of safe sanitation would lead to positive impact on health parameters. There should be a reduction in the number of diarrheal cases and diarrheal deaths in the PRI jurisdiction according to the statistics maintained by the concerned ANM/PHU/PHC.	The PRI must have a functional mechanism for household garbage disposal and a functional drainage system and cleanliness should be maintained in the inhabited areas.

1. Application procedure and verification process

Given below a comparative analysis of changes observed in the application procedure and process in recent guidelines:



2. Deterrent mechanisms

Procedure for payment of incentive amount

The process of releasing the instalment remains the same as in the previous guidelines, barring that fact that now all prize money will be given in two instalments. As per previous guidelines second instalment will be forfeited and even first instalment will be recovered from the awardees if 'Nirmal' status is not maintained. Now it has been notified that state will take all necessary measures to facilitate reviving 'Nirmal' status of awardees till it get its 'Nirmal' status on a sustainable basis but if defaulting persists the second instalment of the award money will be not be released.

Disincentive in case of relapse of ODF status

Apart from withdrawing NGP status of PRI, the NGP award of that block and district panchayat will also be taken away as per 2010 guidelines.

1.4 STATES AWARDS SCHEMES LIKE NGP

In addition to Nirmal Gram Puraskar, many sample states have introduced their own clean village schemes to encourage sanitation and best hygiene practices. The states who have taken such initiative are Maharashtra, Andhra Pradesh, Haryana, Himachal Pradesh, Bihar and Karnataka. An insight into some of the schemes is given below:

Andhra Pradesh

The Govt. of Andhra Pradesh has introduced a clean villages scheme award named **"Shubhram"** to foster the community led approach to sanitation, and achieve people's involvement in total sanitation. This award has been instituted to bring about a distinct shift in the general perception of sanitation and also to increase the pace of NGP in state. The state award not only goes to the Gram Panchayats but also the cleanest Mandals and Zilla Parishad get the award. As per the scheme guidelines, only one GP can be awarded from each Mandal, 3 GPs from one district and 3 GPs from the state. The Shubhram awards seek to provide incentives to local governments that excel in delivering improved quality of life through sanitation. Safe excreta disposal, liquid waste disposal, solid waste disposal, Operation and Maintenance (O & M) of Drinking Water and Sanitation schemes, personal hygiene and community participation are the criteria to measure and evaluate the scheme.

Haryana

The Government of Haryana has launched "State Incentive Scheme on Sanitation" (SISS) for the villages to promote, accelerated sanitation coverage and eliminate the practice of 'open defecation' to promote environmental sanitation in rural areas of the state. The scheme implementation started from the financial year 2007-08. Awards/ incentives to the clean Gram Panchayats has been given in the form of cash along with certificate of merit on any national or state important day as may be decided by the state government from time to time at block, district and at the state level. The cash award has been Rs.2.00 lakh to one gram panchayat at the block level, Rs.5.00 lakh to one gram panchayat at the district level, Rs.20.00 lakh, Rs.15.00 lakh and Rs.10.00 lakh respectively to GPs standing first, second and third, respectively at the state level. During the year 2008-09, budget provision for the scheme was Rs.393.00 lakh. Finalisation of state level awards is under consideration. A budget provision amounting Rs.393.00 lakh has been earmarked under the scheme for the year 2009-10.

Maharashtra

Sant Gadge Baba Swachchhata Abhiyan (SGBSA), a scheme introduced by state government of Maharashtra to reward GPs based on certain indicators related to sanitation and good governance. The scheme was launched in year 2002 and state has allocated a total amount of Rs 2.5 million for the scheme. It is a competition for 'clean village' award where villages participate voluntarily. The gram panchayats, PRI take the lead in mobilising communities. Communities undertake work with their own resources and no subsidy from the State. A 'Neutral Committee' evaluates the competing villages at 5 levels: sub-block: block, district, region and state. Award money given as a token of appreciation of the community's collective action towards building a positive physical and social environment in the villages. More than 8000 village panchayats (PRI) has participated in this process. Successful villages are recognised as resource centers for rural development and innovation.

Himachal Pradesh

The government of Himachal Pradesh has launched a comprehensive strategy to tackle the sanitation challenge based on motivating rural communities to end the traditional practice of open defecation and adopt safe sanitation. In pursuance of this strategy, the state government has introduced the **Maharishi Valmiki Sampoorn Swachata Puruskar (MVSSP)** to select the cleanest gram panchayat at block, district, division and state level, based on an annual competition. Winning gram panchayats at state and divisional levels receive the prize from the hands of the Hon'ble Chief Minister of Himachal Pradesh, and district and block levels from the hands of senior dignitaries, during Independence Day celebrations each year.

Any gram panchayat that satisfies the following conditions is eligible to participate in the MVSSP competition:

- The gram panchayat should have become open defecation free.
- Winning gram panchayats at any level are excluded from participating for the award for that level for the next three years. However, it can participate in this competition at a higher level e.g. Panchayats having won the block level award in the previous year, would be eligible to compete only for district, division and state award in the next year's competition.
- State level winner is not eligible to participate in the competition for 3 years after the year of winning.

The basis for selecting the cleanest panchayat in the MVSSP is a scoring scheme that gives weightage to different parameters of total sanitation. The weightage is designed so as to incentivise gram panchayats to not only sustain but also improve on their open defecation free status. The parameters (weightage) include; personal hygiene (15), school and anganwadi sanitation (15), quality of life (15), solid waste management (20), liquid waste management (15), and community participation and institutional arrangements (20).

Karnataka

The State has introduced a sanitation reward scheme called **Nairmalya**. The Nairmalya awards consists of financial awards with citations at different levels i.e., at taluka, district, division and state levels.

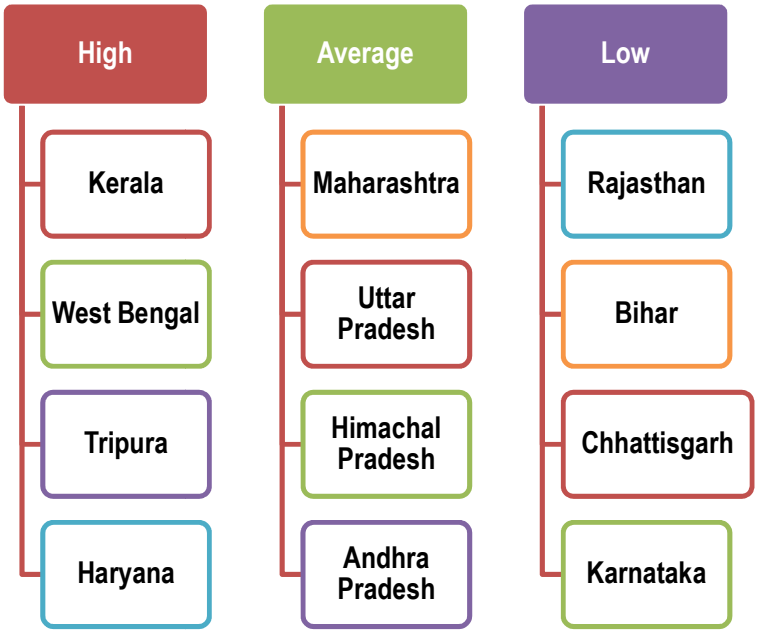
1.5 THE STUDY

The Department of Drinking Water and Sanitation, Govt. of India intended to conduct a study of the impact & sustainability of Nirmal Gram Puraskar in the 12 states of the country. CMS through a technical and financial selection process was assigned the responsibility for this purpose. The main purpose of the study was to assess the impact of NGP on the pace of progress of sanitation availability and usage in the country under TSC and its related impacts on health, education, gender empowerment, social inclusion in rural areas. The study has also assessed the durability & sustainability of the provision and usage of sanitary facilities over the time.

Beyond Nirmal Gram: Monitoring for Sustainability (Excerpts from Eleventh Five-Year Plan)

Once the village, block, or district Panchayat has received the Puraskar, there is a responsibility thrust on them, to maintain the Nirmal Gram status. The sustainability features specially, community involvement with women and children would sustain the Nirmal Gram status. Such Nirmal Grams have to move now to the next stage of sustained SLWM and proper street drainages.

The study was undertaken in twelve states, which were categorised (as per the TOR) by their performance under the TSC programme, viz. high, average and low performing states to have a fair assessment. Though the sample 12 states belonged to three different categories, however no priority was assigned to the states based on its categorisation while selecting the NGP-GPs. The category wise distribution of states and NGP-GPs awarded is mentioned in the below;



CHAPTER 2

The Study Overview

CHAPTER 2: THE STUDY OVERVIEW

2.1 BACKGROUND

The Department of Drinking Water and Sanitation, Ministry of Rural Development envisaged a comprehensive 'Assessment Study of Impact and Sustainability of Nirmal Gram Puraskar' in the country. The main purpose of the study was to assess the impact of NGP on the pace of progress of sanitation availability and usage in the country under TSC and its related impacts on health, education, gender empowerment, social inclusion in rural areas on different user groups particularly the rural poor. This study also focused on the durability and sustainability of the provision and usage of sanitary facilities over time. The rationale of the present evaluation study was to provide important evidence on whether the NGP component of the TSC to be continued and if so till when and with what modifications so as to reach the goal of 100% sanitation coverage and usage in rural areas of the country by 2012. The subsequent chapters provided a national level report on assessment of impact of NGP.

This chapter will elaborate on the objectives of the study, approach, methodology, sampling plan, selection of districts, sample size, tools developed, respondents' details and field work (Sep 2010) conducted in 56 districts of 12 states.

2.2 FOCUS ISSUES

To facilitate analysis, the focus issues (given in the ToR) were summarised and rearranged as follows:

5. Current Status of NGP Criteria (Coverage, Usage, ODF & Resolution, Garbage Disposal and Drainage Systems)

F5.1. Status of Coverage, Durability and Functionality

F5.2. Status of Usage and 'Nirmal' status (ODF and Resolution, Garbage Disposal & Drainage Systems)

6. Impact and Hygiene Factor

F6.1. Impact on Health, Education, Economics, Gender and Social Inclusion (seen in light of status of usage & 'Nirmal' criteria, status of water scarcity and source)

F6.2. Relation of Impact with Status of Hygiene Practices (Hand Washing, Drinking Water)

7. Sustainability of NGP Status

F7.1. Critical Factors for Achieving NGP Status

F7.2. Reasons for Non-coverage and Non-Usage by Households, Men, Women, Infants, Adolescent Girls, Disabled and Aged, Relation with Status of Cleanliness, Water Scarcity and Water Source

F7.3. Factors Critical for Better Sustainability of NGP Status and Sustainability of Impact

F7.4. NGP Award Money Utilisation

8. Measures and Modifications for Sustained NGP Status

F8.1. Measures Needed to Strengthen the Impact and Sustainability

F8.2. NGP to Continue (for How Long and with What Modifications) or Not (Including improvement in coverage & pace of progress and improvement in usage)

2.3 INDICATORS

In the process of preparing a logically consistent list of indicators that helped in assessing the four focus issues listed earlier, the performance, sustainability and impact indicators given in the ToR (which are listed below), were analysed and linked to the appropriate focus issue, which is mentioned in the bracket after the indicator as F1 to F4 below.

Performance indicators (as per ToR)

1. Access to toilets - individual, shared, community (F1.1 Status of Coverage, Durability and Functionality)
2. Percentage of households, individuals resorting to open defecation regularly (F1.2 Status of Usage and 'Nirmal' status)
3. Functionality (F1.1) and reasons for non-functionality of toilets built (F3.2 Reasons for Non-Usage by Households, Men, Women, Infants, Adolescent Girls, Disabled and Aged)
4. Years since toilets constructed (F3.2)
5. Type of toilet used (F3.2 If this indicator is important to assess the current availability of various types of toilets, then this is just information on availability F1.)
6. Usage (F1.2) and reasons for non-usage of toilets (F3.2)
7. Practices followed for disposal of child faeces (F1.2)
8. Awareness of need and methods for disposal of waste/ sludge / excreta (F3.3 Factors Critical for Better Sustainability of NGP Status and Sustainability of Impact)
9. Availability, adequacy and condition/functionality of toilets and urinals in Schools separately for boys and girls (F1.1)
10. Arrangements for hand washing, water, soap/ ash/ etc in schools and anganwadis [F2.2 Relation of Impact with Status of Hygiene Practices (Hand Washing, Drinking Water)]
11. Schools with facilities for safe disposal of sanitary pads (F1.2)
12. Availability, adequacy and condition/functionality of baby friendly/ other toilets and urinals in Anganwadis baby friendly toilets (F1.1)
13. Observation of garbage dumping, water logging (F1.2)
14. Mechanisms for garbage collection and disposal (F1.2)
15. Methods for black water and grey water disposal and for drainage to prevent water logging. (F1.2)
16. Whether all water sources have proper platforms and drainages around them (F1.2)
17. Key hygiene practices - Hand wash before/after food intake and after using toilet among adults and children (F2.2)
18. Method of washing - water/soil/ash/soap and water (F2.2)

Sustainability indicators (as per ToR)

19. Motivating factors for toilet construction (F3.1 Critical Factors for Achieving NGP Status) and usage (F3.3 Factors Critical for Better Sustainability of NGP Status and Sustainability of Impact)
20. Activities taken up for awareness generation and social mobilisation process (F3.1 and F3.3)
21. Persons/institutions leading the awareness generation and social mobilisation process (F3.1 and F3.3)
22. Maintenance of ODF status after NGP award (**This indicator is interpreted as the 'Maintenance systems for ODF status & their effectiveness' and was used for comparison before and after NGP)** (F3.1 and 3.3)

23. Action taken by Gram Panchayat (e.g. fines for open defecation, resolution etc.), community, others to maintain ODF status (**This indicator was used for comparison before and after NGP)** (F3.1 and 3.3)

24. Present condition **(was interpreted as functionality and durability)**, cleanliness of toilets, individual, shared, community, school, anganwadi **(was interpreted as an indicator of effectiveness of O & M system, and was analysed to see in how many (if any) cases of unclean toilets, did the respondents report it as the reason of non-usage of toilet)** (F1.1)

25. O and M arrangements for upkeep of community, school and anganwadi toilets (F3.1 and 3.3)

26. Awareness about linkages between water sanitation and health (F3.3)

27. Availability of water **(and its sources)** (F3.2)

28. Availability of mug/ vessel/ tumbler (F1.2 as one of the observed **evidences of usage)**

29. Availability of maintenance worker (F3.3)

30. Availability of mason for repairs (F3.3)

31. School and Anganwadi Sanitation - Prevalence of personal hygiene practices among children (F2.2)

Impact indicators (as per ToR)

32. Health

Reduction of water and sanitation related diseases like Diarrhoea, Jaundice, Worm infestations, UTI: Infant mortality, Malnutrition and Maternal mortality (F2.1: Impact on Health, Education, Economics, Gender and Social Inclusion: Indicators of infant mortality, maternal mortality and malnutrition are also affected by causes not related to sanitation **such as** availability of food and safe drinking water, access to proper health care facilities, medicines and many **other** factors. Segregating the current impact that can be attributed to only/ mainly to NGP status (achievement and/ or maintenance) required a host of other factors to be assessed and data collected for all those factors. For three indicators viz. infant mortality, maternal mortality and malnutrition assessment had been on the basis of perception of health workers/ PHC staff.

32.1 Physical security of women and adolescent girls (F2.1, interpreted as an indicator for impact of coverage and usage on gender, and not health)

32.2 Better personal and domestic hygiene practices- Hand washing practices, proper disposal of faeces, hygiene practices in storage of water (F2.1, interpreted as current hygiene practices. As they are not a part of the NGP eligibility criteria as per the old NGP guidelines, their current status would be analysed to see their independent impact, in the cases of non-usage of toilet, on health and/ or social inclusion)

32.3 Better understanding of the water and excreta related diseases (F2.1 & F3.3)

33. Education

Increase in attendance and retention rates of children (especially girls) in school: It was suggested that this be assessed in connection with health indicators and not on the basis of actual attendance or enrolment data, as the pre-test had revealed that more than a day would be required for collecting this data from a NGP-GP. This was discussed during the meeting of the Consultant Monitoring Committee held on 23rd July 2010, and hence the indicators 'Increase in attendance and retention rates of children' were approved for elimination from this study.

Increase in active participation within class, and attention levels within class: This was asked to the teacher, for comparison between the times before toilet construction in school and after. But that was a recall in the range of 3-6 years and hence not very objective. Also, the reasons, to which this increase (if occurred & perceived at all) can be attributed, would be many having links to many other programmes apart from NGP or even TSC. Hence these two indicators viz. increase in active participation within class, and attention levels within class were approved for elimination (during the meeting of the Consultant Monitoring Committee held on 8th June 2010) from the indicator list

of this study.

Economic: Reduction of time for going for open defecation (F2.1); Increase in productive man days due to lower morbidity: Pre-test had revealed that respondents were not able to recall such information. Hence it was suggested that this be assessed in connection with health indicators. This was discussed during the meeting of the Consultant Monitoring Committee held on 23rd July 2010 and hence the indicator 'Increase in productive man days' were approved for elimination from this study. Reduction in medical expenses; Better utilisation of time (F2.1).

34. **Gender**: Women's perception about level of privacy, dignity provided by access to sanitation. Women's perception about safety of using water and sanitation services (F2.1)
35. **Environmental**: Reduction in open defecation (F1.1), Proper drainage (F1.1), solid and (liquid) waste management (F2.1)

CMS has added site selection (distance of pit from the nearest water source) for the latrine as an indicator of environmental impact sustainability (preventing water contamination)

2.4 SAMPLE SIZE

As per ToR, the districts were selected using the PPS methodology keeping NGP-GPS numbers as base and further NGP-GPS were also selected through PPS based on population criteria. The final sample size (refer table below) also includes PRI representatives, school teachers, anganwadi workers, PHC/PHU staff, health workers, community based organisations/ non government organisations, self help groups, women or youth groups, block coordinators, district water and sanitation mission officials, and concerned state officials apart from households in 664 NGP-GPs. The total sample covered, as described below, differed from the planned figures, in some cases, mainly due to availability or non-availability of respondents.

Table 2.1: Overall summary of final sample size

S. No.	Stakeholders	Planned number	Total Sample Size
1.	Individual households	15 per NGP-GP	9960
2.	Focus Group Discussion	1-2 per district	59
3.	Elected PRI members	2 per NGP-GP	1279
4.	School teachers	Approx. 2-3 per NGP-GP	1383
5.	Children	-	14062
6.	Anganwadi workers	Approx. 2 per NGP-GP	1184
7.	PHC/ PHUs Staff	1 per block	311
8.	Health Workers	1 per NGP-GP	610
9.	Community Based Organisation (CBO) and NGOs	1 per state	13
10.	Self-Help Groups	1 per NGP-GP	438
11.	Women or Youth groups	I each per NGP-GP	450
12.	Block Co-ordinators	1 per block	261
13.	District Water and Sanitation Mission Officials including PRI Representatives	1 per district	77
14.	State Concerned Officials and CCDU officials	1 per state	17
15.	Community Sanitary Complexes	-	134
	Total		**30238**

2.5 APPROACH AND METHODOLOGY

PPS methodology (Probability Proportional to Size) has been used for selection of sample till Gram Panchayat level. Circular systematic sampling was used for selection of households. For 360^0 assessment, information and data was collected from all stakeholders. The observation checklist was included in the structured interview schedules for households, school and anganwadis along with FGDs was the value addition to the entire approach and the study.

2.5.1 Sampling Framework

Since the awardees were distributed over four different time points (years) and the study intended to see the impact and sustainability of the scheme, hence awardees from 2008 and those of years 2005, 2006 and 2007 together were taken for study. The clubbing of years 2005, 2006 and 2007 was necessary in view of very few awardees in 2005 and 2006 as compared to 2008 (refer table below). Clubbing and taking 2005, 2006 and 2007 awardees together gave a balanced distribution and to be hereinafter referred to as 2007+. As indicated in ToR, the study was undertaken in 12 states, which were categorised by their performance in the TSC programme, viz. High, Average and Low performing. However no priority was assigned to the proposed 12 states based on its categorisation while selecting NGP-GPs.

Table 2.2: NGP-GPs from year 2005 – 2008

Category	State	2005	2006	2007	2007+ (2005-2007)	2008
High	Kerala	1	6	220	227	600
	West Bengal	10	126	470	606	328
	Tripura	1	36	46	83	30
	Haryana	0	0	60	60	798
Average	Maharashtra	13	380	1974	2367	4301
	Uttar Pradesh	0	40	488	528	729
	Himachal Pradesh	0	0	22	22	245
	Andhra Pradesh	0	10	143	153	662
Low	Rajasthan	0	0	23	23	141
	Bihar	0	4	39	43	156
	Chhattisgarh	0	12	90	102	300
	Karnataka	0	0	121	121	479
Total		**25**	**614**	**3696**	**4335**	**8769**

2.5.2 Selection of Districts

- A list of districts where NGP-GPs were available for both time points has been identified as 'common districts' for each selected state. Selection of blocks with such constraint was difficult given the variable number NGP-GPs within a block and the possible large number of unmatched blocks between 2007+ and 2008. 393 numbers of blocks was covered in 664 selected NGP-GPs.
- Approx. 32% of the common districts i.e. 56 districts (out of 176 total common districts in sample states) were selected through PPS for the study. The sampled districts were proportionately allocated to each state after allowing for a minimum of 2 districts in a state.
- The selection of the districts from the proposed states were done to ensure that awardees from both the time points 2007+ as well as in 2008 were covered. Refer table below for state-wise details of districts selected. Through PPS sampling using number of GPs as the size variable the allocated numbers of districts were selected. This was to make certain that districts with higher number of GPs had higher probability to be in the sample.

- Though as per the ToR only 54 districts were suppose to be covered in the proposed 12 states, but since in Rajasthan instead of 3 districts, actually 5 districts were selected to fulfil the prescribed coverage of 18 NGP-GPs from each time point, the total 56 districts were covered under study.
- In case of Rajasthan, 2005-07 time groups had very few NGP-GPs. Hence due to the sampling design followed for all states, all 2005-07 NGP-GPs had to be included in the study. As these NGP-GPs are likely to be relatively high performing, Rajasthan, as a state has shown relative better performance among the 12 study states. This factor needs to be kept in view, while considering the findings of the study described in chapter 4 to 6.

Names of the final selected districts are given in the following table.

Table 2.3: Districts and NGP-GPs sampling plan

Total sample size of states, districts, gram panchayats and households										
State	Total districts	No. of common districts	Total District selected	% (selected districts/ total districts)	No. of NGP-GPs in common districts		No. of NGP-GPs allocated 2007+		No. of NGP-GPs allocated 2008	
					2007 +	2008	Per District	Total	Per District	Total
Andhra Pradesh	23	17	5	22	153	662	6	30	6	30
Bihar	38	7	2	5	43	156	7	14	7	14
Chhattisgarh	18	5	2	11	102	300	7	14	7	14
Haryana	21	9	3	14	60	798	6	18	6	18
Himachal Pradesh	12	5	2	17	22	245	7	14	7	14
Karnataka	29	10	3	10	121	479	6	18	6	18
Kerala	14	13	4	29	227	600	6	24	6	24
Maharashtra	35	33	9	26	2367	4301	6	54	6	54
Rajasthan	33	8	5	15	23	141	6	18	6	18
Tripura	4	2	2	50	83	30	7	14	7	14
Uttar Pradesh	71	55	15	21	528	729	6	90	6	90
West Bengal	18	12	4	22	606	328	6	24	6	24
Total	**316**	**176**	**56**	**18%**	**4335**	**8769**	**76**	**332**	**76**	**332**

2.5.3 Selection of NGP-GPs

- As per the ToR directions, CMS has selected in total 664 NGP-GPs from the sample 56 districts, with equal number (332 GPs) from each of the two time points viz., 2007+ and 2008 to undertake field survey. The numbers of NGP-GPs were selected from each sample district in such a manner so as to have sufficient number of sample observations for a reliable estimate at the state level for each time point.
- There were around 13000 NGP-GPs in these twelve states. The NGP-GPs were selected randomly from each of these states separately by using PPS sampling method, base being population of the NGP-GPs.
- As per the sampling plan mentioned in ToR, six-seven NGP-GPs were required to cover from each time point of each district. However during sampling it observed that in some districts of Rajasthan, Uttar Pradesh, Bihar, Tripura, Himachal Pradesh and Haryana, number of awarded NGP-GPs were even less than six or seven GPs. A total shortfall of 24 NGP-GPs in 2007+ time point and 7 NGP-GPs in 2008 time point were noticed. The shortfalls of GPs were supplemented through NGP-GPs of other selected districts in same state through fresh PPS sampling.

Table 2.4: Final selected 56 districts, NGP-GPs, households to be surveyed

Sl. No.	States	Districts	Number of NGP-GPs selected			Households
			2007+	2008	Total	
1.	Andhra Pradesh	Guntur	6	6	12	180
2.		Karimnagar	6	6	12	180
3.		Krishna	6	6	12	180
4.		Khammam	6	6	12	180
5.		West Godawari	6	6	12	180
6.	Bihar	Katihar	6	7	13	195
7.		Vaishali	8	7	15	225
8.	Chhattisgarh	Rajnandgaon	7	7	14	210
9.		Korba	7	7	14	210
10.	Haryana	Karnal	8	6	14	210
11.		Panipat	8	6	14	210
12.		Kurukshetra	2	6	8	120
13.	Himachal Pradesh	Solan	2	7	9	135
14.		Mandi	12	7	19	285
15.	Karnataka	Uttara Kannada	6	6	12	180
16.		Dakshin Kaannada	6	6	12	180
17.		Shimoga	6	6	12	180
18.	Kerala	Thiruvananthapuram	6	6	12	180
19.		Alappuzha	6	6	12	180
20.		Ernakulam	6	6	12	180
21.		Thrissur	6	6	12	180
22.	Maharashtra	Solapur	6	6	12	180
23.		Nagpur	6	6	12	180
24.		Bhandara	6	6	12	180
25.		Ahmednagar	6	6	12	180
26.		Raigad	6	6	12	180
27.		Ratnagiri	6	6	12	180
28.		Satara	6	6	12	180
29.		Kolhapur	6	6	12	180
30.		Pune	6	6	12	180
31.	Rajasthan	Alwar	1	4	5	75
32.		Churu	6	4	10	150
33.		Jhunjhunu	5	4	9	135
34.		Rajsamand	3	2	5	75
35.		Sikar	3	4	7	105
36.	Tripura	South Tripura	7	6	13	195
37.		West Tripura	7	8	15	225
38.	Uttar Pradesh	Pratapgarh	3	4	7	105
39.		Kaushambi	3	6	9	135
40.		Bareilly	6	2	8	120
41.		Lakhimpur Kheri	5	6	11	165
42.		Aligarh	4	6	10	150
43.		Orraiya	5	6	11	165

Sl. No.	States	Districts	Number of NGP-GPs selected			Households
			2007+	2008	Total	
44.		Basti	7	6	13	195
45.		Gorakhpur	7	7	14	210
46.		Kannauj	3	6	9	135
47.		Moradabad	7	7	14	210
48.		Jaunpur	7	7	14	210
49.		Bijnor	10	7	17	255
50.		Mirzapur	7	7	14	210
51.		Muzaffarnagar	9	6	15	225
52.		Ghaziabad	7	7	14	210
53.	West Bengal	Bankura	6	6	12	180
54.		Nadia	6	6	12	180
55.		North 24 Paraganas	6	6	12	180
56.		Medinipur	6	6	12	180
	Total		**332**	**332**	**664**	**9960**

2.5.4 Selection of Households

- First households were listed in the selected 664 NGP-GP. 15 households from each NGP-GP were selected using Circular Systematic Sampling procedure. Through purposive sampling or circular systematic sampling at least two household each of SC/ ST were also part of the total household sample. Total 9,960 households (refer table below) were interviewed through structured interview schedule.
- For getting equal representation and views of all gender, CMS ensured that while interviewing the households at least 50% respondents were female. There was also a separate section for female of the household in the household Structured Interview Schedule (SIS). It helped in eliciting fair assessment on gender relation and women perception about safety, privacy and dignity provided to them by access to sanitary facility.

2.6 TOOLS AND RESPONDENTS

Besides structured schedules for individual households, schools and anganwadis, CMS developed the research tools for other stakeholders as indicated in table below. Apart from in-depth discussion with multiple stakeholders, focus group discussions with villagers and separate observation checklists for households, community sanitary complexes, school and anganwadis were administered in the selected Gram Panchayats.

2.6.1 Pretesting and Translation in Regional Languages

The revised tools were pre-tested and response was analysed and accordingly incorporated. Pre-testing of tools was done in Aligarh, Uttar Pradesh and Guntur, Andhra Pradesh from July 5-10, 2010. A team of senior researchers, researchers, field executive and interviewers have undertaken pre-testing. The tools were translated in six languages (Hindi, Marathi, Telugu, Kannada, Malayalam and Bengali) keeping in view the different local language in the proposed states for comprehensive field work.

2.6.2 Respondents

Table 2.5: Level-wise respondents and tools

Geographic level and Sub-level	Respondent type	Tools Type
		SIS/ IDS/ FGD/ Observation/ Data checklist
NGP-GP level (Household)	Adults (Female 50% if possible)	SIS
	Female (a separate section)	SIS
Household/ Village/ NGP-GP	HHs of NGP-GP	FGD
	NGP-GP	Observation checklist
	Elected PRI: Female - NGP-GP level	IDS
	Elected PRI: Male - NGP-GP level	IDS
	SHG member	IDS
	Women group	IDS
	Youth group	IDS
	Health worker	IDS
	Anganwadi worker	SIS
	Anganwadi	Observation checklist
	School Govt/ Pvt.- aided/ unaided	Observation checklist
	School teacher in-charge/ Head of the school	SIS
	School Children	SIS
	Community Sanitary Complexes (CSC)	Observation checklist
Block Level	PHC staff	IDS
	Block Co-coordinators	IDS
District	PRI Representatives at Zila Panchayat level	IDS
	Districts Water and Sanitation Missions officials	IDS
State	State Officials	IDS
	State Communication and Capacity Development Unit (CCDU)	IDS

2.7 FIELD WORK OVERVIEW

The field work started on August 25, 2010 and completed by October 4, 2010. The orientations of the teams were held for four days in each briefing locations. The orientation programme had three components: a) theoretical orientation involving briefing on the objectives of the study b) field methods and instrumentation, covering all aspects of data collection, and c) an ethics module to orient the team regarding maintenance of confidentiality and data storage. The sessions were participatory in nature, enabling thorough explication and exposure to tools instruments, role-playing (mock interview) and discussion time to clarify doubts and questions.

Well-experienced and trained interviewers, researchers, field executives and field co-ordinators were under the direct supervision of the senior researchers and field manager. The field work was done in all states simultaneously.

2.8 FINAL REPORT

After completing field work, the top line findings were presented to the consultant monitoring committee in October 2010. The data was scrutinised, coded and entered in SPSS 13. Further the data was validated for quality assurance. The draft final report was submitted in December 2010. The presentation on the draft final report was made to the consultant monitoring committee on January 27, 2011. The comments and suggestions from consultant monitoring committee were incorporated in the final report.

Table 2.6: Field work schedule

State	Briefing date	Briefing Venue	Field Work Starting Date	Field Work Completion Date
Haryana	Aug 25-28, 2010	Delhi	Aug 30, 2010	Sept 17, 2010
Himachal Pradesh	Aug 25-28, 2010	Delhi	Aug 30, 2010	Sept 19, 2010
Uttar Pradesh	Aug 25-28, 2010	Delhi	Aug 30, 2010	Sept 22, 2010
Bihar	Aug 30-Sept 2, 2010	Patna	Sep 3, 2010	Sept 22, 2010
Tripura	Sept 4 -7, 2010	Agartala	Sep 8, 2010	Sept 25, 2010
West Bengal	Aug 30-Sept 2, 2010	Kolkata	Sep 6, 2010	Sept 26, 2010
Chhattisgarh	Sept 6-9, 2010	Raipur	Sep 9, 2010	Sept 26, 2010
Rajasthan	Aug 30-Sept 2, 2010	Jaipur	Sep 3, 2010	Sept 27, 2010
Kerala	Sept 7 -10, 2010	Ernakulam	Sep 15, 2010	Oct 4, 2010
Karnataka	Sept 6-9, 2010	Bangalore	Sep 13, 2010	Oct 4, 2010
Andhra Pradesh	Sept 7 -10, 2010	Vijayawada	Sep 11, 2010	Oct 4, 2010
Maharashtra	Aug 30-Sept 2, 2010	Nagpur	Sep 3, 2010	Oct 4, 2010

CHAPTER 3

Socio Demographic Profile of the Respondents

CHAPTER 3: SOCIO DEMOGRAPHIC PROFILE OF THE RESPONDENTS

This chapter will provide the respondents profile of all tools administered during the study. It elaborates on gender, primary occupation, religion, social category, land owning including agricultural land, type of houses, availability of ration card, type of ration card etc. of the household respondents.

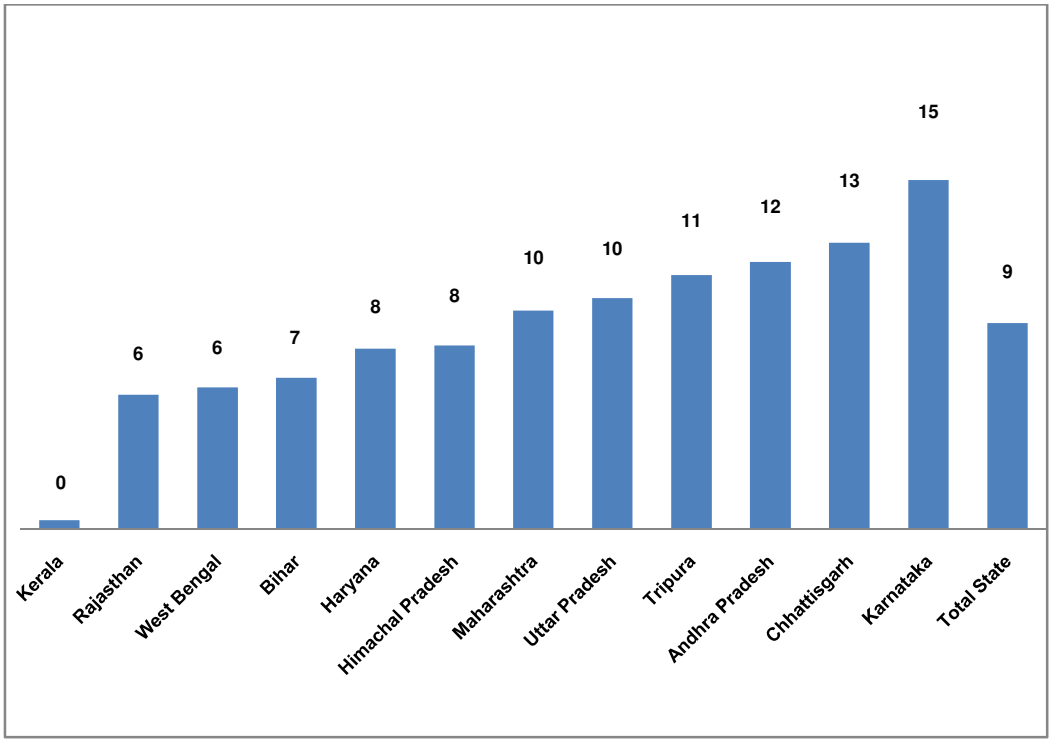
PRI members' social category and religion details are also given in the chapter. Information on numbers of girls, boys and co-ed schools is also depicted in the chapter.

3.1 HOUSEHOLDS PROFILE

3.1.1 Gender

Overall approx. 51% female respondents were interviewed in the household survey by design. In West Bengal household questionnaire was administrated with more than 81% female respondents followed by Tripura (69%) and Kerala (66%). On the contrary Chhattisgarh and Haryana had male respondents (64%) followed by 63% in Karnataka.

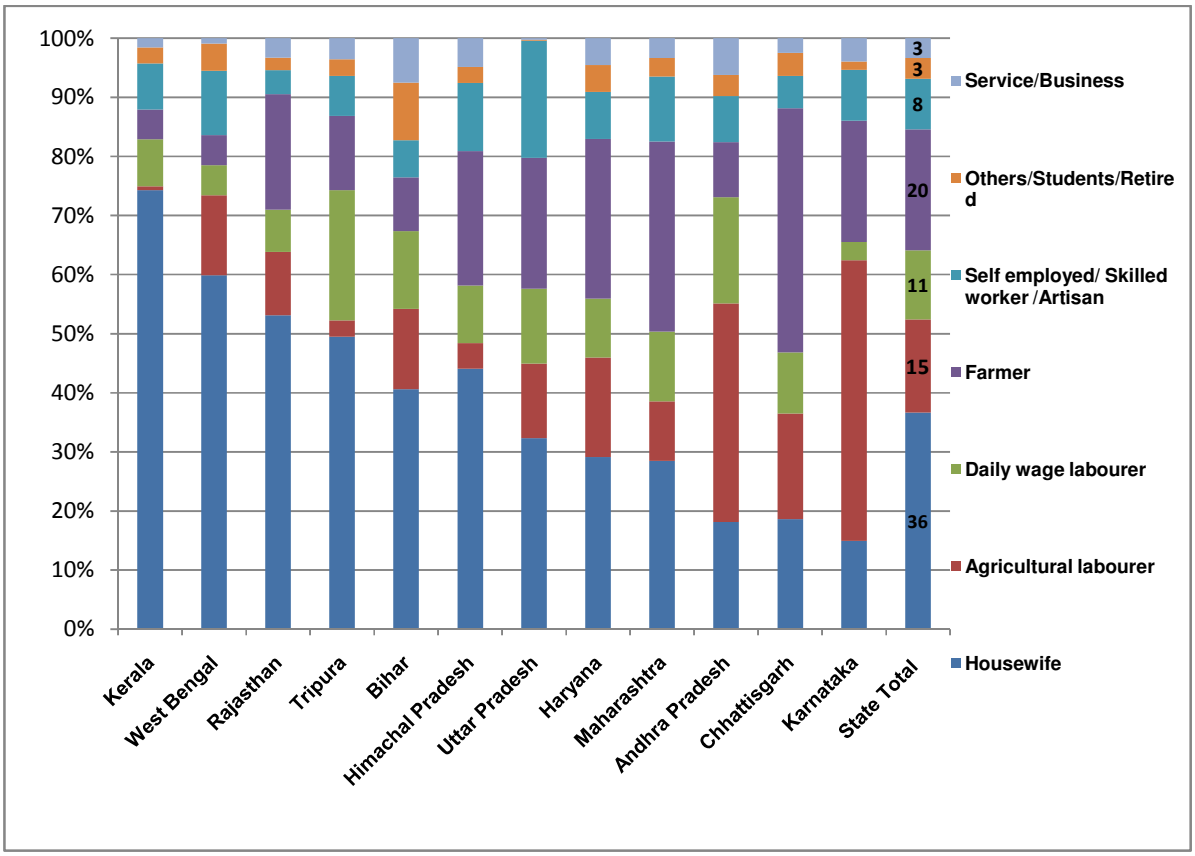
Fig 3.1: Female-headed households (in percentage)



Predominantly head of the household in majority of the households surveyed were male. More or less similar trend was noticed across 12 sample states except for Kerala wherein cent percent cases male members were heading the households. Karnataka having the highest percentage (15%) and Kerala having the least percentage (0.4%) as the female headed households in the sample.

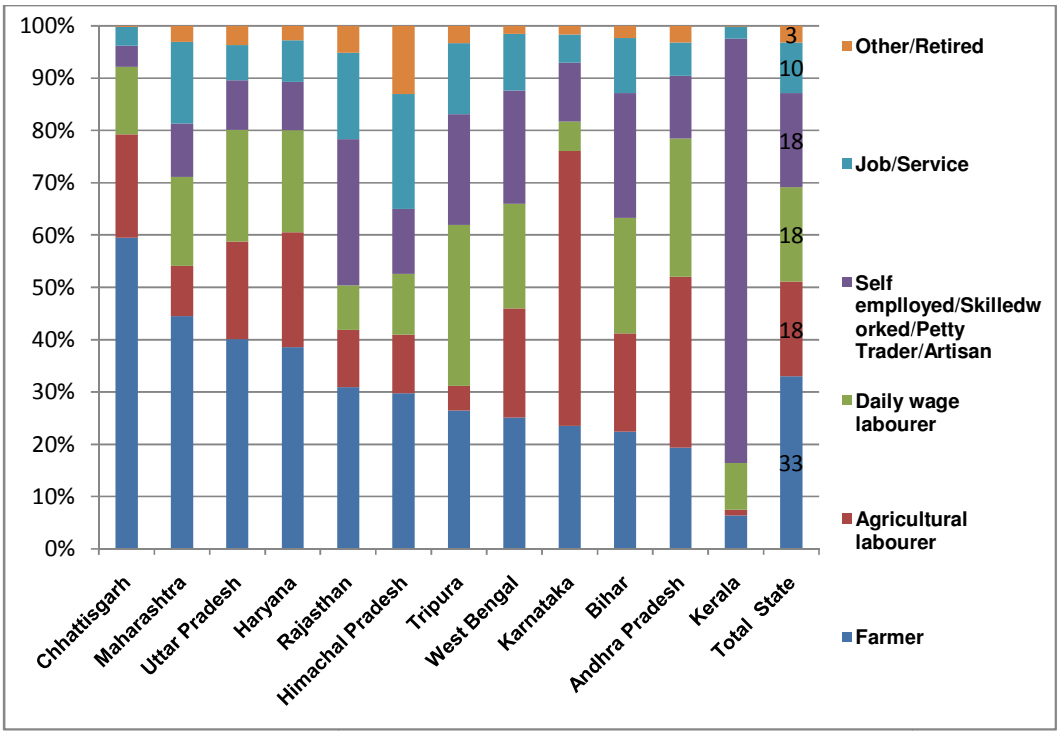
3.1.2 Primary Occupation

Fig 3.2: Primary occupations of the respondents (in percentage)



- About 36% of the respondents were housewives, followed, agricultural labourer (15%) and 11% wage labourers, farmers (20%)
- The state wise sample revealed that about 66% of the respondents in Kerala and 14% respondents in Karnataka were reported to be "Housewives". Farmer's representation was found to be highest in Chhattisgarh (43%) and lowest in Kerala (4%). Nearly half of the respondents in Karnataka and as low as 1% in Kerala were agricultural labourers. In Tripura 20% daily wage labourers and 18% skilled workers in Kerala were respondents for household survey.
- Representations of other occupations viz.; artisans, retired/pensioner, business/ industrialist were negligible in almost all sample states.

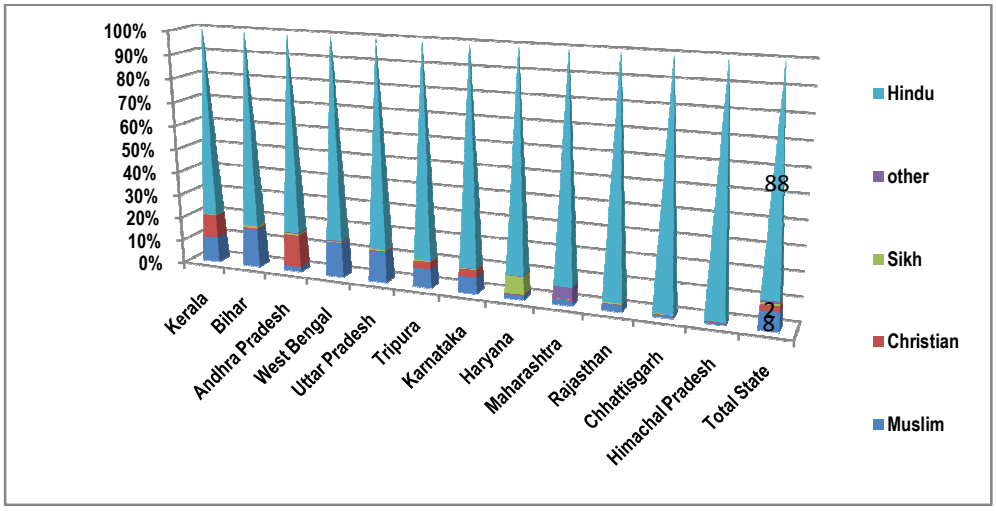
Fig 3.3: Primary occupations of the households (in percentage)



- The graph above depicts that majority of sample households (33%) are dependent on "farming". Approx. 18% households are agricultural labourers and wage earners each. Skilled workers comprises 7% of the household surveyed followed by petty traders/shop owners (6%), govt. services and self employed 5% each.
- State wise analysis reveals that "farming" as primary occupation of the HHs (Households) is highest in Chhattisgarh (60%) with 44% in Maharashtra and 40% in Uttar Pradesh. Similarly Karnataka stands on top with 53% HHs reported agricultural labourer as the main occupation of the HHs with least representation of Kerala (1%). Daily wage labourer is recorded highest in Tripura (31%) and lowest in Karnataka (less than 6%).
- Kerala is having the highest skilled workers (48%) and also the highest self employed (29%). Contrast to Kerala, Himachal Pradesh shows the highest 13% households stated to be in govt. service. The remaining nearly 11% are retired/pensioners.

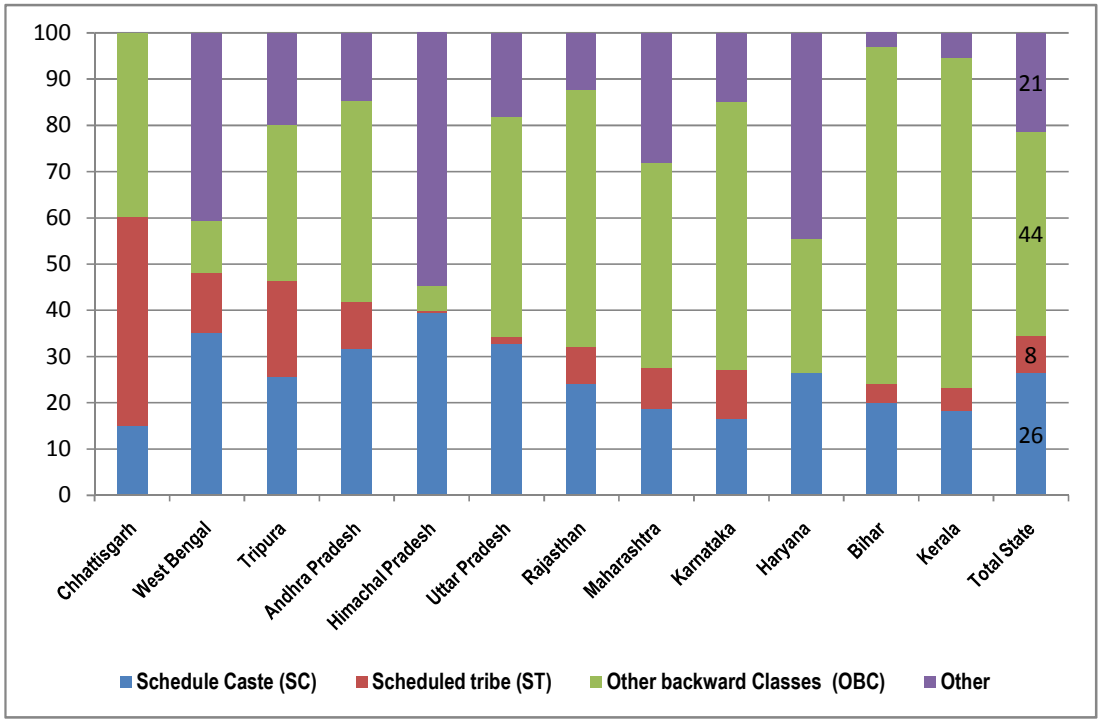
3.1.3 Religion and Social Category

Fig 3.4: Religion of the households (in percentage)



- In more than 88% cases, households are Hindu, followed by 8% Muslims and 2% Christians. Sikhs and others represented less than 1% in overall sample. In Kerala and Chhattisgarh almost all sample HHs (each being 99%) belong to Hindus while Muslim representation is found to be highest in Bihar with more than 16%, followed with 14% in West Bengal and 13% in Uttar Pradesh. Similarly in Haryana, more than 7% head of the households reported Sikh and in Andhra Pradesh approx 14% head of the households reportedly followed Christianity.

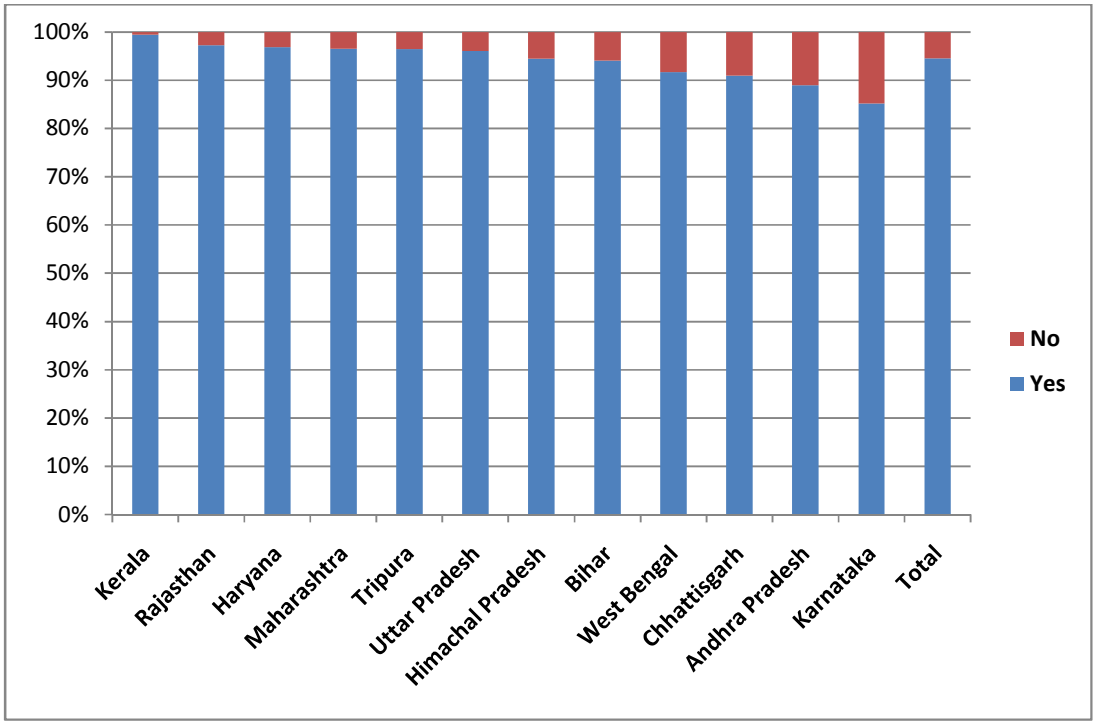
Fig 3.5: Social category of households (in percentage)



- An analysis of the sample households by their social category reveals that nearly 44% are from OBC category, 26% from the SC category, 21% belonged to others and 8% belonged to the STs. The representation of SCs is highest in Himachal Pradesh (40%), followed by West Bengal (35%) and Uttar Pradesh and Andhra Pradesh being 32% each.
- The presence of STs households was nil in Himachal Pradesh while in Chhattisgarh, Tripura, West Bengal and Andhra Pradesh they are 45%, 20%, 13% & 10% respectively. Likewise OBC reported highest in Bihar with 73% followed by Kerala with 71% and Karnataka with 58%. Household from the 'others' category represented highest in Himachal Pradesh (55%) and lowest in Kerala (5%).

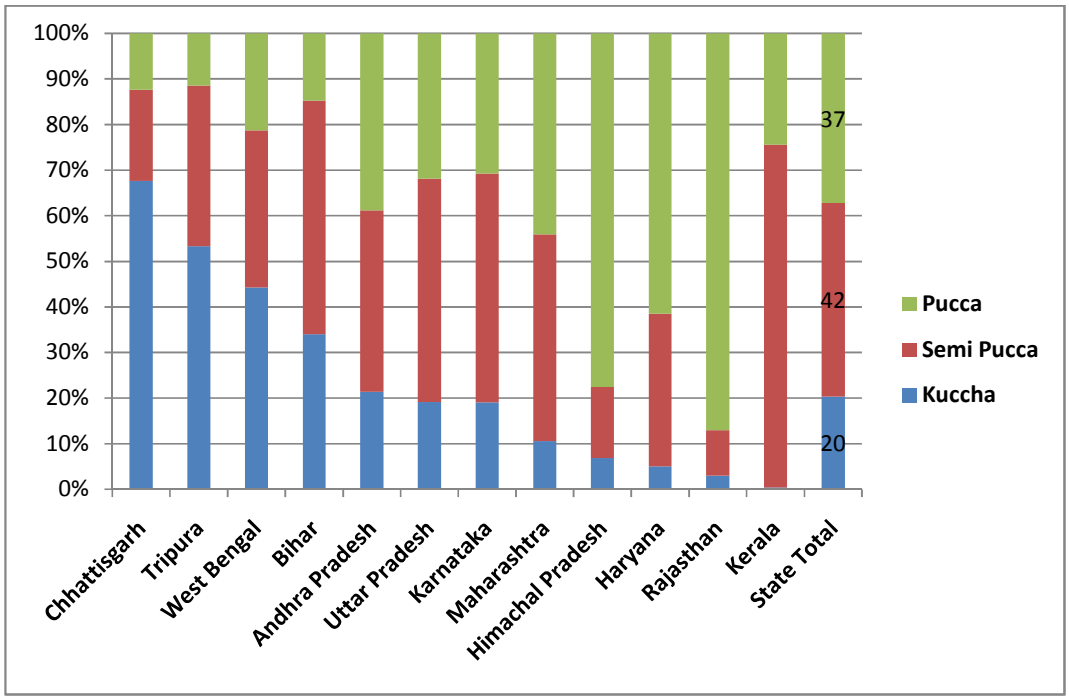
3.1.4 Households Ownership and Type

Fig 3.6: Ownership of homestead land (in percentage)



- The study findings indicate that around 95% of the respondents own the land on which their houses are built. Kerala leads with highest (99.4%) respondent while Karnataka trails with (85%) in this response category.

Fig 3.7: Type of house (in percentage)

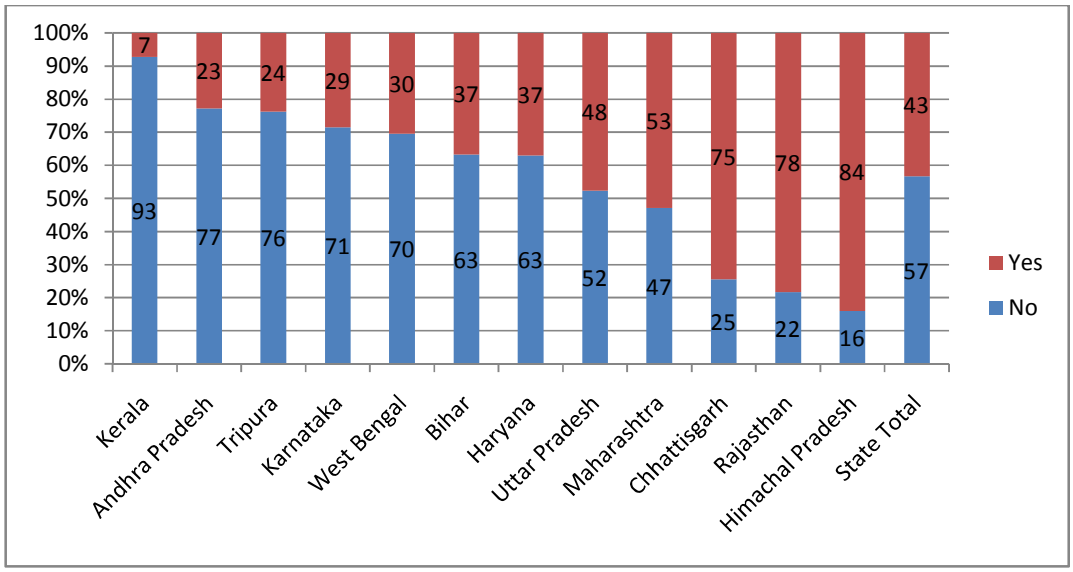


- The sample graph reflects that in overall 37% houses were of pucca in type, around 42.3% semi pucca and 20% are Kuchha.

- Among the sample households, Rajasthan reported highest number of pucca houses (87%), followed by Himachal Pradesh (78%). On the other hand Chhattisgarh has the highest 67% of kuchha houses amongst the response category followed by Tripura with 53%. So far as semi-pucca houses are concerned, Kerala tops with 75% households followed by Bihar and Karnataka with 51% and 50% respectively.

3.1.5 Agricultural Land Ownership

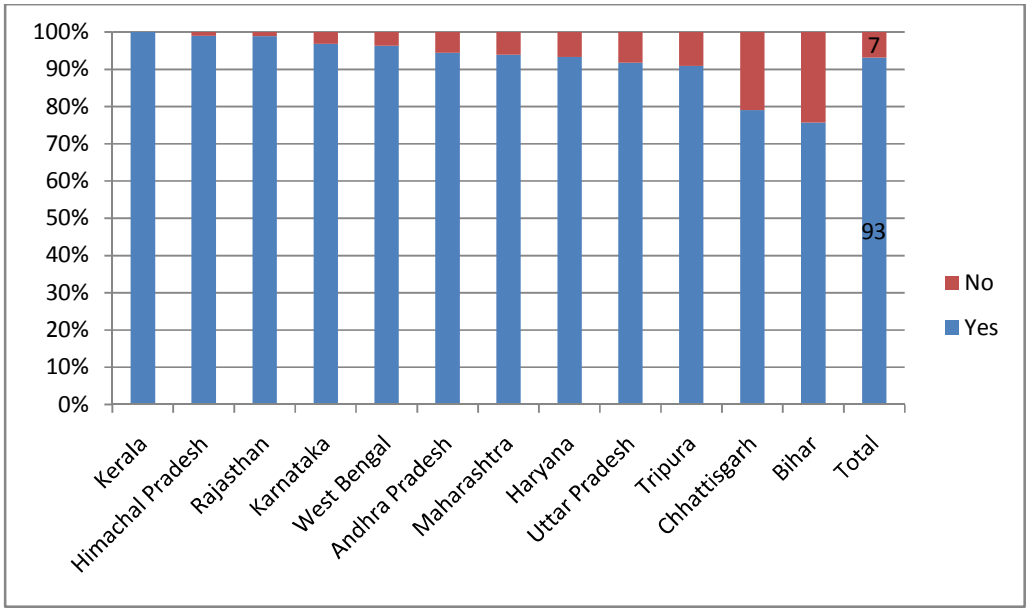
Fig 3.8: Household's having agricultural land on ownership/sharing basis (in percentage)



- Analysis of the responses received regarding ownership of agricultural land on ownership or sharing basis reveals only 43% of the sample households have such agriculture land.

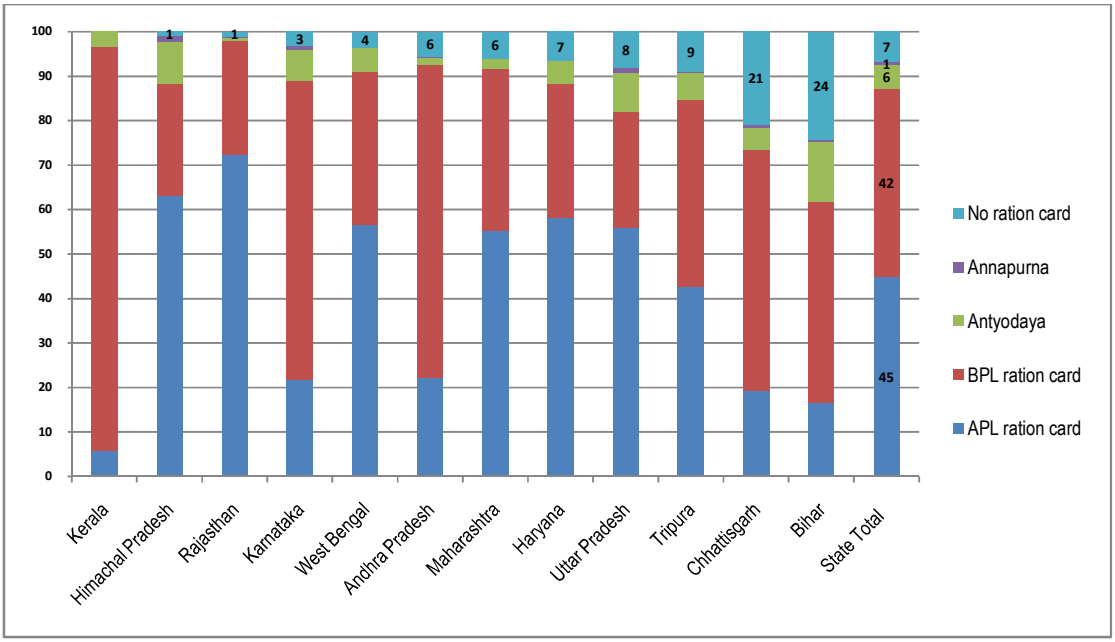
3.1.6 Ration Card

Fig 3.9: Availability of ration card (in percentage)



- Around 93% of the responding households had ration cards. Kerala being topper with cent percent ration cards followed by Himachal Pradesh and Rajasthan with 99% each. However in Bihar and Chhattisgarh the gap was of 24% and 20% respectively.

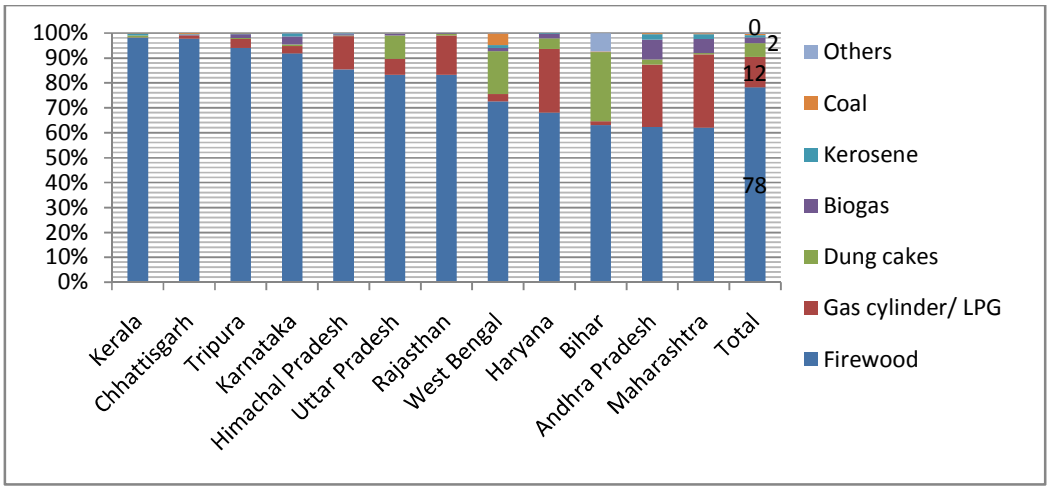
Fig 3.10: Type of ration card in the households (in percentage)



3.1.7 Primary Fuel for Cooking

Data pertaining to the sample households and types of ration cards they have reveals that Rajasthan has the highest (73%) sample households having an APL card and Kerala being the least with 6%. Kerala has the maximum 91% sample households having BPL cards, close to states like Andhra Pradesh with 74% BPL cards and Karnataka with 70% BPL cards. The percentage of households with Antyodaya card was highest 18% in Bihar. The possession of the Annapurna card is insignificant in the sampled households.

Fig 3.11: Use of primarily fuel for cooking (in percentage)

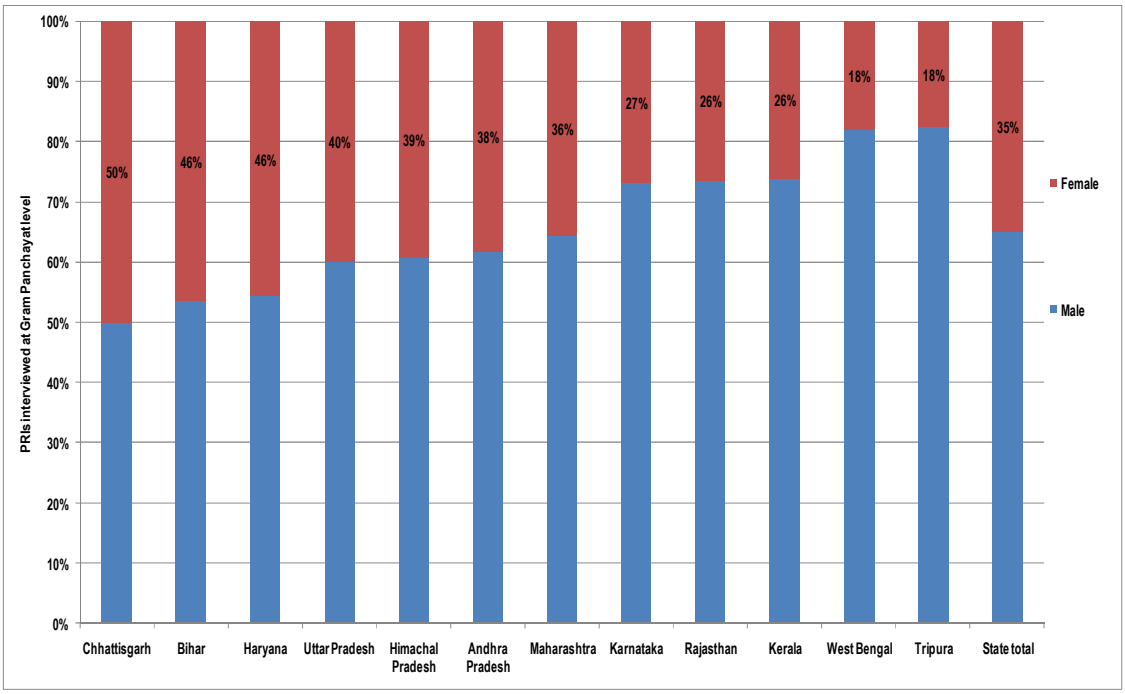


- Against a 12 state average of 78% sample households use firewood as their primary cooking fuel, over 95% of the sampled Kerala households use firewood. At the other end of this scale are Maharashtra and Andhra Pradesh with 62% households using firewood as their prime cooking fuel.
- The usage of LPG is between 0.14 % to a little over 6% in states like Kerala, Bihar, UP, Karnataka, Tripura and West Bengal. Leading the LPG users are the households in Maharashtra, Andhra Pradesh and Haryana with a little over 25% users.

- Around 6% households reported use of Dung cakes and 2% as biogas for cooking. Use of Kerosene, Coal and others source is found to be negligible in the sample households.

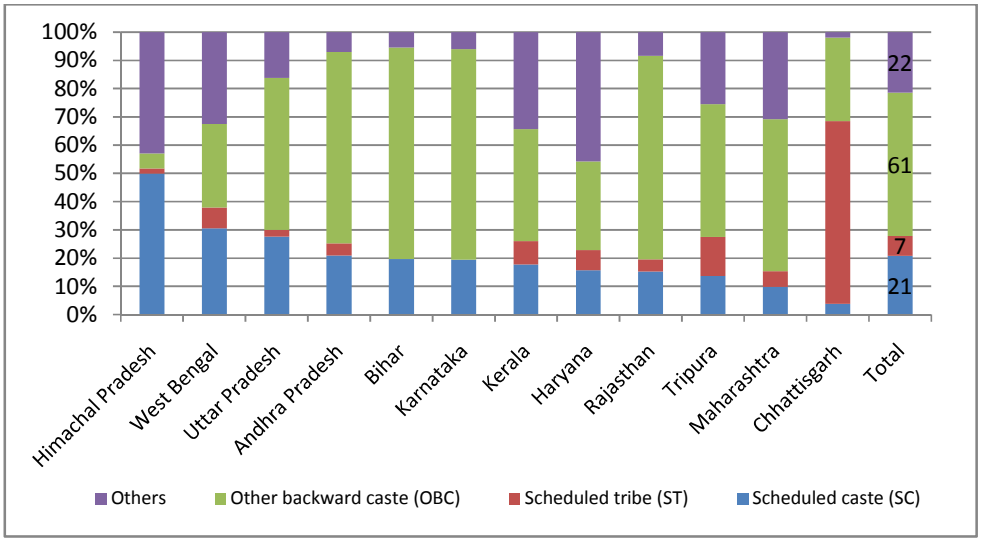
3.2 PRI MEMBERS PROFILE

Fig 3.12: PRI members by Gender (in percentage)



Among the PRI members interviewed at Panchayat level, around 35% were female (as specific effort was made to interview a female PRI if available in a NGP-GP, apart from the current Sarpanch/ Pradhan).

Fig 3.13: PRI members by social category (in percentage)

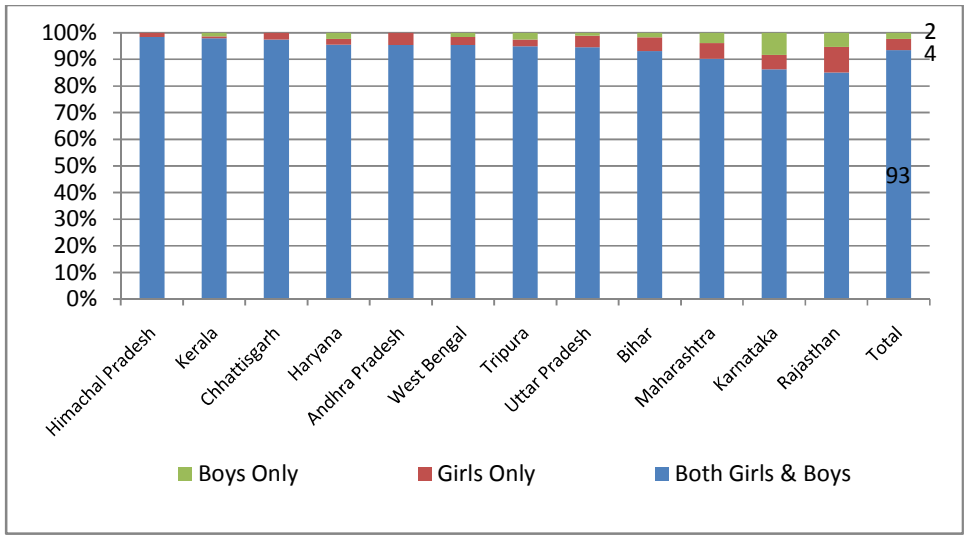


- Around 51% PRI members interviewed belong to OBC category followed by SC and Others category both being 21%. STs is to the extent of 7% of the total sample. At state level SCs representation was highest in Himachal Pradesh with 50%, followed by West Bengal, Uttar Pradesh, Andhra Pradesh and Bihar with 30%, 28%, 21% and 20% respectively.

- Similarly highest STs are represented in Chhattisgarh with 65% and lowest in Uttar Pradesh and Himachal Pradesh being just 2% each. Other backward cast is recorded maximum in Bihar and Karnataka with 75%, followed by Rajasthan with 72% and minimum with 5% in Himachal Pradesh. Likewise Haryana represented the highest 'Other' cast category (46%) followed by Himachal Pradesh (43%).

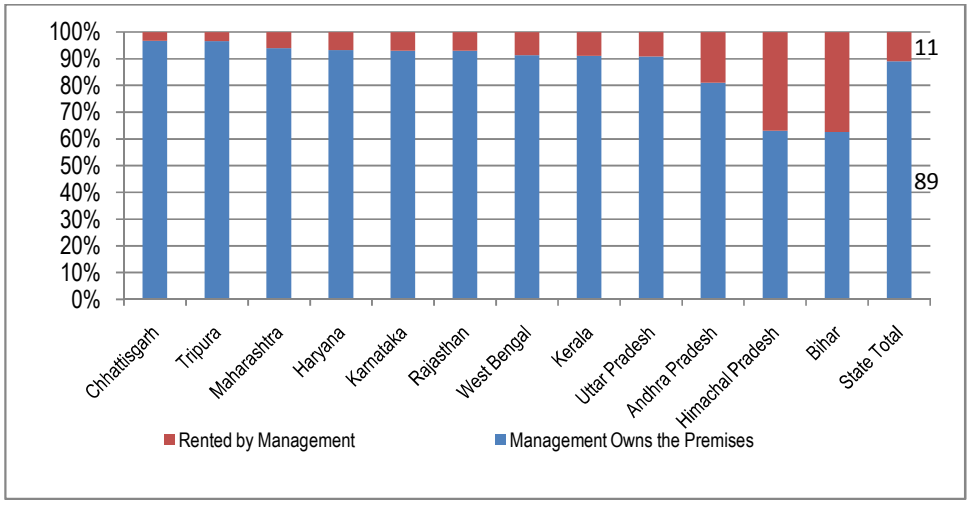
3.3 SCHOOLS AND ANGANWADIS PROFILE

Fig 3.14: Gender wise schools profile (in percentage)



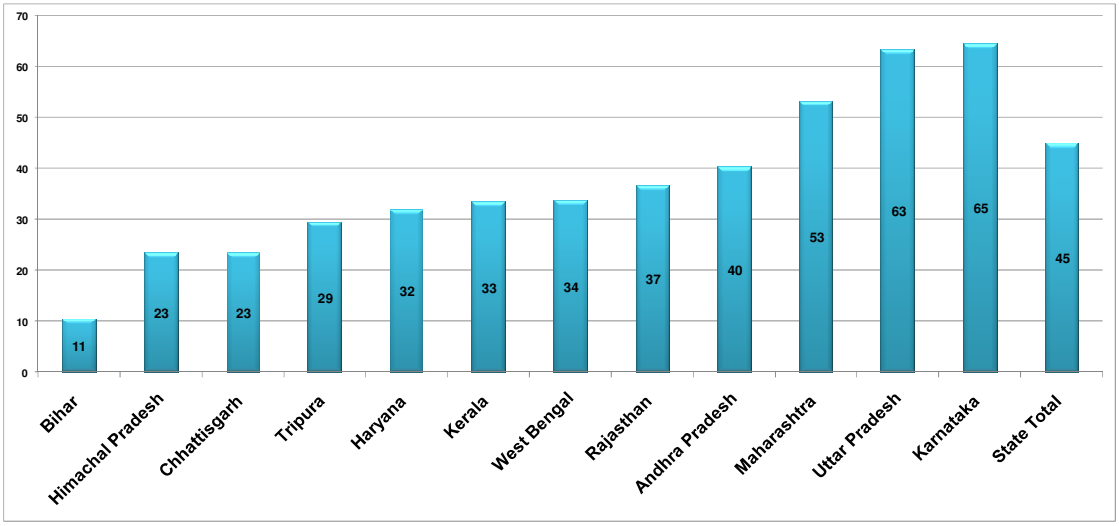
- In the sample, co-ed schools are covered to the extent of more than 93%, followed by girls' schools only (4.2%) and boys' schools only with 2.3%. In Himachal Pradesh and Kerala around 98% schools interviewed were co-ed while in Karnataka 8% schools covered were only boys' schools. In Himachal Pradesh no "Only Boys" school was covered. "Only Girls" schools were covered maximum in Rajasthan being 10% followed by Maharashtra, Karnataka and Bihar with 5% each.

Fig 3.15: Schools and anganwadis in ownership/ rented premises (in percentage)



- In overall sample of schools and anganwadis, 89% premises are owned by the management while in 10% cases it was rented. However at state level, Tripura is reported on top with 97% and Bihar is lowest with 62% schools/ anganwadis were operating from own premises.

Fig 3.16: Anganwadis situated in schools premises (in percentage)



- Approx. 45% Anganwadis are operated from the school buildings and 55% anganwadis have their own premises. In Karnataka 65% and Uttar Pradesh 63% anganwadis are situated in school premises followed by Maharashtra with 53%. On other hand, in Bihar 89% anganwadis have their own premises, followed with 77% in Chhattisgarh and Himachal Pradesh respectively.

Table 3.1: Profile of sample schools

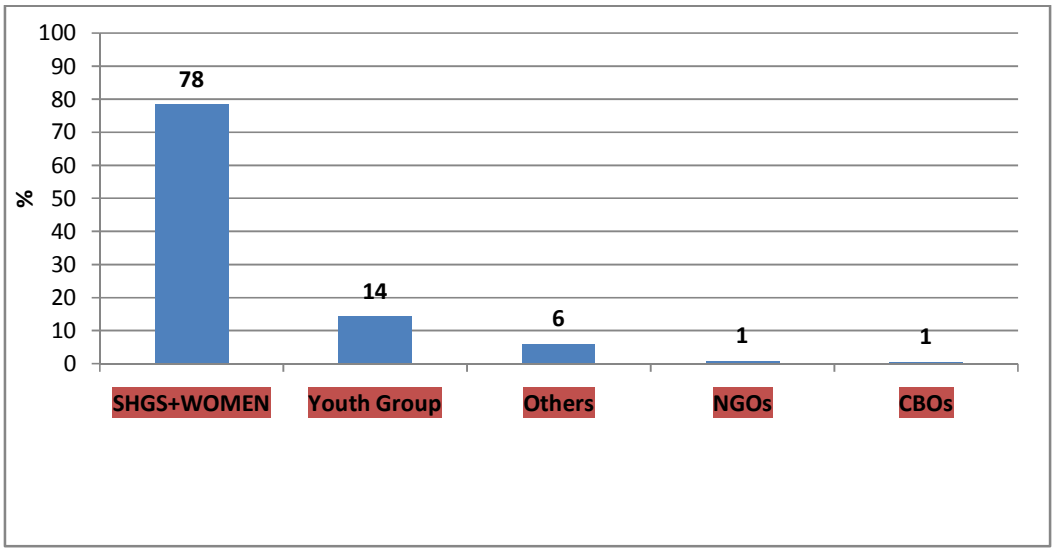
In percentage of sample schools	Type of the management	Owned or rented premises	Who studies			Total
			Co-ed	Girls only	Boys only	
State Total	Government	Owns the premises	82%	4%	2%	88%
		Rented premises	1%			1%
1383		total	83%	4%	2%	90%
	Aided Private	Owns the premises	7%			8%
		Rented premises	1%			1%
		total	9%			9%
	Unaided Private	Owns the premises	1%			1%
		Rented premises	1%			1%
		total	1%			2%
		Grand Total	93%	4%	2%	100%

Among the schools surveyed, less than 90% were government schools, less than 9% were government-aided-private schools, while less than 2% were unaided-private schools. More than 93% were Co-education schools, around 4% were girls' schools and 2% were boys' schools. More than 75% schools had primary sections.

Among the schools surveyed, less than 90% were government schools, less than 9% were government-aided-private schools, while less than 2% were unaided-private schools. More than 93% were Co-education schools, around 4% were girls schools and 2% were boys schools. More than 75% schools had primary sections.

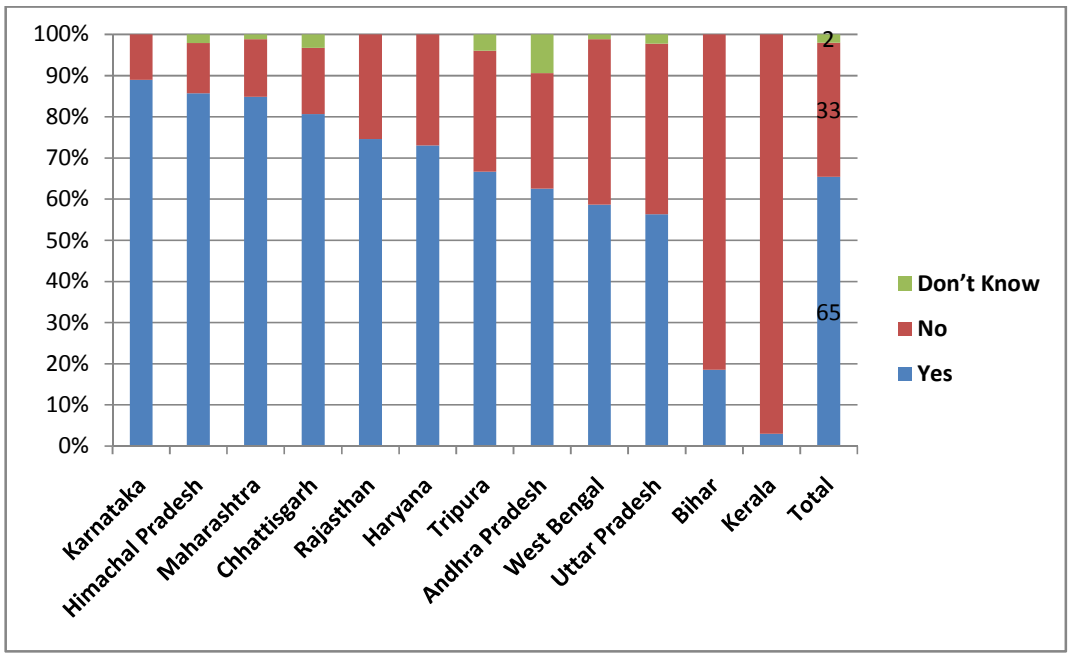
3.4 CBOS/SHGS/ WOMEN GROUP/INDIVIDUAL AND NGO AWARDEES PROFILE

Fig 3.17: Institutional profile (in percentage)



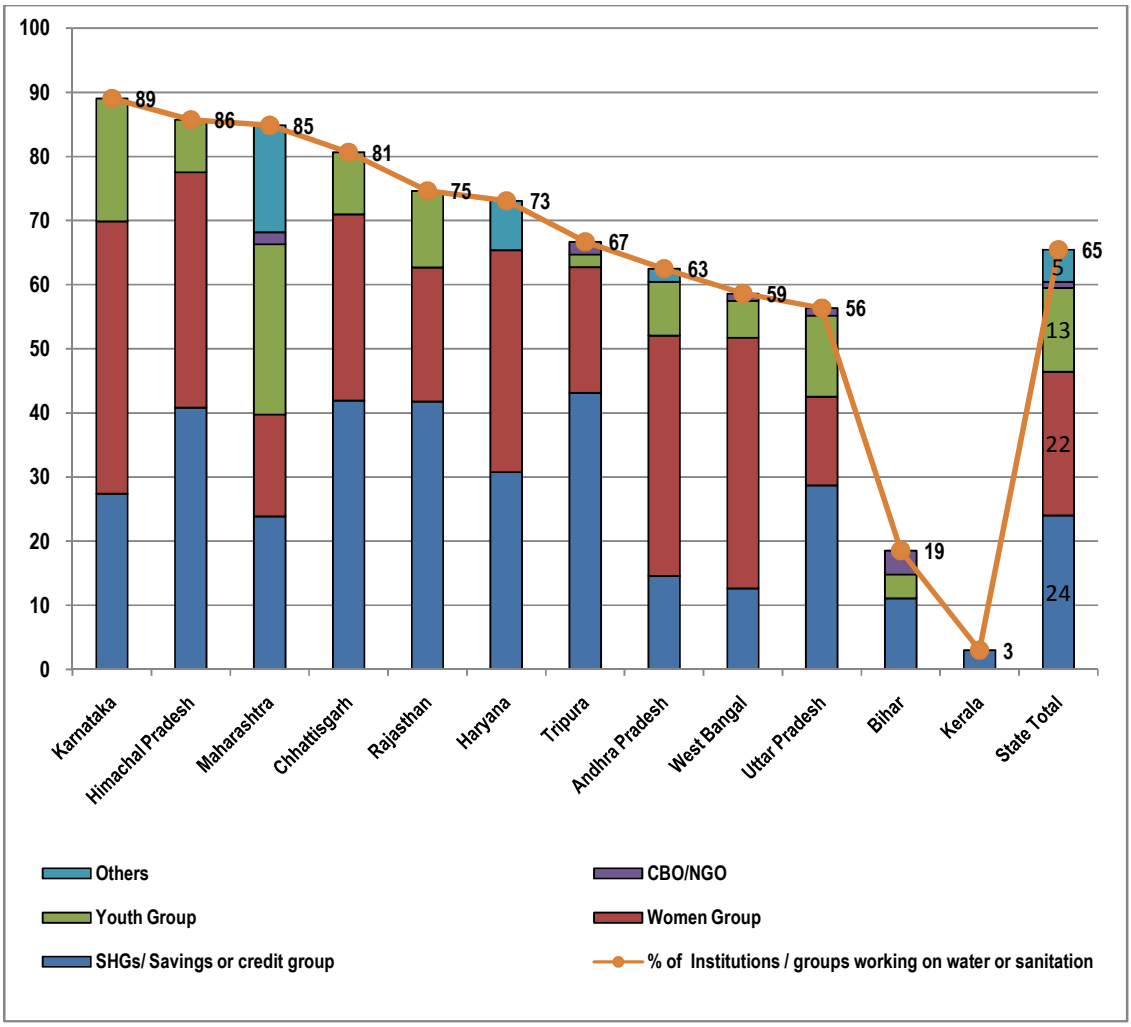
- The graph reflects that against the total 12 state sample, the respondents affiliation was highest 78% to SHGS and women group combined, followed by 14% youth group and 6% affiliated to the others.

Fig 3.18: Institutions working on drinking water and sanitation issues (in percentage)



Among the village level institutions (SHGs, Women's groups/ youth groups, other CBO/ NGOs) around 65% were working on either water or sanitation. Karnataka is leading the group with 89% respondents institutions reported working on water and sanitations issues, followed by Himachal Pradesh (85%), Maharashtra (84%) and Chhattisgarh (80%).

Fig 3.19: Type of Institutions/ groups working on drinking water and sanitation issues (in percentage)



CHAPTER 4

Current Status of NGP Criteria: Impact on Pace & Progress of TSC

CHAPTER 4: CURRENT STATUS OF NGP CRITERIA: IMPACT ON PACE AND PROGRESS OF TSC

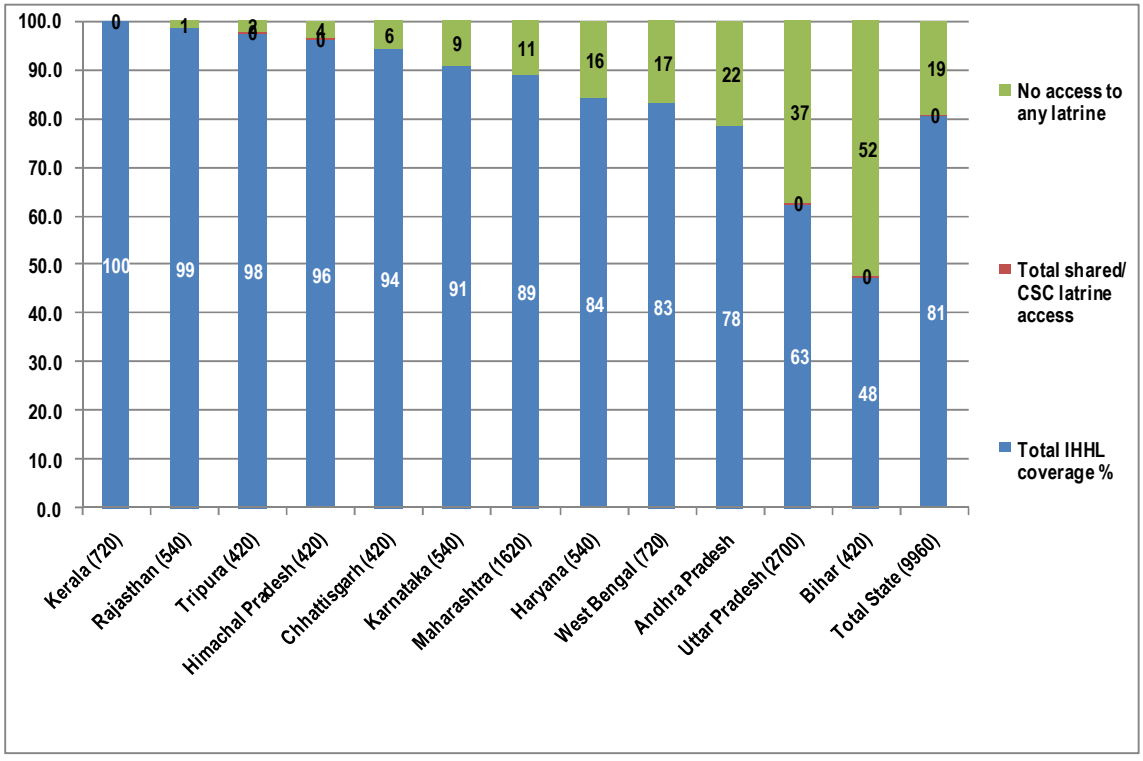
This chapter covers the current status of the criteria, which made the Gram Panchayats eligible for receiving NGP during 2005 to 2008. It aims to present the extent to which these criteria have been sustained as of August 2010. The chapter is divided in two main sections. First section gives major findings on the extent of coverage (access), durability and functionality of the sanitation facilities. The second section presents the usage of these sanitation facilities and the status of solid and liquid waste management arrangements completing the current 'Nirmal' status of the Nirmal Gram Puraskar awarded Gram Panchayats (NGP-GPs).

4.1 STATUS OF COVERAGE, DURABILITY AND FUNCTIONALITY

This section would present the status of coverage i.e. access to sanitation facilities for the households and the institutions at the Gram Panchayat level viz. schools and anganwadis, followed by durability and functionality of the household sanitation facilities.

4.1.1 Status of Household Coverage

Fig 4.1 Households reporting access to sanitation in NGP-GPs (in percentage)



Overall, around 81% of the total sample NGP-GP households reported access to any type of latrine, i.e. either an Individual Household Latrine (IHHL - 80.8%) or a shared latrine/ a specified latrine within a Community Sanitary Complex (CSC – 0.1%). 19.1% of the total sample NGP-GP-households reported lack of access to any latrine.

Among the twelve study states, seven states had around 89 to 100% NGP-GP-households reporting access to any latrine, with the highest household coverage being reported in Kerala. The other six states were Rajasthan, Tripura, Himachal Pradesh, Chhattisgarh, Karnataka and Maharashtra.

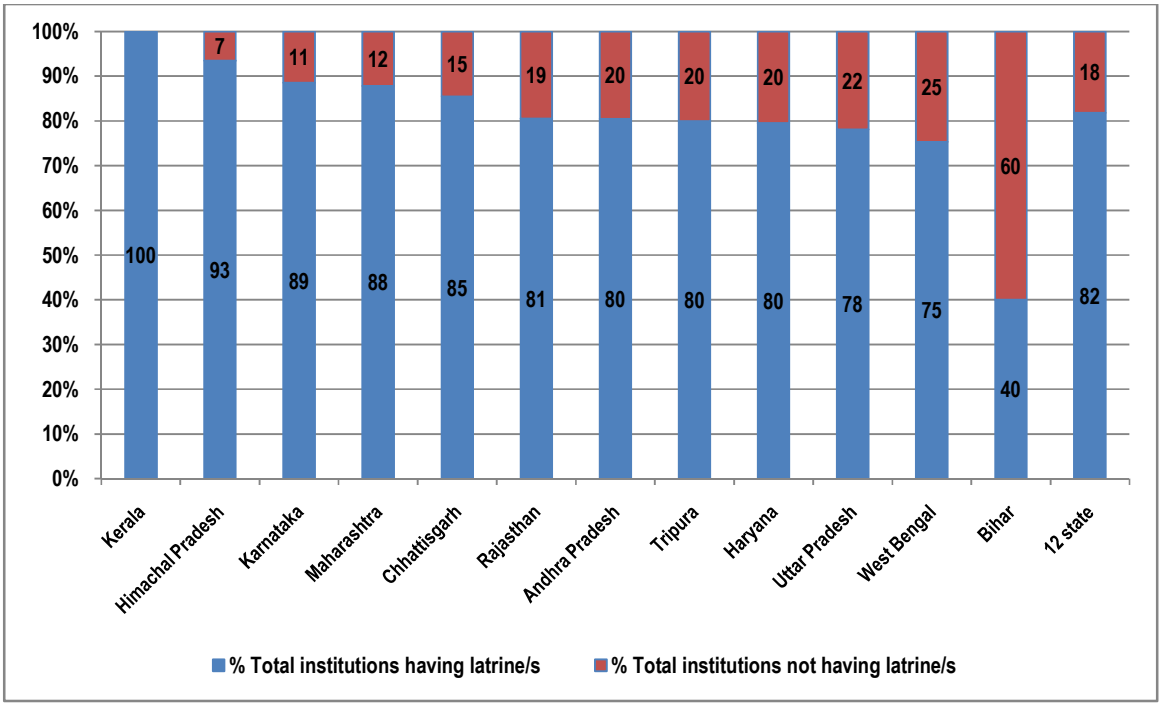
Around 78 to 84% of sample NGP-GP-households in three states viz. Haryana, West Bengal and Andhra Pradesh reported

access. The lowest access was reported by sample NGP-GP-households in two states viz. Uttar Pradesh (around 63%) and Bihar (around 48%).

4.1.2 Status of Institutional Coverage

1. Overall institutional coverage

Fig 4.2: Institutions having at least one latrine (in percentage)



Overall, around 82% of the total sample NGP-GP institutions i.e. schools and anganwadis reported access to at least one latrine.

Among the twelve study states, four states had around 88 to 100% NGP-GP-institutions reporting access to at least one latrine, with the highest institutional coverage being reported in Kerala. The other three states were Himachal Pradesh, Karnataka and Maharashtra.

Around 80 to 86% NGP-GP institutions reported access in five states viz. Chhattisgarh, Rajasthan, Andhra Pradesh, Tripura and Haryana.

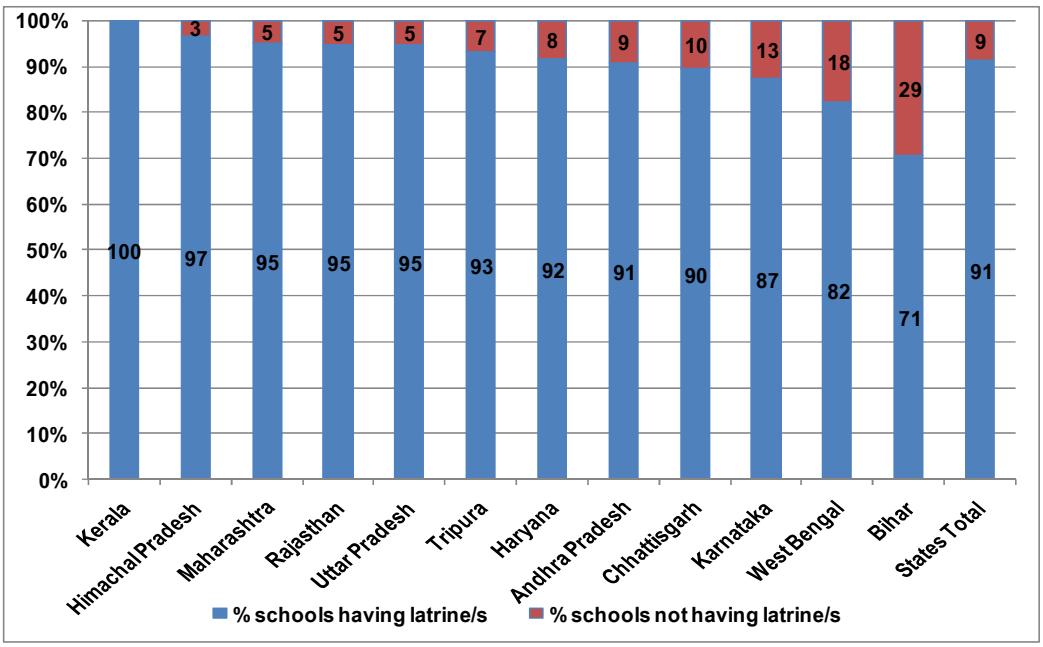
Between 75 to 80% of sample NGP-GP institutions reported access in two states viz. Uttar Pradesh and West Bengal. The lowest access was reported by sample NGP-GP institutions in one state viz. Bihar (around 40%). The chart and tables below show the institutional break up (% of school and anganwadis in total institutions).

Table 4.1: Overall institutional coverage with corresponding school and anganwadi status for the states (in percentage and count)

Total institutions				Schools			Anganwadis		
States (Descending coverage)	Having latrine/s	Not having latrine/s	Total institutions (Count)	Having latrine/s	Not having latrine/s	Total schools (Count)	Having latrine/s	Not having latrine/s	Total anganwadis (Count)
Kerala	100	0	237	100	0	144	100	0	93
Himachal Pradesh	93	7	122	97	3	62	90	10	60
Karnataka	89	12	157	87	13	95	90	10	62
Maharashtra	88	12	385	95	5	184	81	19	201
Chhattisgarh	86	15	124	90	10	77	79	21	47
Rajasthan	81	20	185	95	5	114	69	31	71
Andhra Pradesh	81	20	174	91	9	87	70	30	87
Tripura	80	20	90	93	7	39	66	34	51
Haryana	80	21	88	92	8	44	63	37	44
Uttar Pradesh	78	22	671	95	5	349	58	42	322
West Bengal	75	25	219	82	18	130	65	35	89
Bihar	40	60	115	71	29	58	9	91	57
Totals	**82**	**18**	**2567**	**91**	**9**	**1383**	**71**	**29**	**1184**

2. School coverage

Fig 4.3: School coverage status (in percentage)

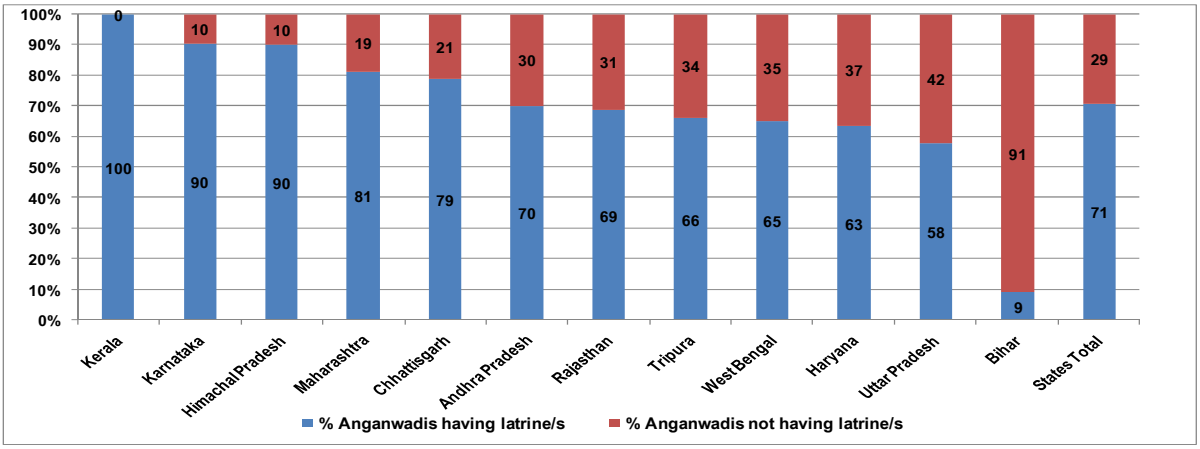


Overall, more than 91% of the total sample NGP-GP schools reported access to at least one latrine. Among the twelve study states, five states had around 95 to 100% NGP-GP schools reporting access to at least one latrine, with the highest school coverage being reported in Kerala. The other four states were Himachal Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

Around 91 to 93% NGP-GP schools reported access in four states viz. Tripura, Haryana, Andhra Pradesh and Chhattisgarh. Between 82 to 87% of sample NGP-GP schools reported access in two states viz. Karnataka and West Bengal. The lowest access was reported by sample NGP-GP schools in one state viz. Bihar (around 71%).

3. Anganwadi coverage

Fig 4.4: Anganwadi coverage status (in percentage)



Overall, more than 71% of the total sample NGP-GP anganwadis reported access to at least one latrine. Among the twelve study states, three states had around 90 to 100% NGP-GP anganwadis reporting access to at least one latrine, with the highest anganwadi coverage being reported in Kerala. The other two states were Karnataka and Himachal Pradesh.

Around 79 to 81% NGP-GP anganwadis reported access in two states viz. Maharashtra and Chhattisgarh. Between 58 to 69% of sample NGP-GP anganwadis reported access in six states viz. Andhra Pradesh, Rajasthan Tripura, West Bengal, Haryana and Uttar Pradesh. An abysmally low (the lowest) access was reported by sample NGP-GP anganwadis in one state viz. Bihar (around 9%). The tables below show the school and anganwadi coverage, separately, in their respective descending order.

Table 4.2: School and anganwadi Coverage (in percentage)

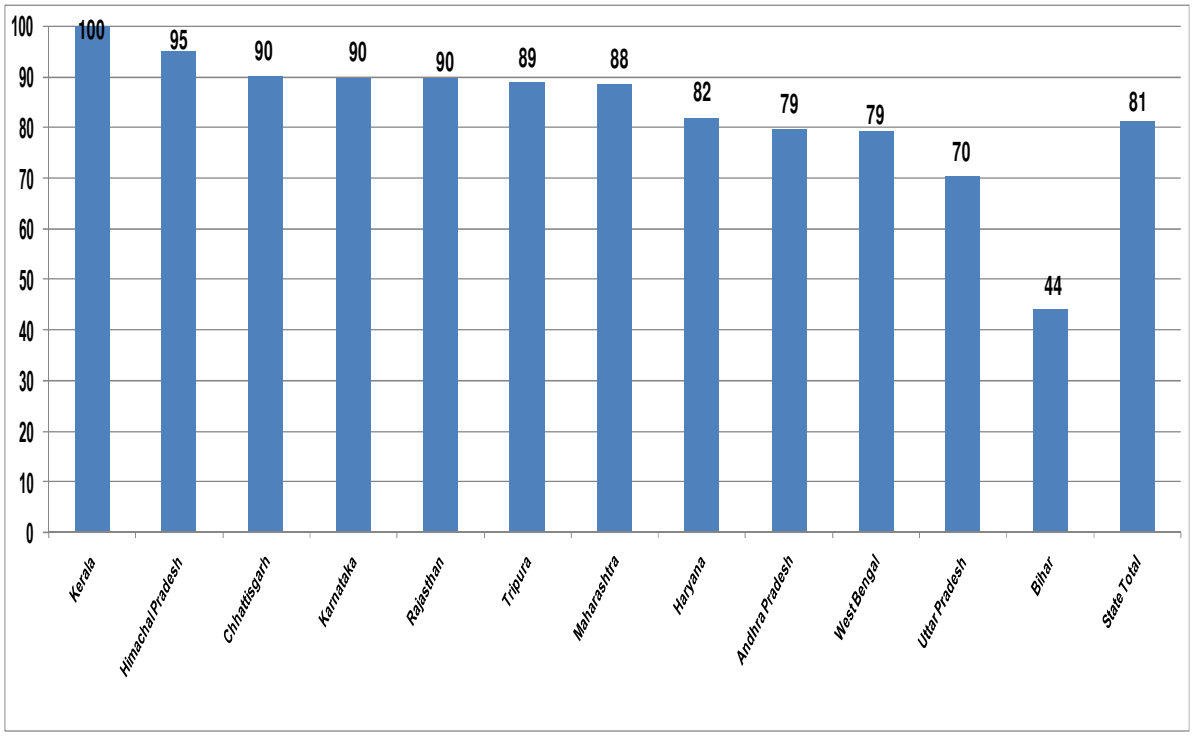
States	Schools			States	Anganwadis			States	Total Institutions		
(Descending coverage)	Having latrine/s	Not having latrine/s	Sample schools (No.)	(Descending coverage)	Having latrine/s	Not having latrine/s	Sample anganwadis (No.)	(Descending coverage)	Having latrine/s	Not having latrine/s	Sample institutions (No.)
Kerala	100	0	144	Kerala	100	0	93	Kerala	100	0	237
Himachal Pradesh	97	3	62	Karnataka	90	10	62	Himachal Pradesh	93	7	122
Maharashtra	95	5	184	Himachal Pradesh	90	10	60	Karnataka	89	11	157
Rajasthan	95	5	114	Maharashtra	81	19	201	Maharashtra	88	12	385
Uttar Pradesh	95	5	349	Chhattisgarh	79	21	47	Chhattisgarh	85	15	124
Tripura	93	7	39	Andhra Pradesh	70	30	87	Rajasthan	81	19	185
Haryana	92	8	44	Rajasthan	69	31	71	Andhra Pradesh	80	20	174
Andhra Pradesh	91	9	87	Tripura	66	34	51	Tripura	80	20	90
Chhattisgarh	90	10	77	West Bengal	65	35	89	Haryana	80	20	88
Karnataka	87	13	95	Haryana	63	37	44	Uttar Pradesh	78	22	671
West Bengal	82	18	130	Uttar Pradesh	58	42	322	West Bengal	75	25	219
Bihar	71	29	58	Bihar	9	91	57	Bihar	40	60	115
Totals	**91**	**9**	**1383**	**Totals**	**71**	**29**	**1184**	**Totals**	**82**	**18**	**2567**

4.1.3 Status of Overall Coverage

Table 4.3 Status of coverage: household and institutional (in percentage and count)

States	Households			States	Institutions		
(Descending coverage)	Total coverage households	No coverage households	Sample households (No.)	(Descending coverage)	Having latrine/s	Not having latrine/s	Sample institutions (No.)
Kerala	100	0	720	Kerala	100	0	237
Rajasthan	99	2	540	Himachal Pradesh	93	7	122
Tripura	98	2	420	Karnataka	89	12	157
Himachal Pradesh	96	4	420	Maharashtra	88	12	385
Chhattisgarh	94	6	420	Chhattisgarh	86	15	124
Karnataka	91	9	540	Rajasthan	81	20	185
Maharashtra	89	11	540	Andhra Pradesh	81	20	174
Haryana	84	16	720	Tripura	80	20	90
West Bengal	83	17	1620	Haryana	80	21	88
Andhra Pradesh	78	22	900	Uttar Pradesh	78	22	671
Uttar Pradesh	63	37	420	West Bengal	75	25	219
Bihar	48	52	2700	Bihar	40	60	115
Total	**81**	**19**	**9960**	**Total**	**82**	**18**	**2567**

Fig 4.5: Average coverage (households and institutions combined)



Overall, when the average of household coverage and institutional (school-anganwadi) coverage is taken together, more than 81% of the total 12 state sample average NGP-GP households and institutions reported access to any latrine.

Among the twelve study states, seven states had around 88 to 100% NGP-GP households and institutions (combined average) reporting access to any latrine, with the highest average coverage being reported in Kerala. The other six states were Himachal Pradesh, Chhattisgarh, Karnataka, Rajasthan, Tripura and Maharashtra.

Around 71 to 81% NGP-GP households and institutions (combined average) reported access to any latrine in four states viz. Haryana, Andhra Pradesh, West Bengal and Uttar Pradesh. The lowest access was reported in Bihar (around 44%).

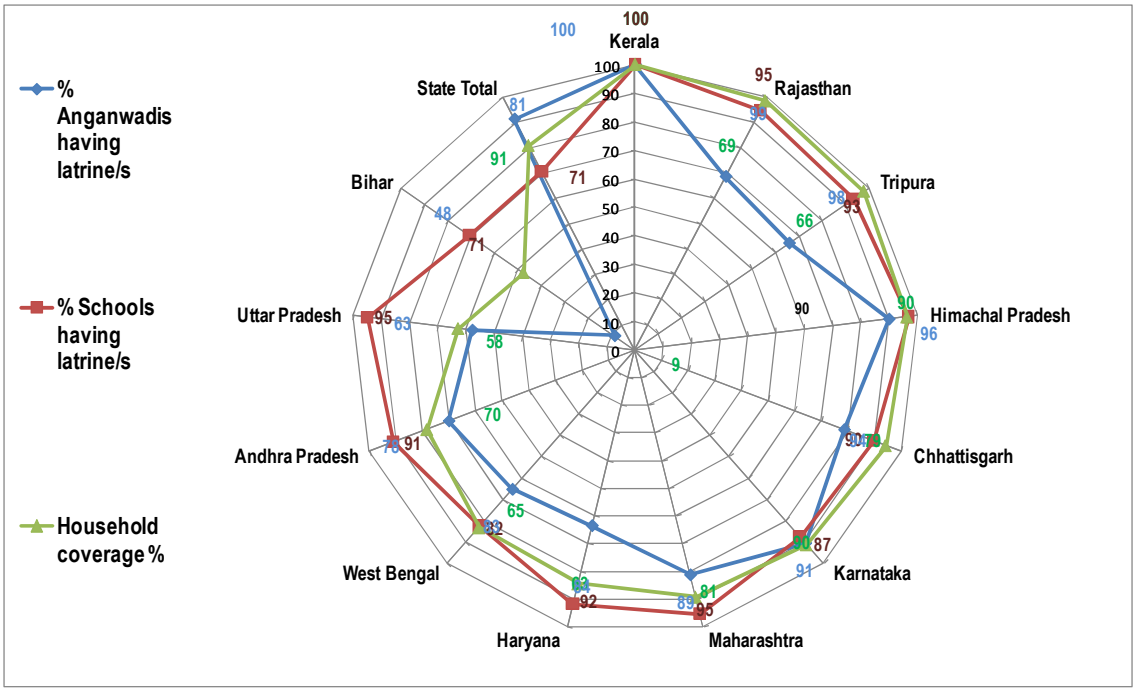
The table below shows the household and institutional coverage arranged in descending order of the combined coverage.

Table 4.4: Average combined coverage in descending order (in percentage)

States	Average coverage (Average of household and institutional coverage)	Household coverage	No coverage households	Sample household (No.)	Institutions having latrine/s	Not having latrine/s	Sample institutions (No.)
Kerala	100	100	0	720	100	0	237
Himachal Pradesh	95	96	4	420	93	7	122
Chhattisgarh	90	94	6	420	86	15	124
Karnataka	90	91	9	540	89	12	157
Rajasthan	90	99	2	540	81	20	185
Tripura	89	98	2	420	80	20	90
Maharashtra	88	89	11	1620	88	12	385
Haryana	82	84	16	540	80	21	88
Andhra Pradesh	80	78	22	900	81	20	174
West Bengal	79	83	17	720	75	25	219
Uttar Pradesh	71	63	37	2700	78	22	671
Bihar	44	48	52	420	40	60	115
Totals	**81**	**81**	**19**	**9960**	**82**	**18**	**2567**

The figure below shows the percentage coverage of households, schools and anganwadis, where the areas covered by the three lines represent the overall total picture of coverage on the three aspects.

Fig 4.6: Overall status of coverage



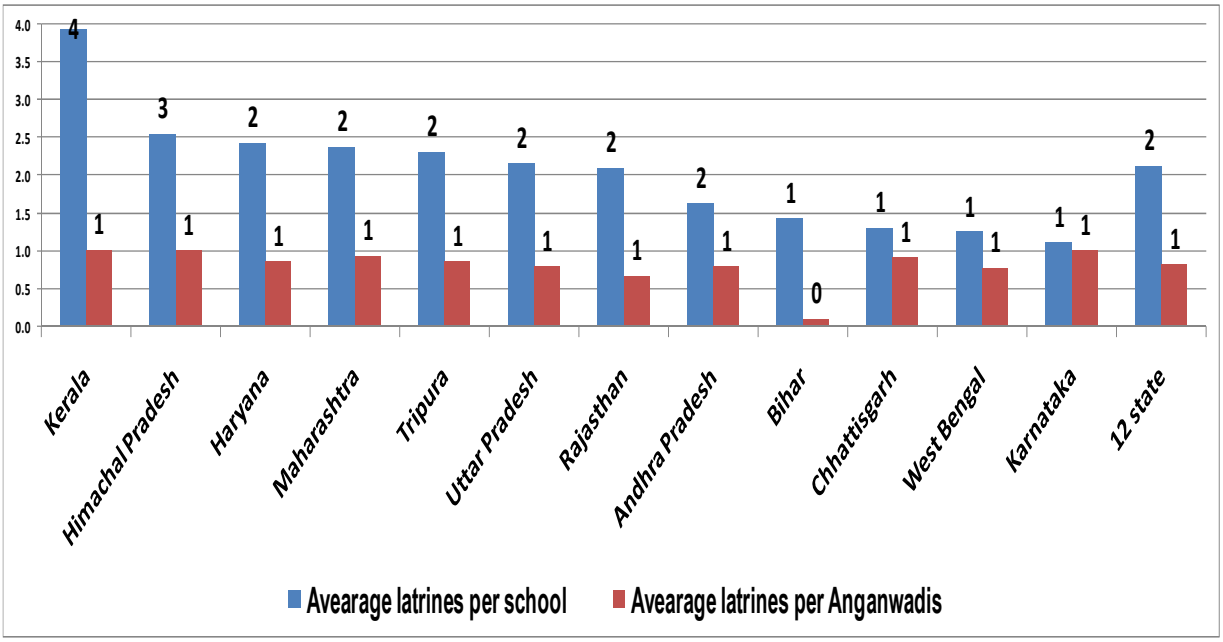
4.1.4 Adequacy of Latrines and Urinals in Schools

1. Average number of latrine per school

Given below is the picture that emerges when average latrine per school and average latrine per anganwadi is calculated for the sample schools/ anganwadis. This is calculated by dividing the number of latrines observed in the schools/ anganwadis by the number of sample schools/ anganwadis respectively.

The graph below shows the states when arranged according to average number of latrine in sample schools.

Fig 4.7: Average number of latrine per school and average number of latrine per anganwadi



The table below also shows the combined institutional average, i.e. average number of latrine per institution (including both school and anganwadi).

Table 4.5: Average latrine per school/ anganwadi and institutions (in percentage and count)

States	Total latrines in schools	Total schools	Average latrines per school	Total latrines in anganwadi	Total angan wadis	Average latrines per Anganwadi	Total institutional latrines	Total institutions	Average latrines per institution
Kerala	568	144	4	94	93	1	662	237	3
Himachal Pradesh	158	62	3	60	60	1	218	122	2
Haryana	107	44	2	38	44	1	145	88	2
Maharashtra	437	184	2	188	201	1	625	385	2
Tripura	90	39	2	44	51	1	134	90	2
Uttar Pradesh	752	349	2	255	322	1	1007	671	2
Rajasthan	239	114	2	48	71	1	287	185	2
Andhra Pradesh	141	87	2	69	87	1	210	174	1
Bihar	83	58	1	6	57	0	89	115	1
Chhattisgarh	101	77	1	43	47	1	144	124	1
West Bengal	162	130	1	69	89	1	231	219	1
Karnataka	106	95	1	62	62	1	168	157	1
Total	**2944**	**1383**	**2**	**976**	**1184**	**1**	**3920**	**2567**	**2**

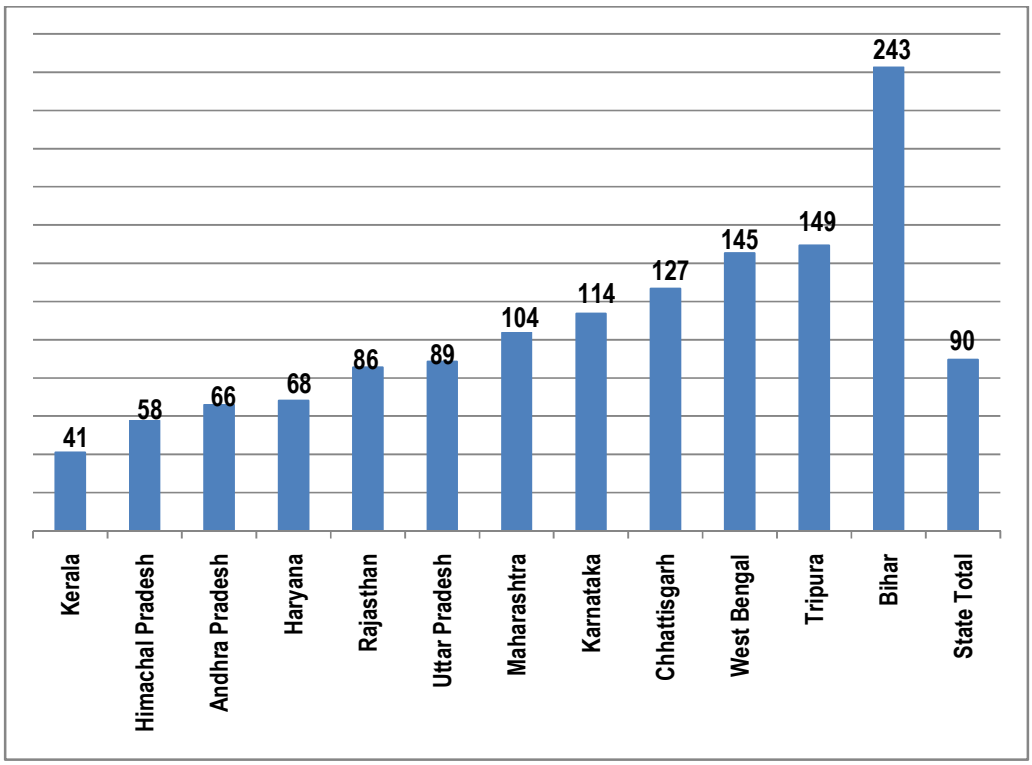
2. Number of students per latrine (Gross latrines: student ratio)

Table 4.6: Gross Latrine to student ratio (in count)

States	No. of students per latrine in schools (among those who have latrine and student number)
Bihar	243
Tripura	149
West Bengal	145
Chhattisgarh	127
Karnataka	114
Maharashtra	104
Uttar Pradesh	89
Rajasthan	86
Haryana	68
Andhra Pradesh	66
Himachal Pradesh	58
Kerala	41
Total	**90**

Given below no. of students per latrine in schools (among those having latrine and enrolment number gathered).

Fig 4.8: Gross latrine to student ratio (in count)



Following picture emerges when the number of students per latrine in sample schools is arrived at, on a gross basis; i.e. by simply dividing the number of students enrolled in state sample schools (having latrine and where enrolment data could be gathered despite field contingencies) by the total number of latrines observed in those schools. This gross ratio does not take into account that, in practice, who is the actual user (students or teachers), allowed access to those latrines.

Overall, the gross Latrine to student ratio reaches just less than 1:90 (where the latrine could be meant for both children and teachers).

Among the twelve study states, two states had gross Latrine to student ratio between 1:41 to 1:58. The lowest ratio is found in Kerala, with the other state being Himachal Pradesh.

Gross Latrine to student ratio ranging from 1:66 to 1:68 was found in two more states have, viz. Andhra Pradesh and Haryana.

Gross Latrine to student ratio between 1:86 and 1:89 was found in two states i.e. Rajasthan and Uttar Pradesh.

Gross Latrine to student ratio ranging from 1:104 to 1:114 was found in two states viz. Maharashtra and Karnataka.

Gross Latrine to student ratio ranging from 1:127 and 1:149 was found in three states i.e. Chhattisgarh, West Bengal and Tripura.

The highest gross Latrine to student ratio of 1: 243 was found in Bihar.

This is in stark contrast with the NGP guidelines - applicable for the study-sample NGP-GPs (2005-08), which had the following requirement as one of its NGP-eligibility criteria.

"Toilets and urinals should be available separately for boys and girls in adequate proportion, one urinal for every 20 to 40 and one lavatory for every 80- 120 boys/(girls) enrolled in the school (source: 'NGP Guidelines' prior to the NGP Guidelines 2010" girls added)

3. Users of school latrines: Separate latrine for boys and girls, separate latrine for children and teachers

The figure below presents the status of who, in practice, is the actual user (students or teachers) allowed access to the school latrines. The category of teachers with girls (mainly the female teachers) or boys (mainly with the male teachers) has been presented separately as they are later combined into a single category of schools that allow access to at least one latrine to students, exclusively (as for girls only/ boys only/ students only) or as combined with teachers (but never the less allowed access).

Fig 4.9: Users of school latrines (in percentage of total latrines)

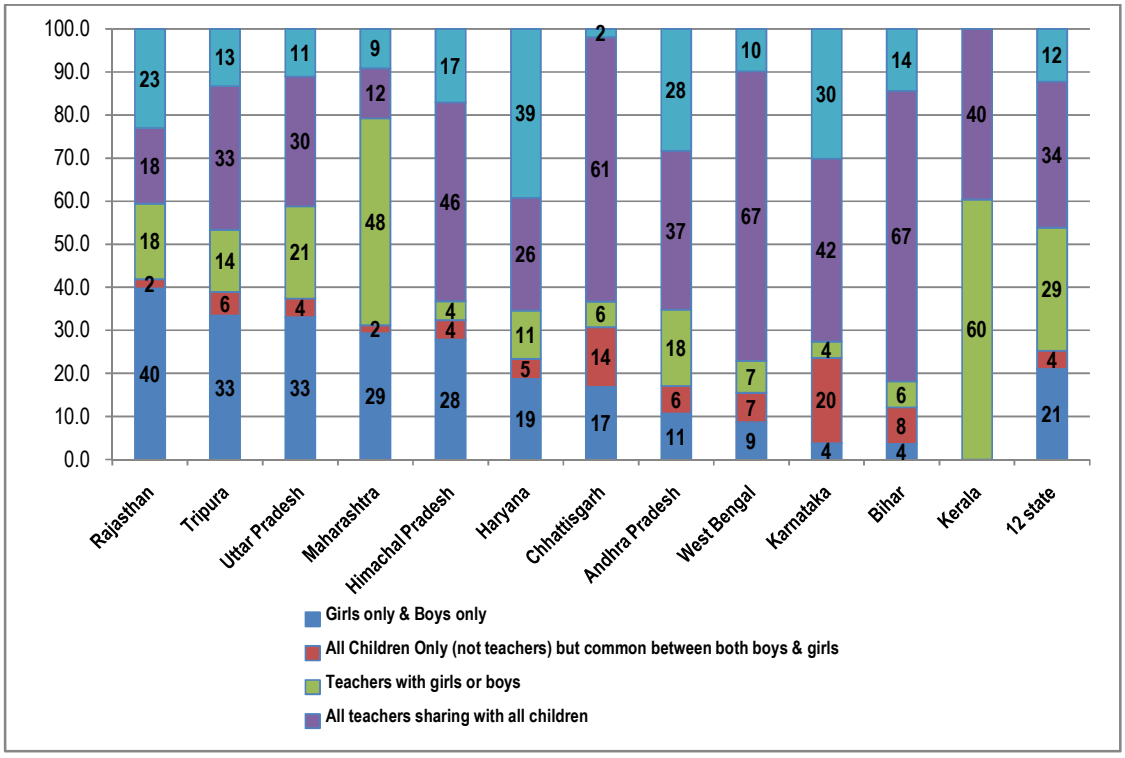


Fig 4.10: Users of school latrine (in percentage of sample schools)

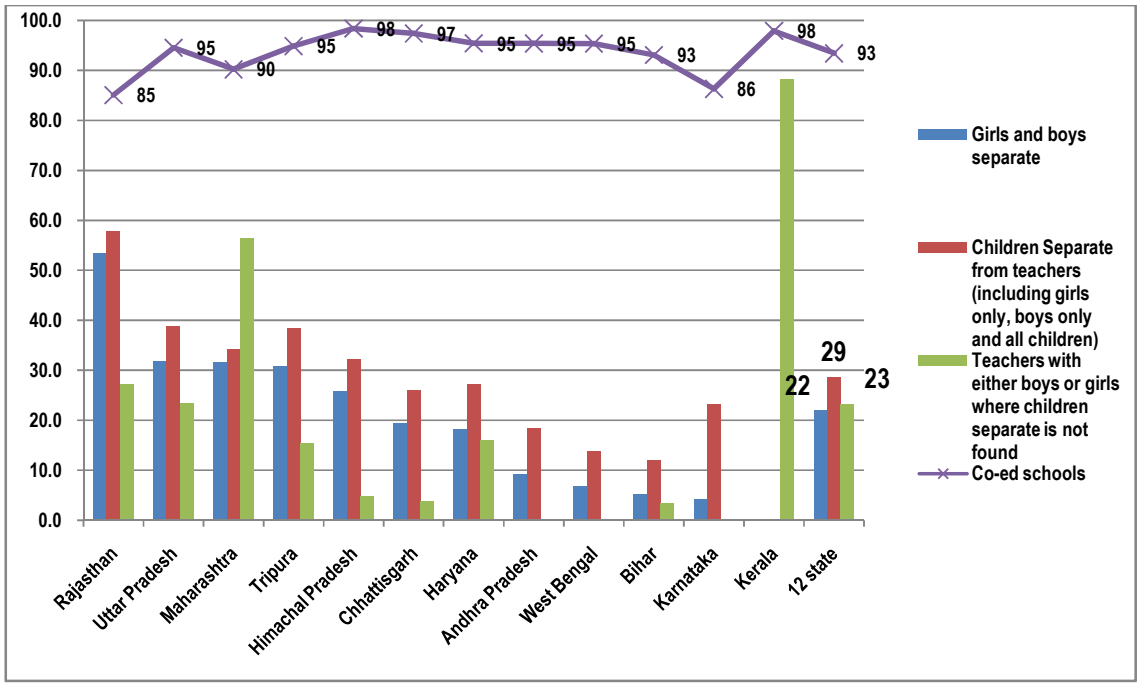


Table 4.7: Users of school latrine: States arranged in descending order of separate latrine for girls and boys (in percentage and count)

States	Girls and boys separate	Children Separate from teachers (including girls only, boys only and all children)	Teachers with either boys or girls where children separate is not found	Total latrines (Count)	School Having Latrine (Count)	Total Sample Schools (Count)
Rajasthan	54	58	27	239	108	114
Uttar Pradesh	32	39	24	752	320	349
Maharashtra	32	34	57	437	175	184
Tripura	31	39	15	90	37	39
Himachal Pradesh	26	32	5	158	60	62
Chhattisgarh	20	26	4	101	69	77
Haryana	18	27	16	107	41	44
Andhra Pradesh	9	18	0	141	79	87
West Bengal	7	14	0	162	107	130
Bihar	5	12	3	83	41	58
Karnataka	4	23	0	106	83	95
Kerala	0	0	88	568	144	144
Total	**22**	**29**	**23**	**2944**	**1264**	**1383**

Among the twelve study states, none of the states reaches the latest NGP eligibility criteria of 'Adequate toilets and urinals should be available **separately for boys and girls**' (source NGP Guidelines 2010, emphasis added).

Overall, around 22% of total sample schools had latrines that were reportedly used (as reported by teachers and children), as separate latrine for girls or boys. If the schools having latrines that are used reportedly by all children together (but not by teachers) are included in it, then less than 29% of total sample schools are found to have latrines that were reportedly used exclusively by students (separate from teachers, but including latrines used by girls only or boys only or all children).

Another 23% schools can be added to that number, if schools that have latrines shared (for reported use) by teachers with either boys or girls, when only those schools are considered for addition where a latrine meant exclusively for students (girls/ boys or all) was not reported. Thus the percentage of total sample schools that had any latrine being reportedly used by any student (exclusive or shared with teachers) reaches 51.7%. This number needs to be seen in the light of how many co-education schools were there in the sample. In the figure above, the co-education schools, represented by the line, amount to 93% overall.

The table below shows the states arranged in descending order of percentage of sample schools having any latrine reportedly used by students (shared with teachers/ exclusive for students). The percentage of total latrines (21%) and the percentage of total sample schools (22.1%) are almost similar if compared for reported use separately by either girls or boys.

Table 4.8: Users of school latrine: States arranged in descending order any latrine reportedly used by students (shared with teachers/ exclusive for students) - (in percentage and count)

States	Sample schools					School latrines			
	Girls and boys separate	Student access shared/ exclusive	Schools with any latrine	Schools without latrine	Total sample schools (Count)	Girls only and Boys only	Student access shared/ exclusive	Total latrines (Count)	School having latrine (Count)
Maharashtra	32	91	95	5	184	29	91	437	37
Kerala	0	88	100	0	144	0	100	568	144
Rajasthan	54	85	95	5	114	40	77	239	108
Uttar Pradesh	32	63	95	5	349	33	89	752	175
Tripura	31	54	93	7	39	33	87	90	320
Haryana	18	43	92	8	44	19	61	107	69
Himachal Pradesh	26	37	97	3	62	28	83	158	60
Chhattisgarh	20	30	90	10	77	17	98	101	41
Karnataka	4	23	87	13	95	4	70	106	41
Andhra Pradesh	9	18	91	9	87	11	72	141	79
Bihar	5	16	71	29	58	4	86	83	83
West Bengal	7	14	82	18	130	9	90	162	107
State Total	**22**	**52**	**91**	**9**	**1383**	**21**	**88**	**2944**	**1264**

Fig 4.11: Gender wise schools profile (in percentage)

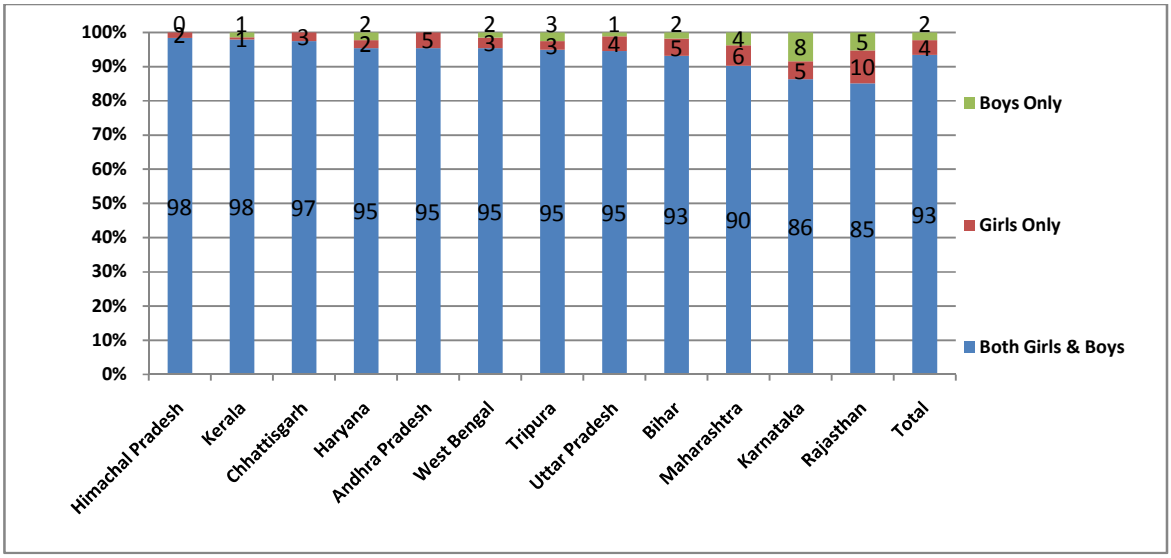
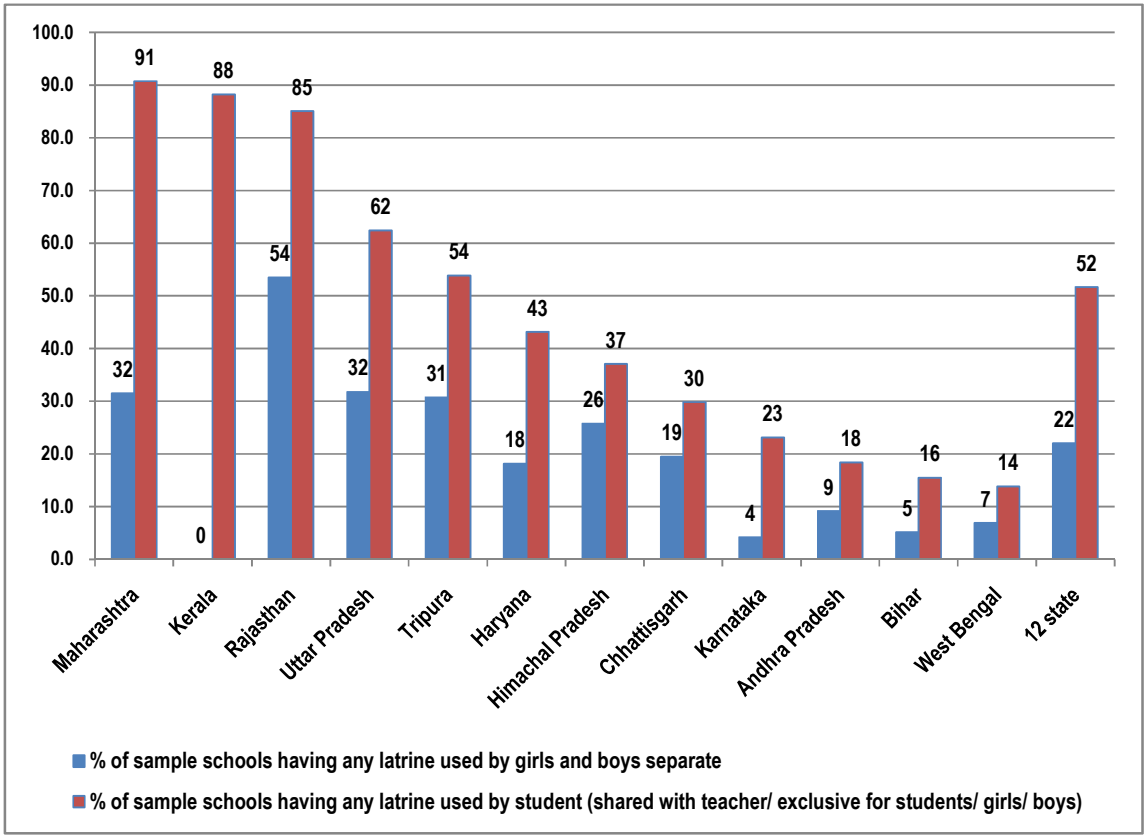
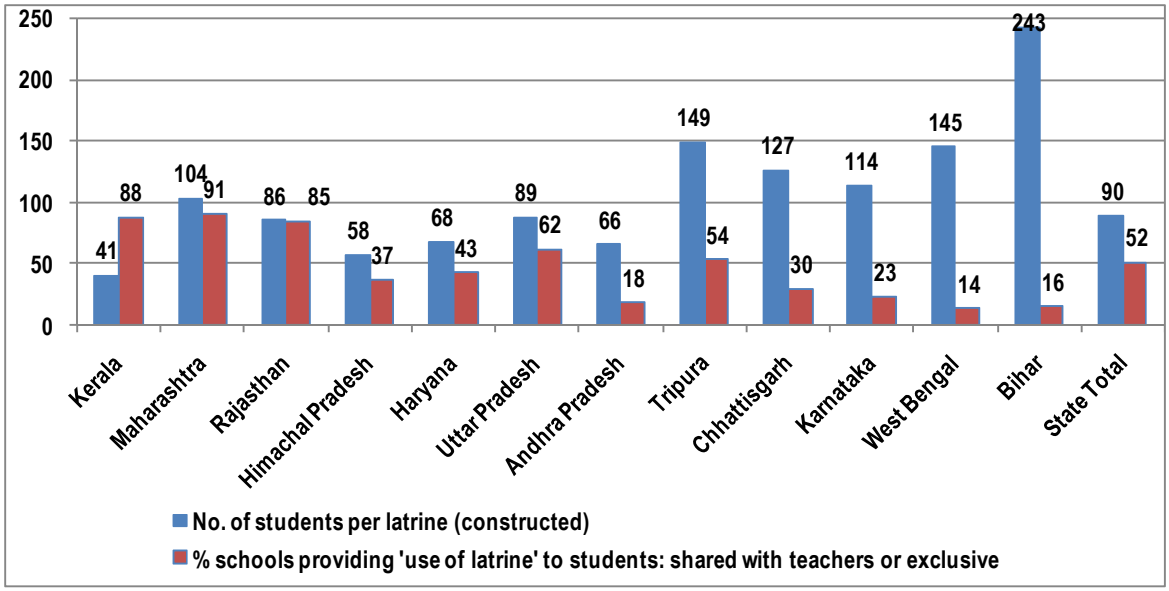


Fig 4.12: Schools having any latrine (shared/ exclusive) reportedly used by students and by girl/boys separately (in percentage)



4. Overall coverage and adequacy of school latrines

Fig 4.13: States arranged in combination of gross latrine to student ratio and percentage schools providing 'reported use of at least one latrine' to students with or without sharing it with teachers (in Number of students enrolled per latrine and in percentage of school respectively)

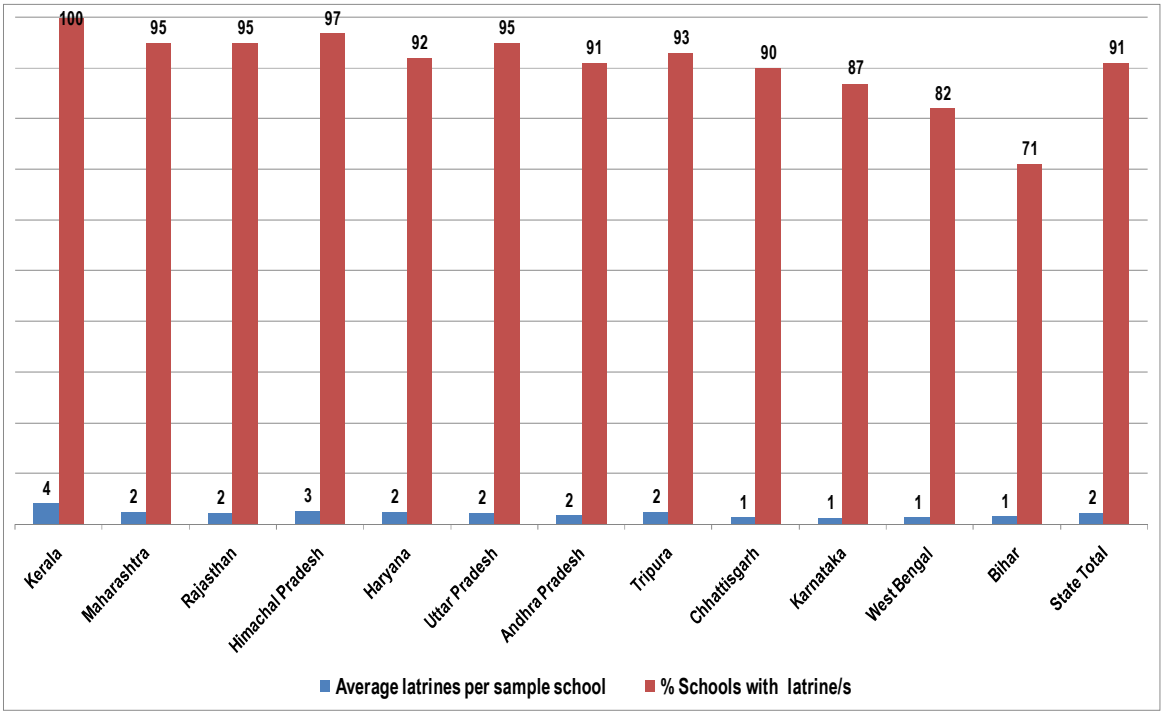


Regional balance (distribution) of school latrine construction seems to be better indicated by **% schools providing 'reported use of at least one latrine' to students (with or without sharing it with teachers).** And the numbers of latrines that need

to be constructed for a student population seem to be better indicated **Gross Latrine to student ratio.** The figure above indicates the picture when the **states are arranged in combination of these two important indicators**.

The table below shows the other two indicators when the states are arranged in the order mentioned above.

Fig 4.14: Average latrine per school and percentage schools with latrine: with the states arranged in combination of latrine to student ratio and percentage schools providing 'reported use of at least one latrine' to students



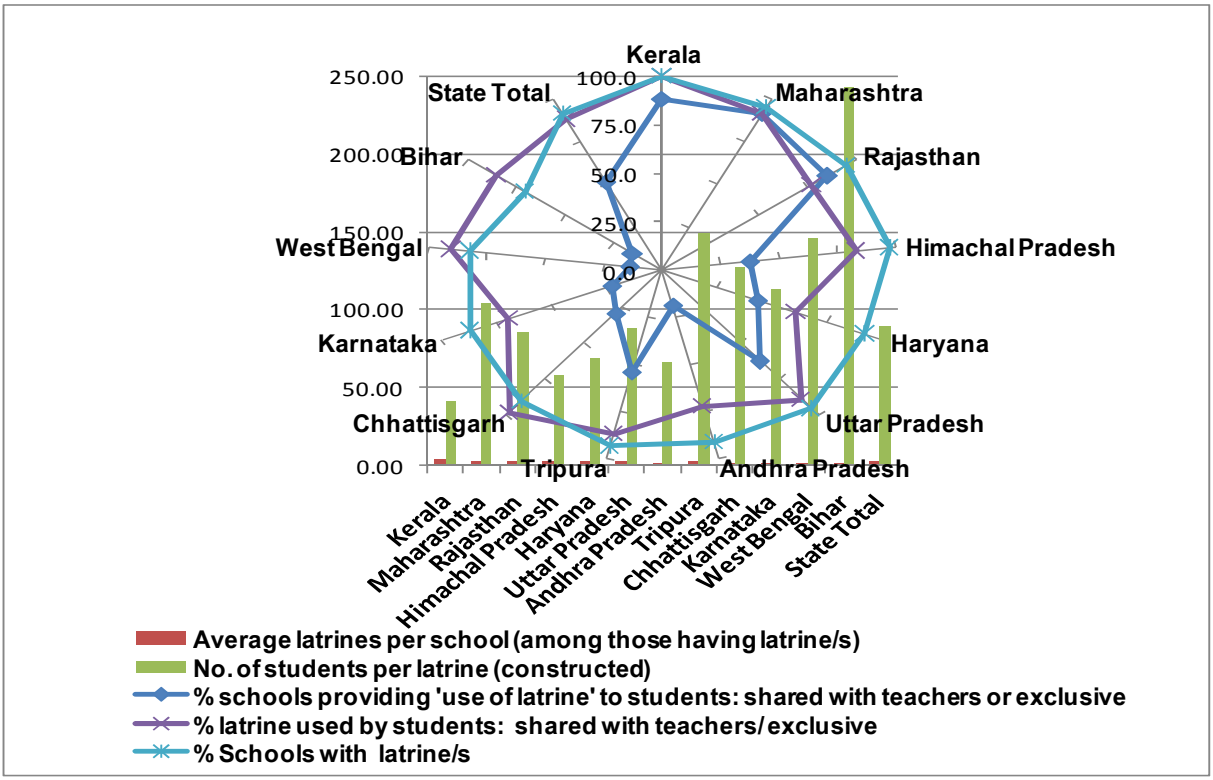
Among the twelve study states:

- Three states have a combination of better regional balance with around 85 to 91% schools providing 'reported use of at least one latrine' to students with or without sharing it with teachers; and both better-and-worse-than-average gross teacher/separate Latrine to student ratio ranging from 1:41 to 1:104.
- The three states are Kerala (second best regional balance and lowest Latrine to student ratio), Maharashtra (best regional balance but higher-than-average Latrine to student ratio) and Rajasthan (high regional balance and around-average Latrine to student ratio. Their average latrines constructed per school ranges from 2.1 to 3.9 and % schools having latrines range from 95 to 100%.
- Two states have a below-average regional balance with only around 37 to 43% schools providing 'reported use of at least one latrine' to students: with or without sharing it with teachers; but a better-than-average gross teacher/ separate Latrine to student ratio ranging from 1:58 to 1:68.
- The two states are Himachal Pradesh and Haryana. Their average latrines constructed per school range from 2.5 to 2.4 and % schools having latrines ranges from 97 to 92%.
- Two states fare better-than-average on only one of the two criteria. The two states are Uttar Pradesh and Andhra Pradesh. Uttar Pradesh, which has above-average regional balance with 62% schools providing 'reported use of at least one latrine' to students: with or without sharing it with teachers; but also has an around-average gross teacher/separate Latrine to student ratio of 1:89. Andhra Pradesh, which has poor regional balance with only 18% schools providing 'reported use of at least one latrine' to students: with or without sharing it with teachers; but also has an better-than-average gross teacher/separate Latrine to student ratio of 1:66. Their average latrines constructed per total sample school range from 1.6 to 2.2 and % schools having latrines ranges from 91to 95%.

- Three states have a combination of around-or-poorer-than-average regional balance with around 54 to 23% schools providing 'reported use of at least one latrine' to students: with or without sharing it with teachers; and worse-than-average gross teacher/separate Latrine to student ratio ranging from 1:113 to 1:149.
- The three states are Tripura (around-average regional balance but much worse Latrine to student ratio), Chhattisgarh (both poor regional balance and poor Latrine to student ratio) and Karnataka (poorer regional balance and poor average Latrine to student ratio. Their average latrines constructed per total sample school ranges from 2.1 to 2.3 and % schools having latrines range from 87 to 93 %.
- Two states fare the lowest on both the criteria. The two states are West Bengal and Bihar. West Bengal has the lowest regional balance with only 14% schools providing 'reported use of at least one latrine' to students: with or without sharing it with teachers; and much worse average gross teacher/separate Latrine to student ratio of 1:145. Bihar has the second-lowest/ much worse regional balance with only 16% schools providing 'reported use of at least one latrine' to students: with or without sharing it with teachers; and the worst/appalling gross teacher/separate Latrine to student ratio of 1:243. Their average latrines constructed per total sample school range from 1.2 to 1.4 and % schools having latrines ranges from 71 to 82%

The figures given below present the overall adequacy scenario in a comprehensive manner. The state total has also been included in the figure for ready reference and comparison of each state with the average.

Fig 4.15: Overall coverage and adequacy of school latrines (in percentage)



This leaves a long road that remains to be covered before the eligibility criteria of NGP either by the latest (2010) NGP guidelines (stating 'Adequate toilets and urinals should be available **separately for boys and girls'),** or by the earlier NGP Guidelines, which stated, "Toilets and urinals should be available separately for boys and girls in adequate proportion, one urinal for every 20 to 40 and one lavatory for every 80- 120 boys/ (girls) enrolled in the school". [(girls) added].

Overall,

- Gross Latrine to student ratio reaches just less than 1:90 i.e. **only 1 latrine is constructed per 90 students on**

an average in any school. (where the latrine could be meant for both children and teachers) and

- Regional balance/ distribution of constructed latrine combined with use emerges as: effectively, **only a little more than half the schools (less than 52%) report at least one constructed latrine reportedly used by students (exclusive or shared with teachers).**

Further,

- Around 2.1 latrines are constructed on an average in the total sample schools and
- Around 91% schools have at least one latrine.
- Around 9% schools do not have latrine (constructed at all) and

What could be examined further is whether latrine construction and use are concentrated in a smaller percentage of overall schools (that take the average higher for all schools).

5. Perception of adequacy

The figures below present the picture that emerges when the reported queue length for a latrine (as reported by students), subjective assessment by students of adequacy of school latrines and frequency of permission (disciplining) by teachers to use latrine during class time was elicited.

Fig 4.16: Queue length reported by children for latrine (in percentage)

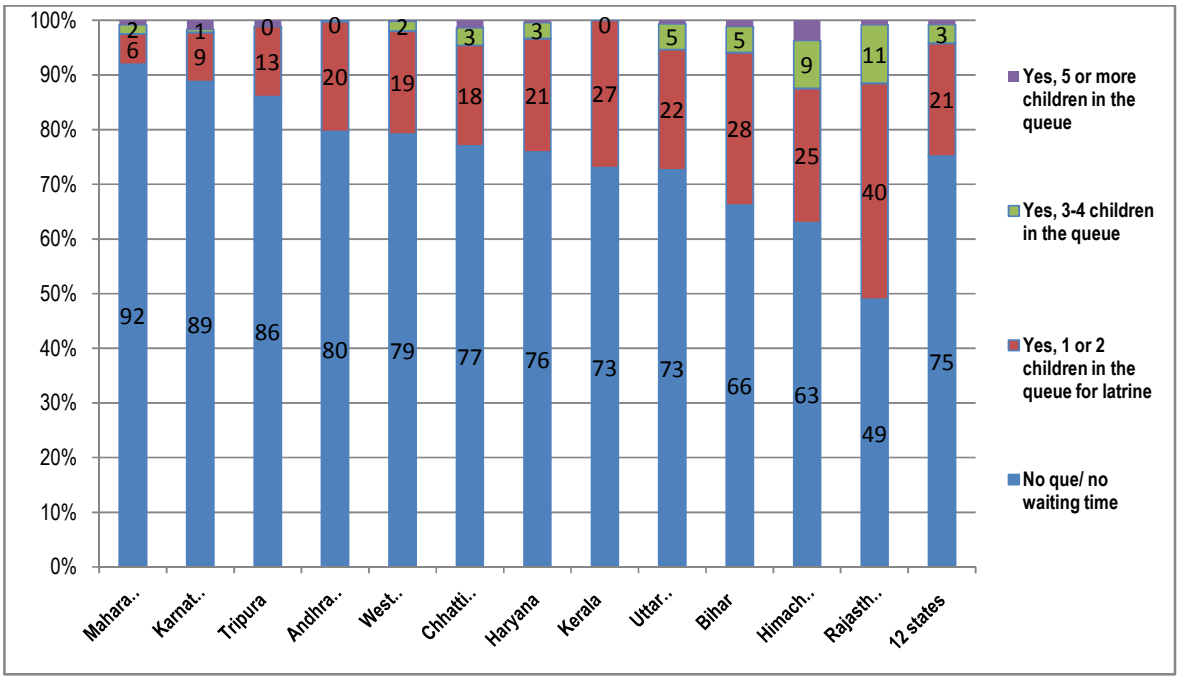
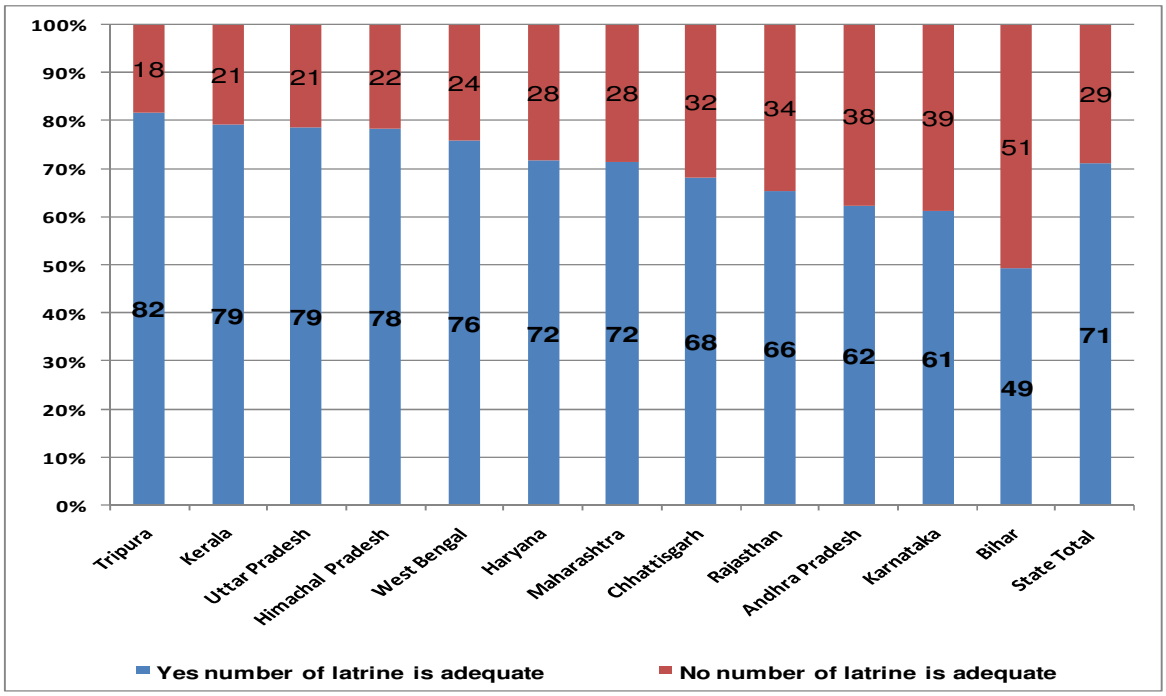


Fig 4.17: Students' perception of adequacy of school latrines (in percentage)



Overall, while around 75% students report no queue for latrine and around 71% students feel that the latrines are adequate, the figures need to seen in the context. What needs further examination is how many of them prefer to go home to use a latrine, if their home is nearby, how many avoid using a latrine or standing in queue for a latrine, how many actually use it, how many latrines are actually functional, have they 'adjusted' their 'subjective assessment' of adequacy to 'feel better' about the whatever situation they have live with anyway? Or to 'not offend the teachers/ authorities' and be in their 'good books' by adjusting their subjective assessment toward a more 'positive picture'?

The same questions apply to the response from girls and boys presented below.

Fig 4.18: Queue length reported by girls for latrine (in percentage)

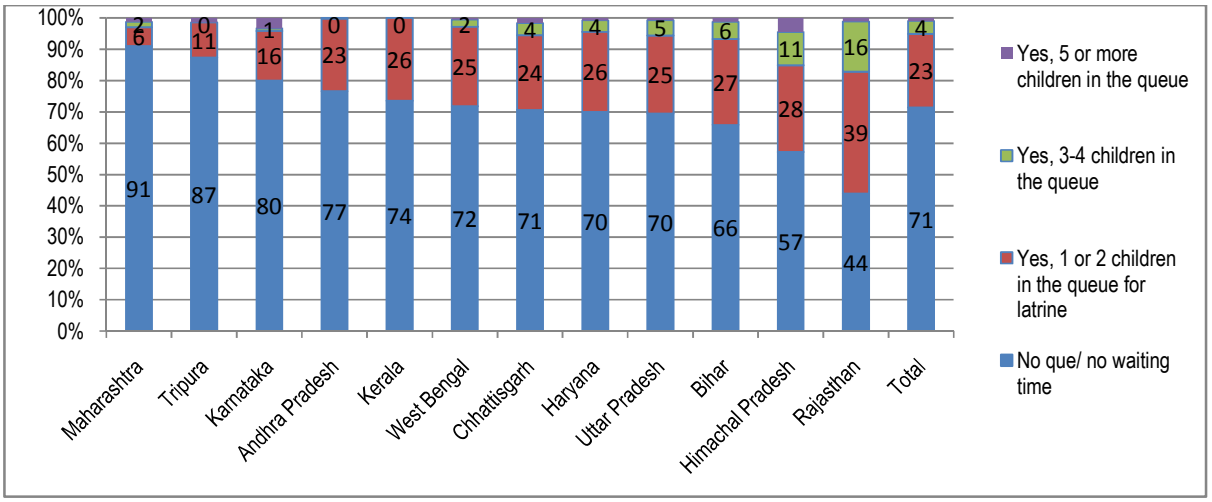


Fig 4.19: Girls' perception of adequacy of latrine (in percentage)

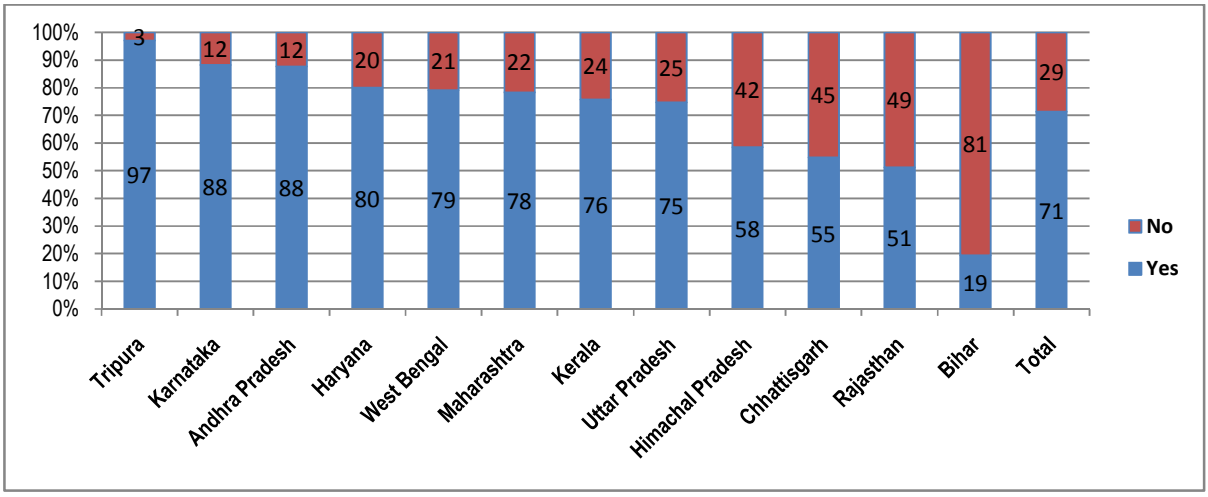


Fig 4.20: Queue length reported by boys for latrine (in percentage)

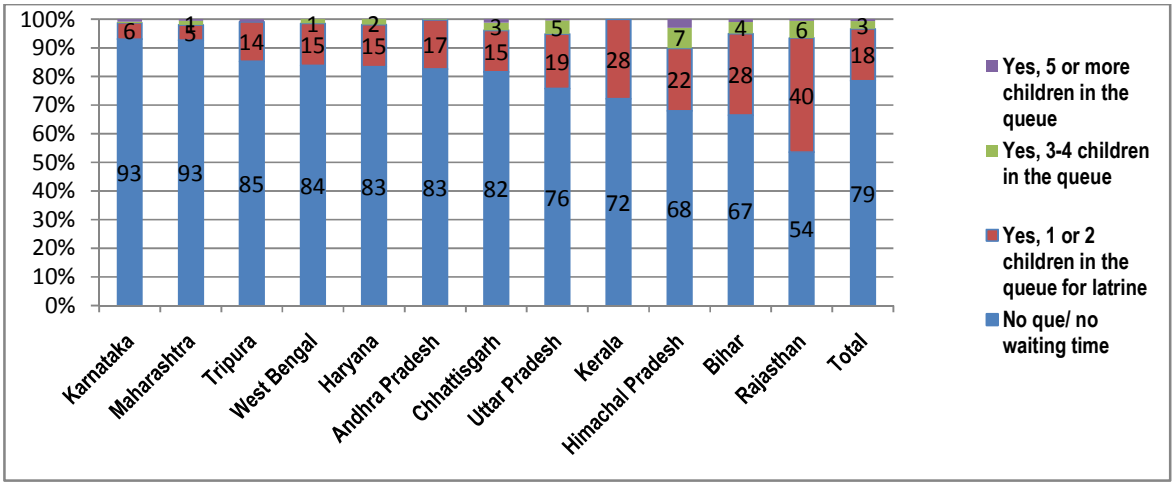
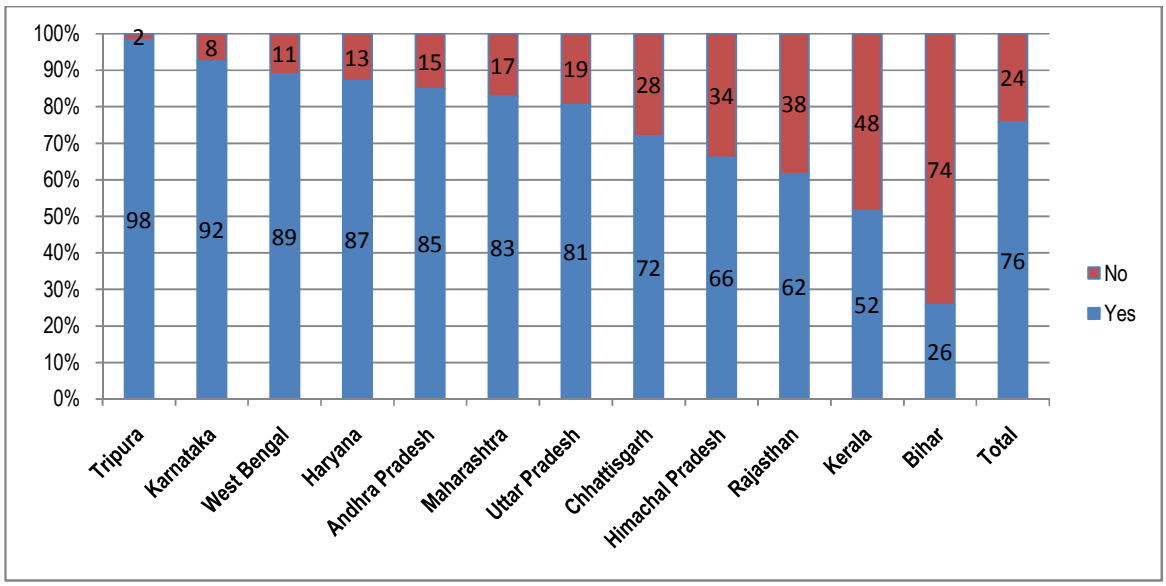
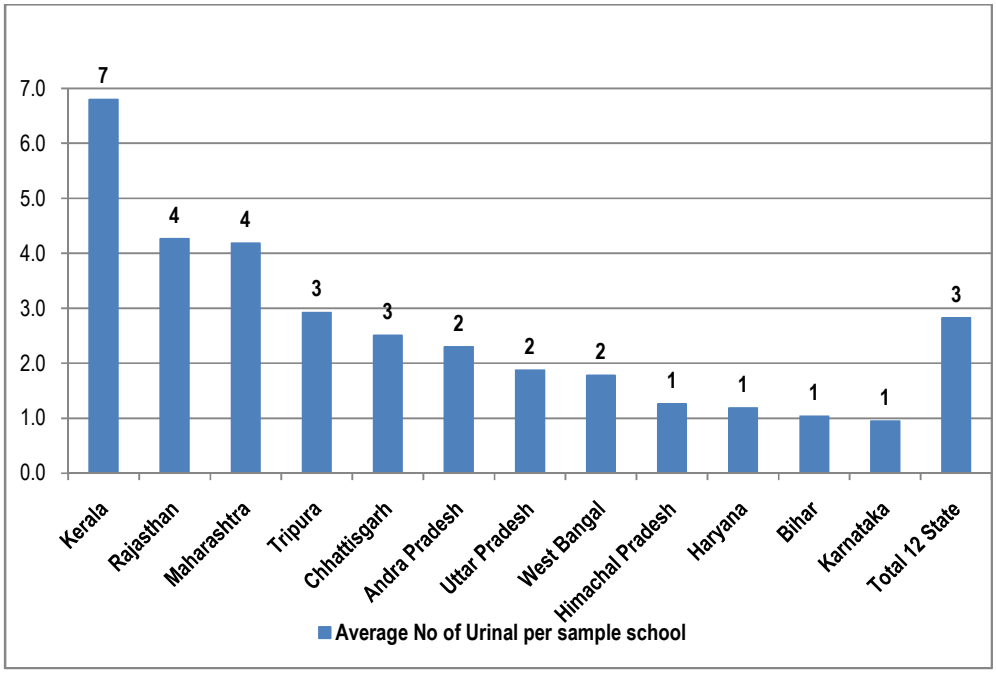


Fig 4.21: Boy's perception of adequacy of latrine (in percentage)



6. Adequacy of urinals in schools

Fig 4.22: Average number of urinal per school (in percentage)



Overall, three urinals per sample school were found with the highesy being seven per school in Kerala and lowest being one per school in Himachal Pradesh, Haryana, Bihar and Karnataka.

7. Disciplining and adequacy

Fig 4.23: Students reporting the frequency & extent of teachers' permission to use latrine or urinal during study/ class time (in percentage)

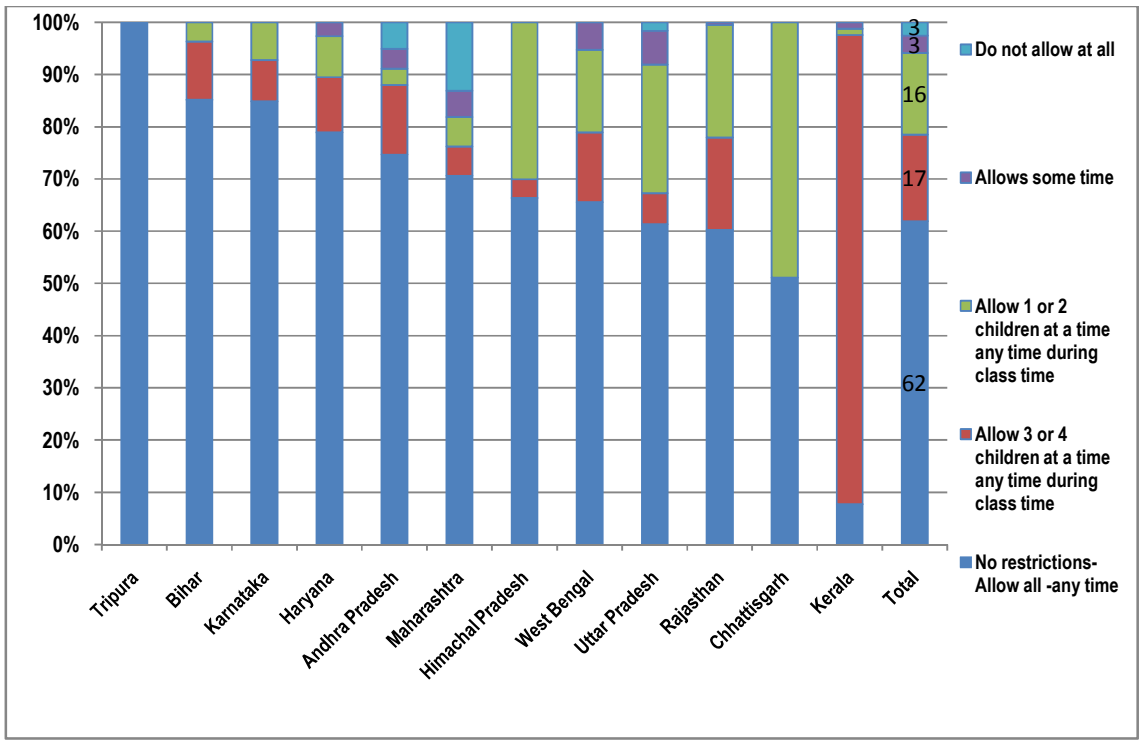


Fig 4.24: Girls reporting the frequency & extent of teachers' permission to use latrine or urinal during study/ class time (in percentage)

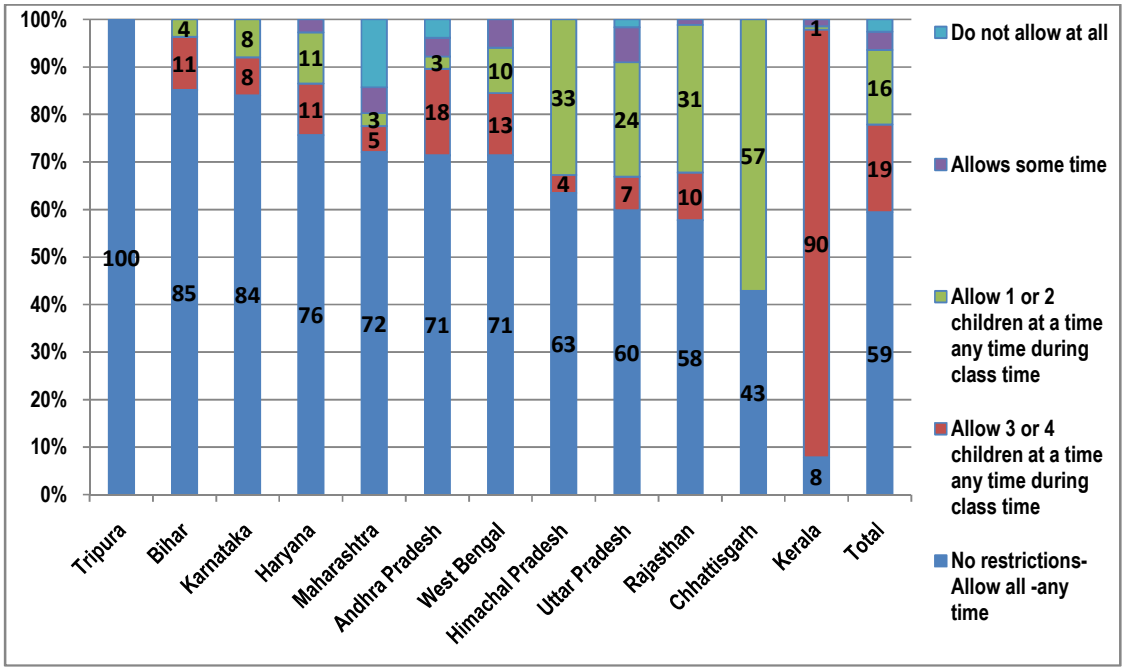
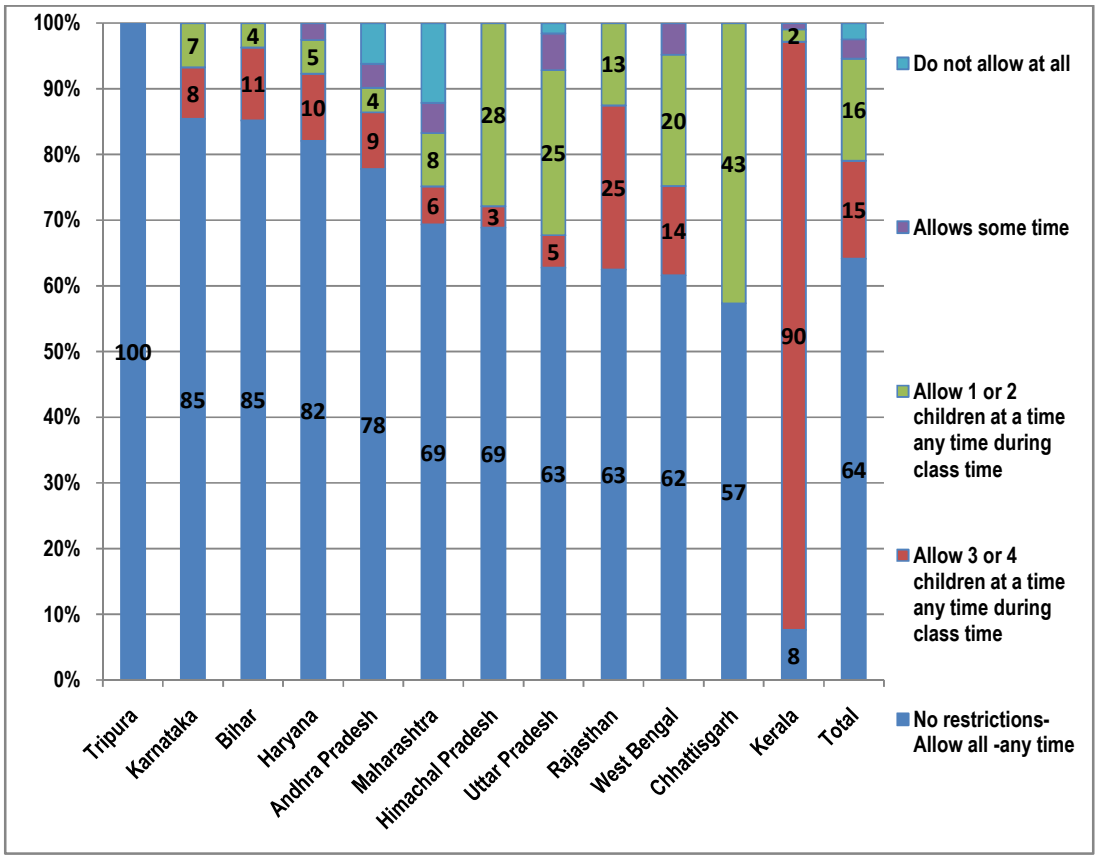


Fig 4.25: Boys reporting the frequency & extent of teachers' permission to use latrine or urinal during study/ class time (in percentage)



4.1.5 Availability of Toilets in Anganwadis

Fig 4.26: Average number of latrines per anganwadi (in percentage)

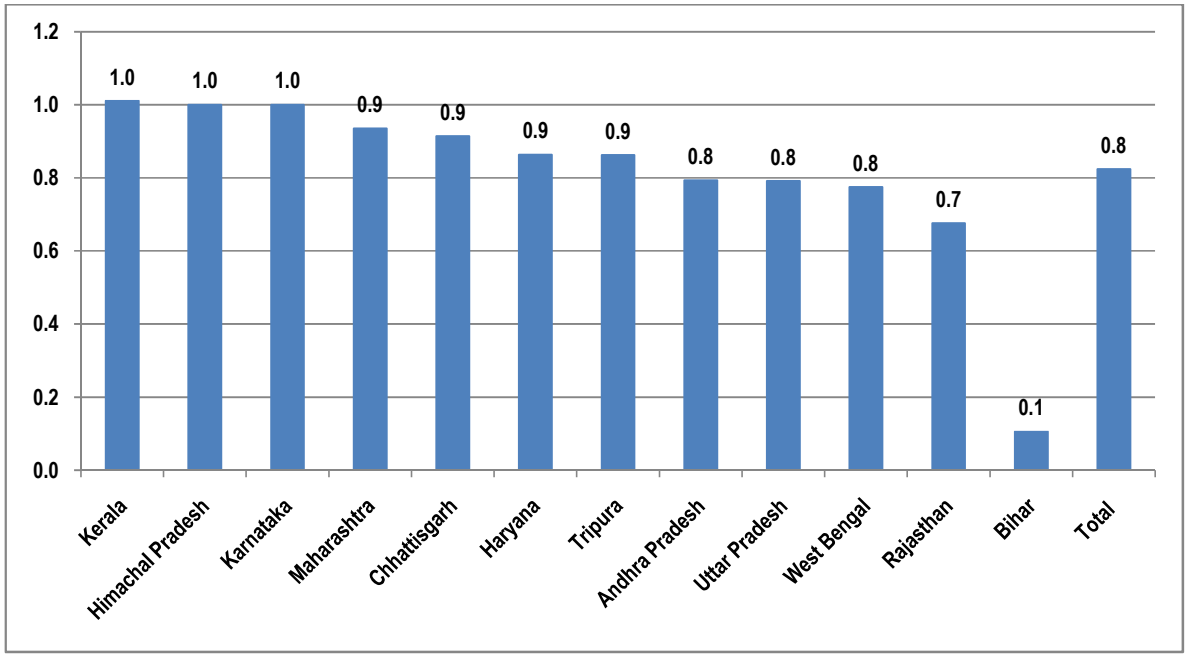
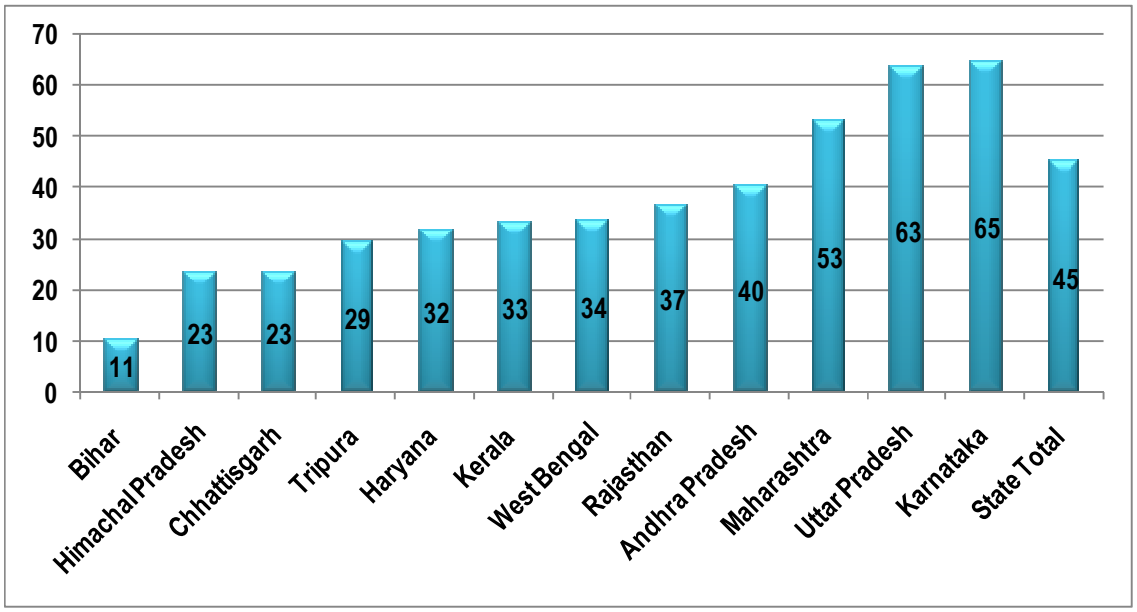


Fig 4.27: Anganwadi situated in the premises of a school (in percentage)

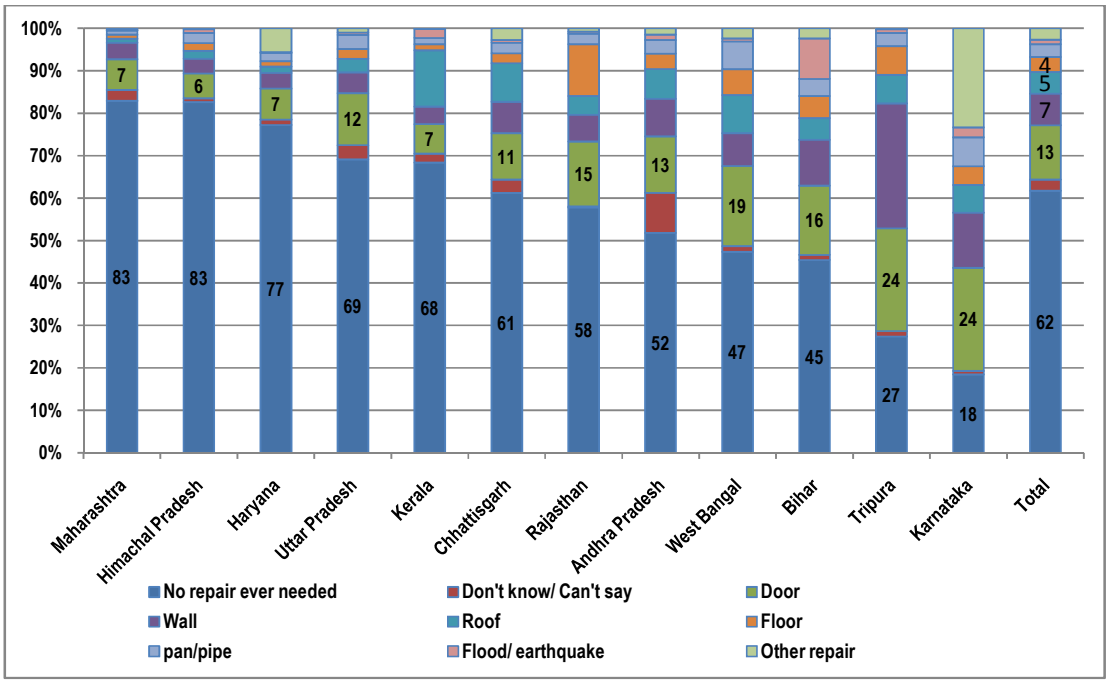


Overall, on an average 0.8 (less than one on an average) latrine (may or may not be baby friendly) was found in sample anganwadis, while 45% of the anganwadis were situated in the premises of a school.

4.1.6 Status of Durability and Functionality

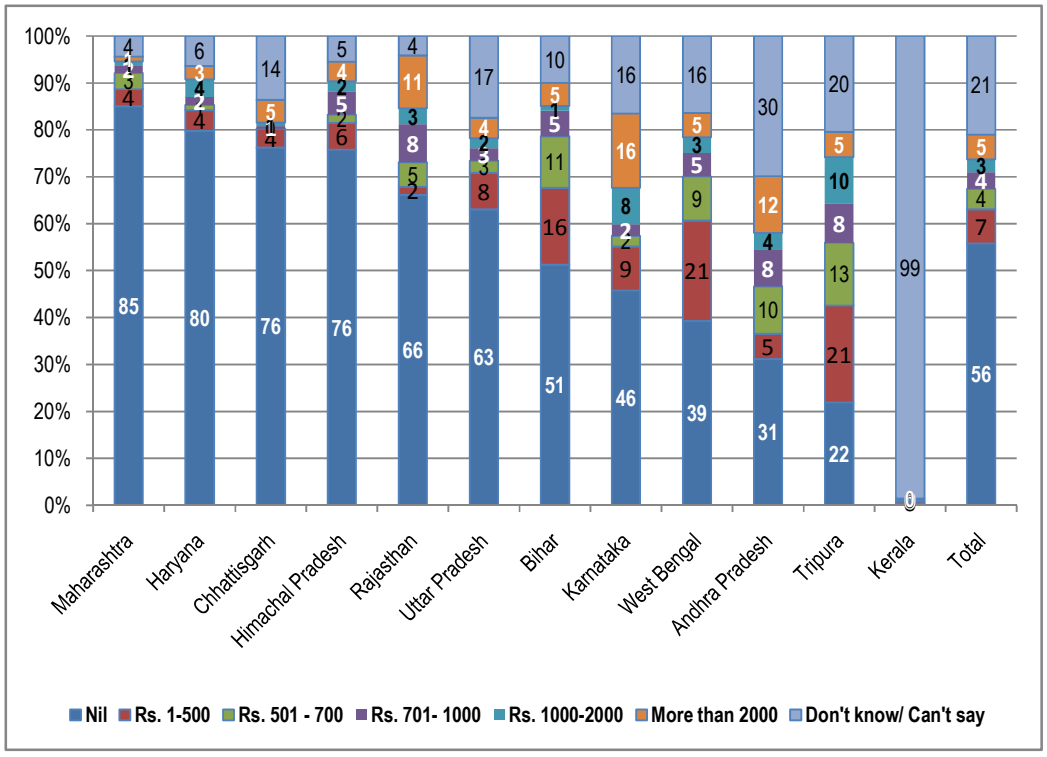
1. Status of durability

Fig 4.28: Repair needed in past for household latrine (in percentage)



Overall, around 62% latrine did not need any major repair in past, as reported by the household respondents.

Fig 4.29: Repair expenditure incurred since construction of household latrines (in percentage)

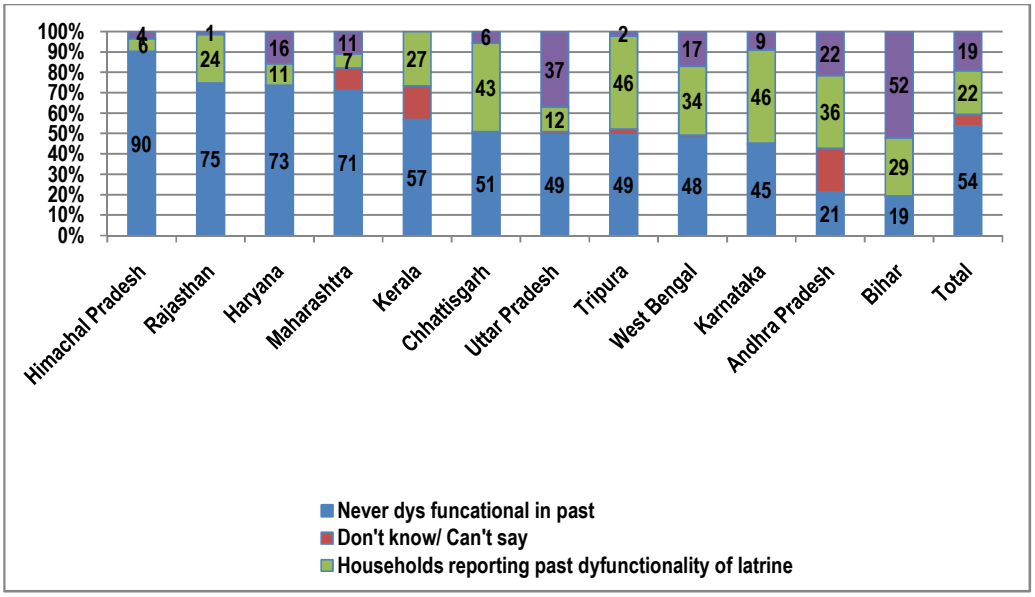


Overall, more than 56% of the total 12 state sample NGP-GP households (that have latrine) reported incurring no expense on

the repair of their latrine since the time of the construction of their latrine, with the notable exception of Kerala, where majority seemed not to know the repair expense, the link of which to the year of latrine construction (long back/ recent) needs to be looked into.

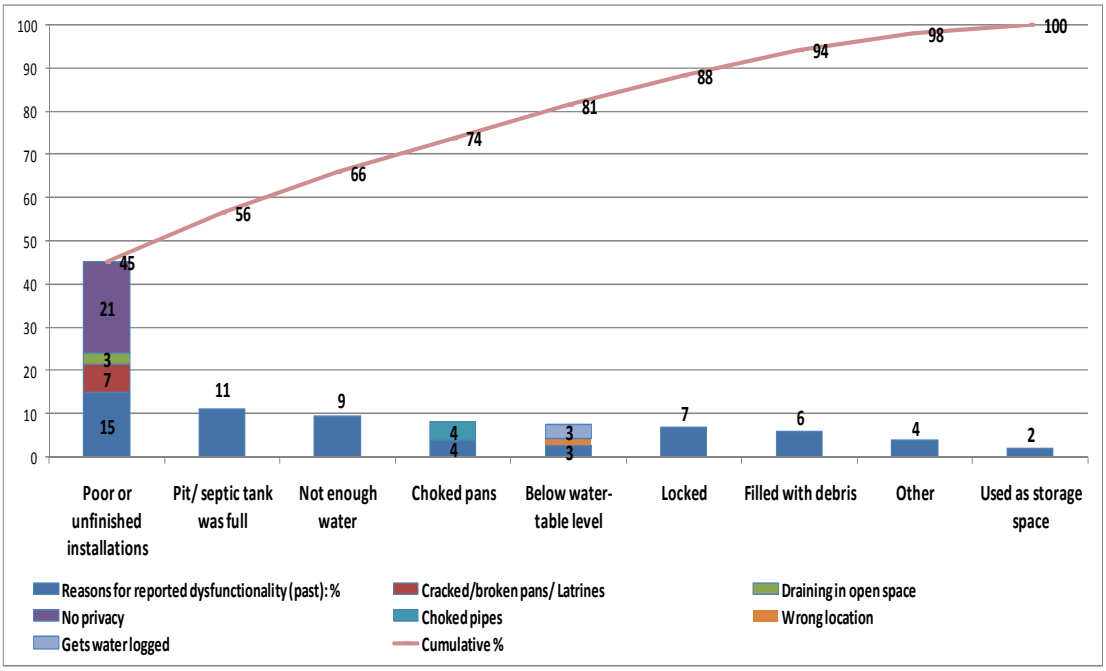
2. Status of functionality: past functionality (reported)

Fig 4.30: Availability and functionality of latrine: past, reported by households (in percentage)



Overall, around 54% of the total sample households, report that their latrine has never been dysfunctional in past, around 22% reporting that their latrine has been dysfunctional in past. Thus, overall, less than 41% of the total sample NGP-GP households either do not have latrine (more than 19%) or report that their latrine had been (or continues to be as described later in this report) dysfunctional.

Fig 4.31: Past Dysfunctionality: Reported, cumulative reasons



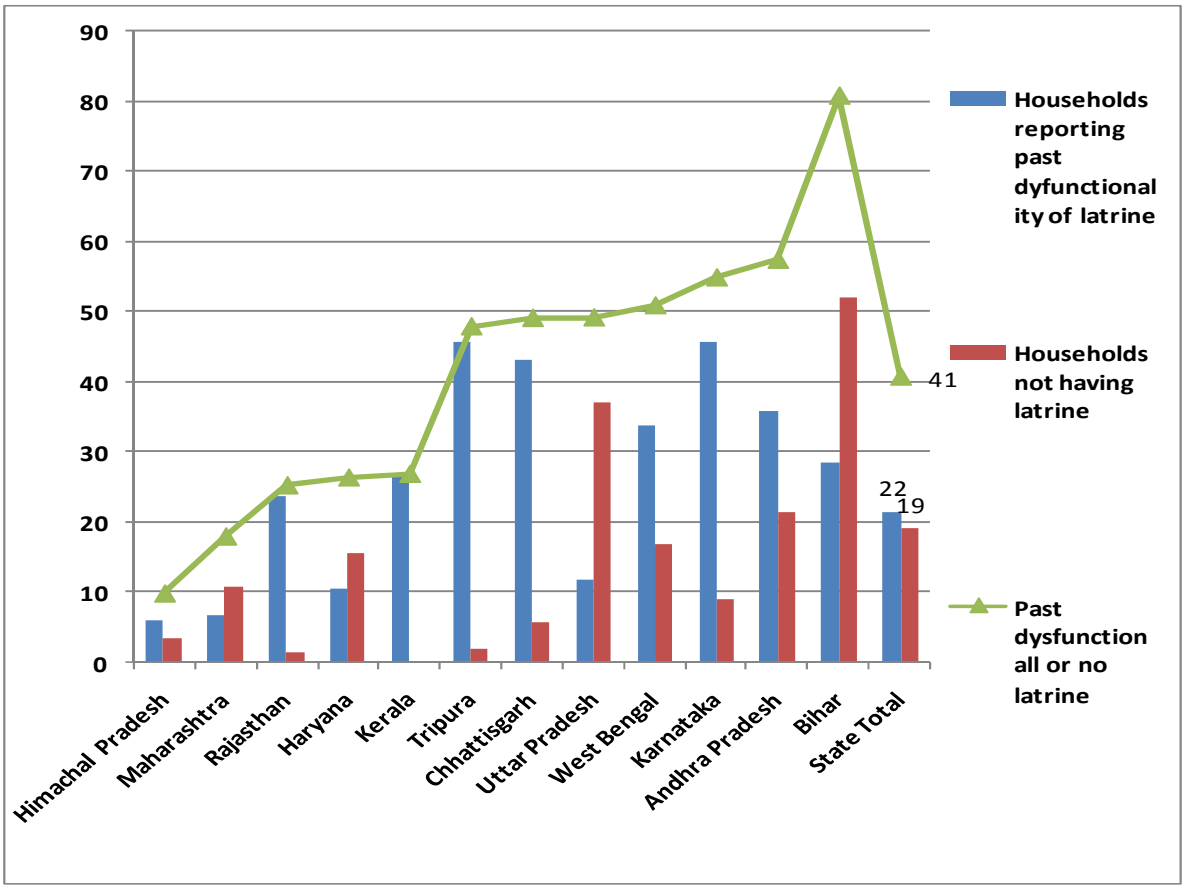
1. Poor or unfinished installation along with cracked/ broken pan/ latrine or draining in open space) is the single largest group – around 46% - of reasons reported by households when asked about the reason for past dysfunctionality, if any, of their

latrine.

2. This is followed by pit septic tank full 11 %
3. While no or not enough water account for 9%
4. Choked pan or pipes account for another 8 % of the reasons
5. Around 7 % reasons include latrine built below water level, other wrong locations and the latrine site getting water logged. Another 7% reasons include and latrine being locked (key not available)
6. Filled with debris 6 %, used as storage space 2 % and others reason are 4 %.

- More than 80% reasons are covered by the 1 to 5 groups of reasons described above, as shown by the cumulative line in the figure above.

Fig 4.32: Non-availability and past dysfunctionality of latrine: reported by households (in percentage)



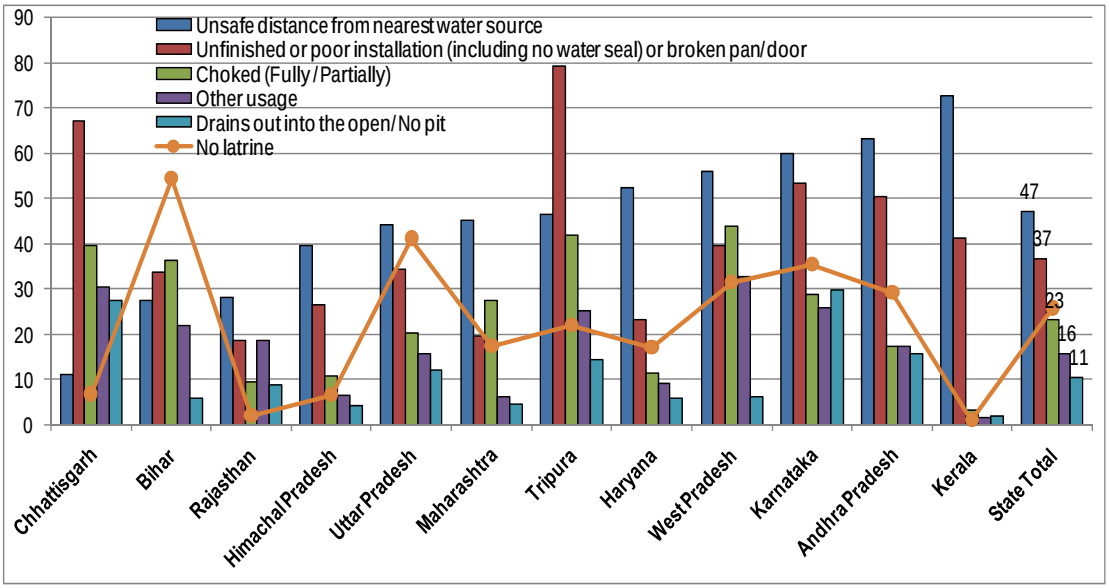
3. Current functionality: observed and reported

The table below presents how the observations and responses on various components have been grouped into 'Criteria' for current functionality and then into a combination of criteria.

Table 4.9: Current functionality: Criteria for categorisation of household latrines as functional or dysfunctional

Criteria no.	Criteria name	Criteria components
1 (observed)	Unfinished or Poor installation (including broken pan/ door)	No pan
		No water seal/ the hole is dry
		No superstructure wall
		No door
		There are cracks in the pan/ the pan is broken or Door does not cover the latrine completely, it needs repairs, has holes etc. (broken door/ no privacy)
2 (observed and reported)	Draining in open/ no pit	Draining in open (observed) or No pit (reported)
3 (observed)	Unsafe for water contamination	Distance between the latrine pit and the nearest water source is between 0 to 9.4 meters
4 (observed)	Choked full/partial	Choked/ Water does not go away completely in ½ a minute or goes slowly in 1/2 a minute. (choked fully or partially)
5 (observed)	Other usages	Filled with debris, Animals inside/ Used as shed for animals, Used to keep goods/ as storage space
6 (1+2+3+ 4+5)	Dysfunctional on combination of important criteria	Unfinished or poor installation (including broken pan or door), Draining in open/ no pit or unsafe for water contamination or choked fully/ partially or other usage

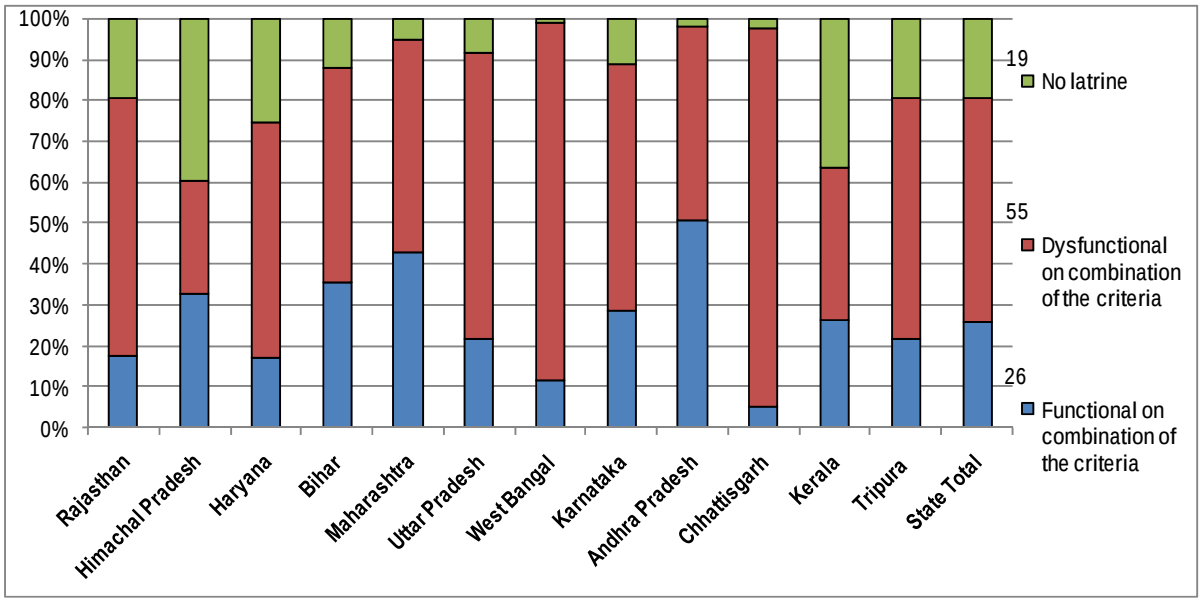
Fig 4.33: Sample households categorised as having currently dysfunctional latrine on each of the criteria (in percentage of total households)



Overall,

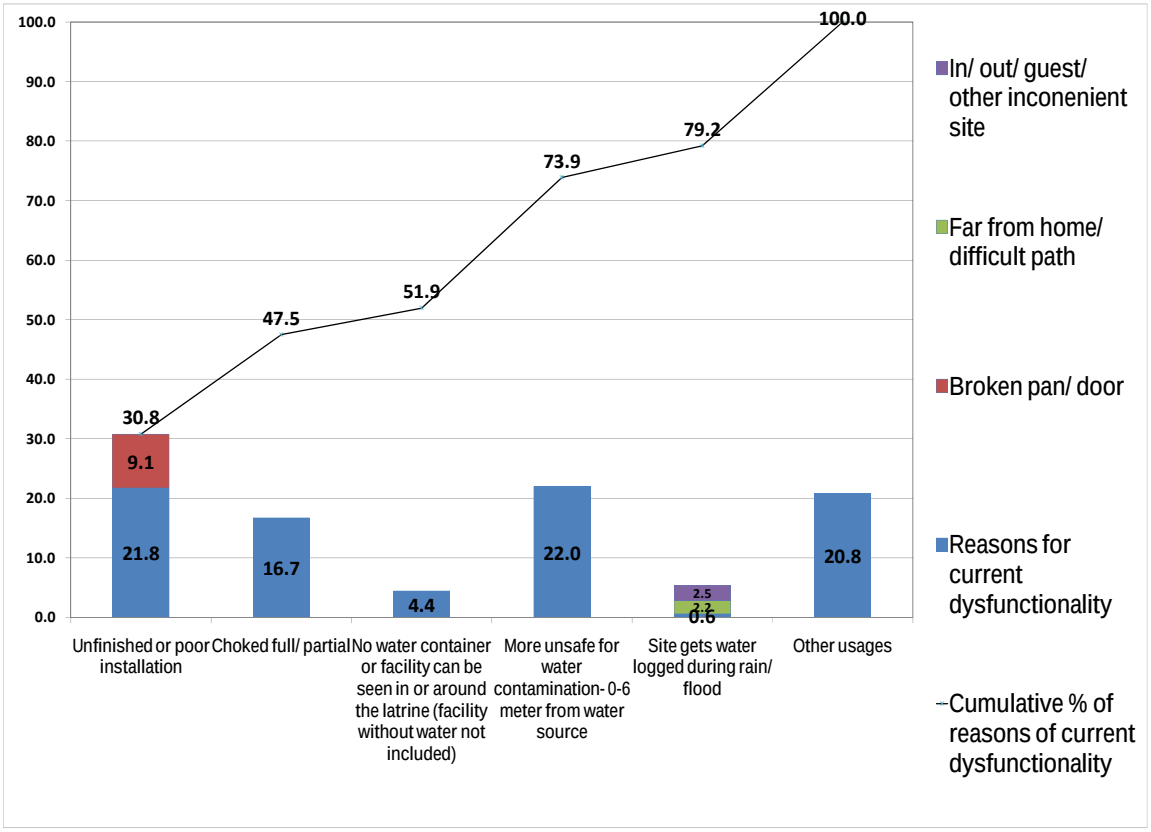
- Around 47% of the total sample NGP-GP-households, was observed to have latrine with their pits at an unsafe distance (less than 9.5 meters) from the nearest water source.
- 37% had unfinished or poor installation (had no pan or no wall/ door or their pan or door were broken).
- 23% were observed to be choked fully or partially,
- 6% were found to be full of debris or used as animal shed or storage space.
- Around 11% were either observed to be draining out into the open or were reported to have no pits.

Fig 4.34: Sample households categorised as having functional or dysfunctional (on the combination of criteria) and not having access to any latrine (in percentage)



Overall, around 26% of the total sample NGP-GP-households, were found to have a functional latrine (on combination of observed and reported criteria) at the time of the study. Alternatively, around 55% were found to have a latrine that was dysfunctional. Thus, overall, more than 74% of the total sample NGP-GP households either did not have access to any latrine (more than 19%) or their latrine was found to be dysfunctional on the criteria describe above.

Fig 4.35: Detailed/ alternative reasons (criteria) observed/ reported for current dysfunctionality of latrine, cumulative (in percentage)

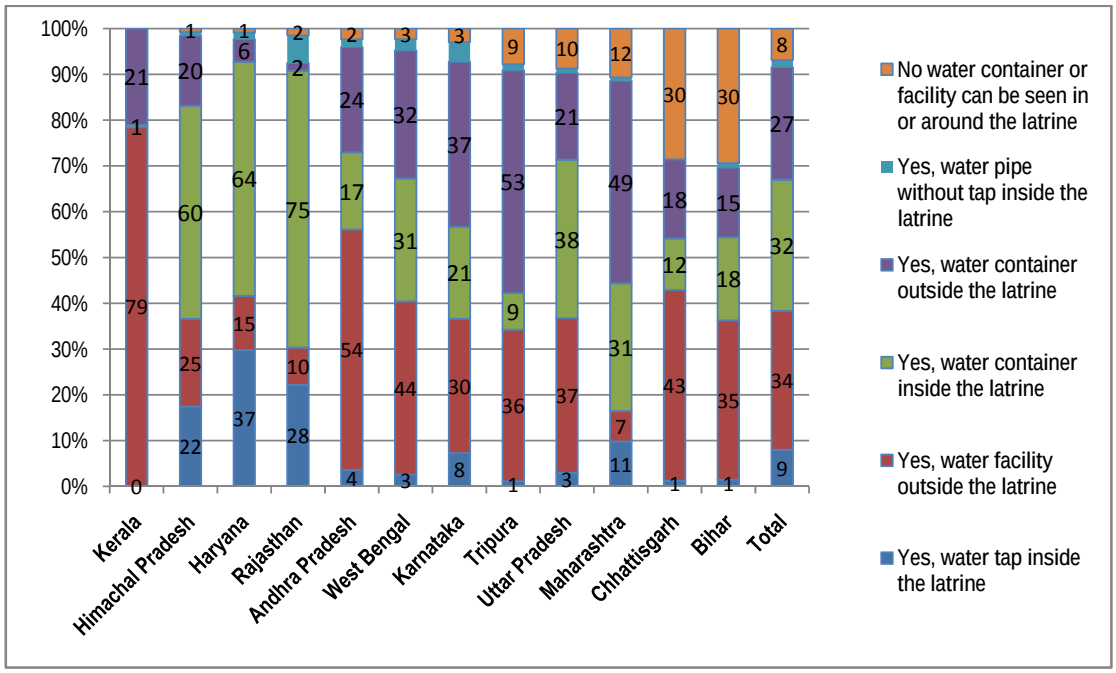


1. Poor or unfinished installation (including draining in open space) along with cracked/ broken pan/ latrine is the single largest group again around 31% of reasons observed for dysfunctionality of the latrine for households.
2. Choked latrine (fully choked or partially choked) accounts for another 17 % of the reasons.
3. While no water container or facility can be seen in or around the latrine (facility without water not included), account for 4.4%
4. More unsafe for ground water contamination (latrine pit situated between 0-6 meters from nearest water source) accounts for another 22% of the reasons.
5. More than 8% reasons (reported) include latrine getting water logged during rain/ flood or latrine being too far away from home or the path to latrine beings difficult or other wrong locations due to inconvenient site of the latrine
6. Locked latrine and key unavailable or filled with debris, or animals inside or used as shed for animals, or not possible to enter the latrine or used to keep goods/ used as storage space - together account for another 21% of the reasons observed for categorising the latrine as dysfunctional at present.

More than 79% reasons are covered by the 1 to 5 numbered groups of reasons described above, as shown by the cumulative line in the figure above.

Functionality also needs to be looked through the factor of availability of water for latrine. The figure below shows the percentage of households having latrine that were found to not have any water storage container or water facility in or around the latrine.

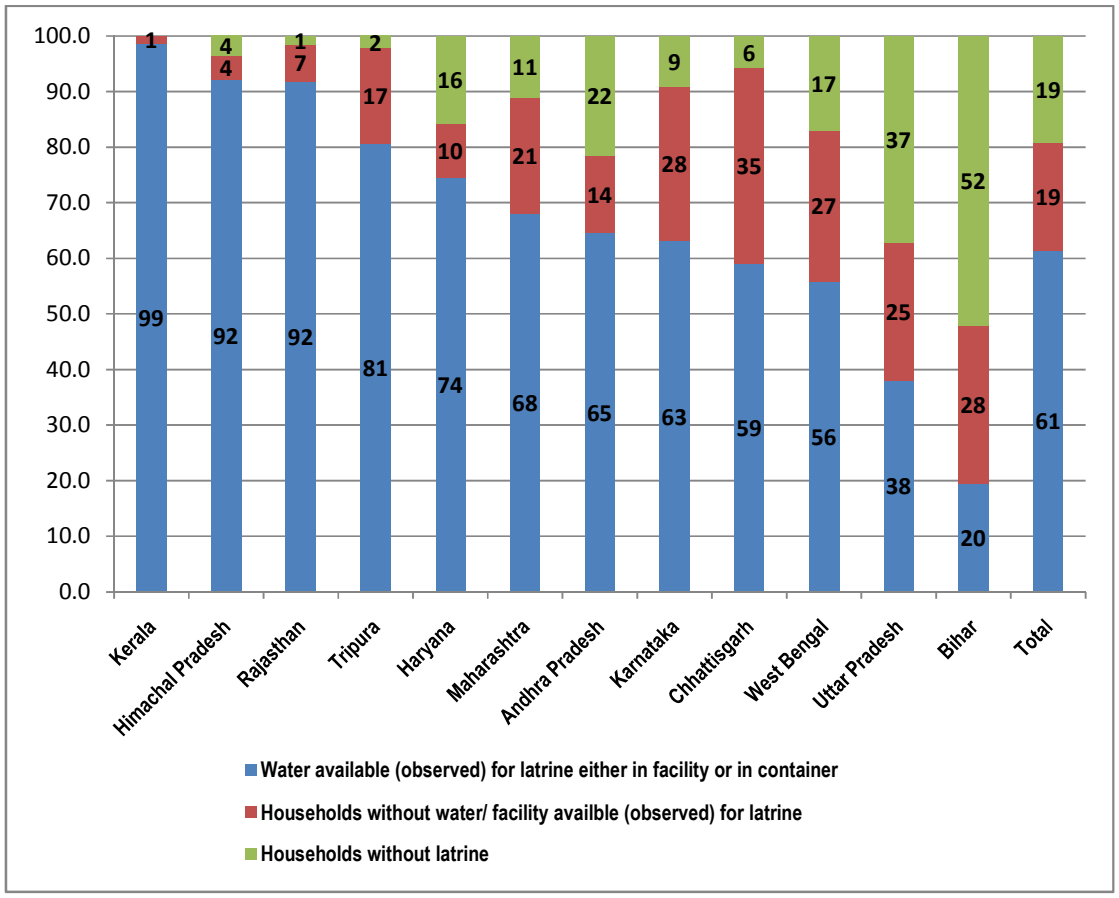
Fig 4.36: Water facility/ water storage container observed in or around the latrine (in percentage of households having latrine)



- In the sample tap water facility outside the latrine is observed in maximum cases (34%), followed by water container inside the latrine (32%), water container outside the latrine (27%), and tap water facility inside the latrine with 9%. In around 8% of the households with latrine 'no water container or facility' was seen in or around the latrines.
- At state level Haryana was observed to have the highest percentage with 37% households having tap water inside the latrine. Similarly water facility outside the latrine (generally a household well) was observed as the highest Kerala with 79%.

- No water facility or container in or around the latrine was observed maximum in two states, Bihar and Chhattisgarh in around 30% of the households' latrines

Fig 4.37: Observed actual water availability for latrine (in percentage)



Water facility for latrine (observed for water): Actual water found in the facility or container in/outside the latrine and coverage combined:

Overall, more than 61% households have been observed to have a latrine with a water facility or a container having actual water (running or stored respectively). More than 19% households were observed to either have no water facility or container in or around their latrine or no water found (running/ stored) in the facility or container that existed in or around the latrine. More than 19% household do not have access to any latrine.

4.2 STATUS OF USAGE AND 'NIRMAL' STATUS

4.2.1 Status of usage at household level: observable factors and reported

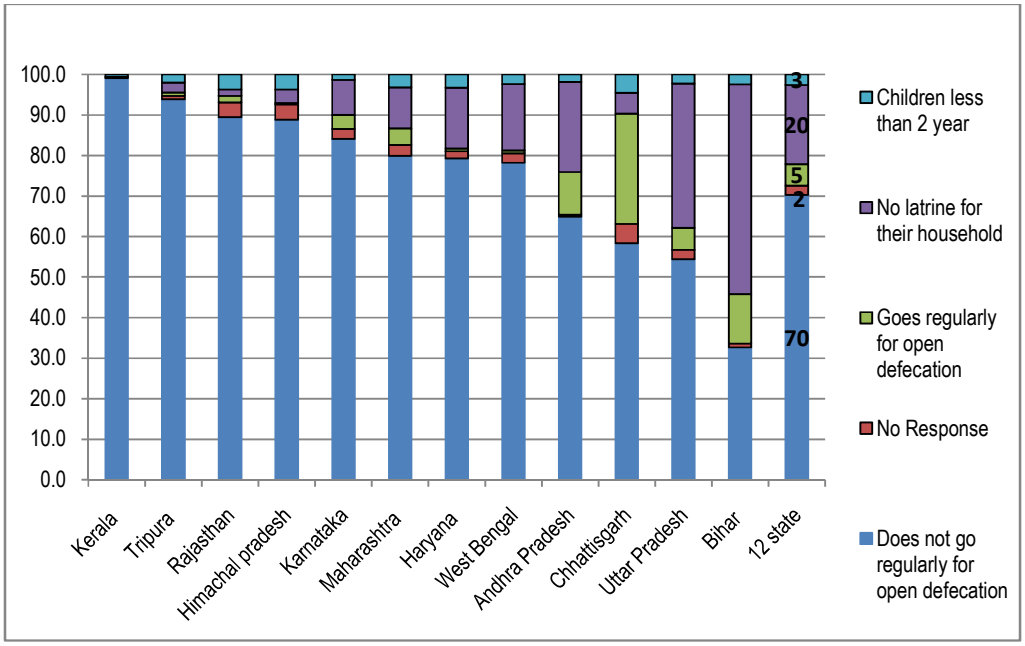
In this section, usage is presented alongside access to any latrine (graphs have 'no latrine' and usage presented in an overall 100% scenario) to give clearer picture of the complete status. This presents the percentage of households that do not have access and the percentage of households that may not be using despite having access. This also indirectly adds up to lack of 'Open Defecation Free (ODF) status.

1. **Usage: reported**

Table 4.10: Population reported to have regular usage of latrine (in percentage)

States	Does not go regularly for open defecation	No Response	Goes regularly for open defecation	No latrine for their household	Children less than 2 year
Kerala	99	0	0	0	1
Tripura	94	1	1	2	2
Rajasthan	90	4	2	2	4
Himachal Pradesh	89	4	0	3	4
Karnataka	84	2	4	9	1
Maharashtra	80	3	4	10	3
Haryana	79	2	1	15	3
West Bengal	78	2	1	16	2
Andhra Pradesh	65	0	11	22	2
Chhattisgarh	58	5	27	5	5
Uttar Pradesh	54	2	6	36	2
Bihar	33	1	12	52	2
State Total	**70**	**2**	**5**	**20**	**3**

Fig 4.38: Percentage population reported to have regular usage of latrine (excluding <2 years' faeces disposal)



Overall, more than 70% of the population of the sample households does not go regularly for open defecation (reportedly uses latrine), while 2.6 % of the sample population belongs to age of 2 years or less - living in households having access to a latrine (the equal to or under 2 years of age children living in households not having any access to a latrine – are already included in the population of no-latrine households) and less than 20% of the population does not have access to any latrine (and hence presumed to go for open defecation). This leaves around 5.3 % of the population reportedly going for open defecation despite having a latrine, while for around 2%, no response was provided. Population having no access to any latrine and reportedly going for open defecation despite having a latrine together account for at least 25% of the population of sample households (excluding no response and children below 2 years of age living in households with access to a latrine).

Fig 4.39: Adults not going regularly for open defecation (in percentage)

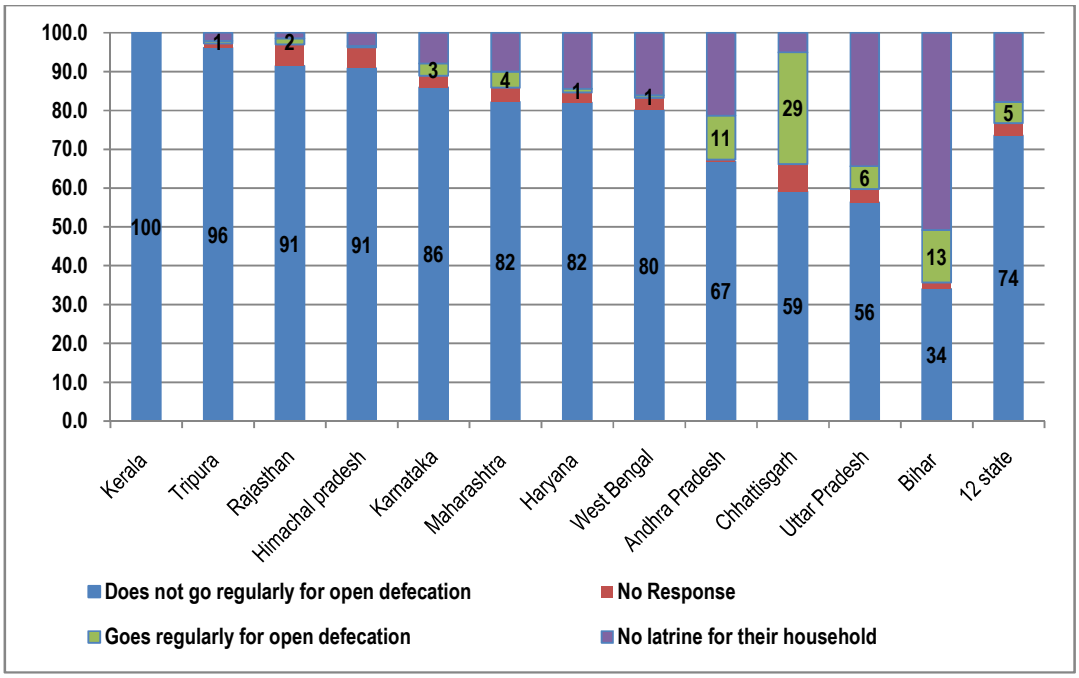
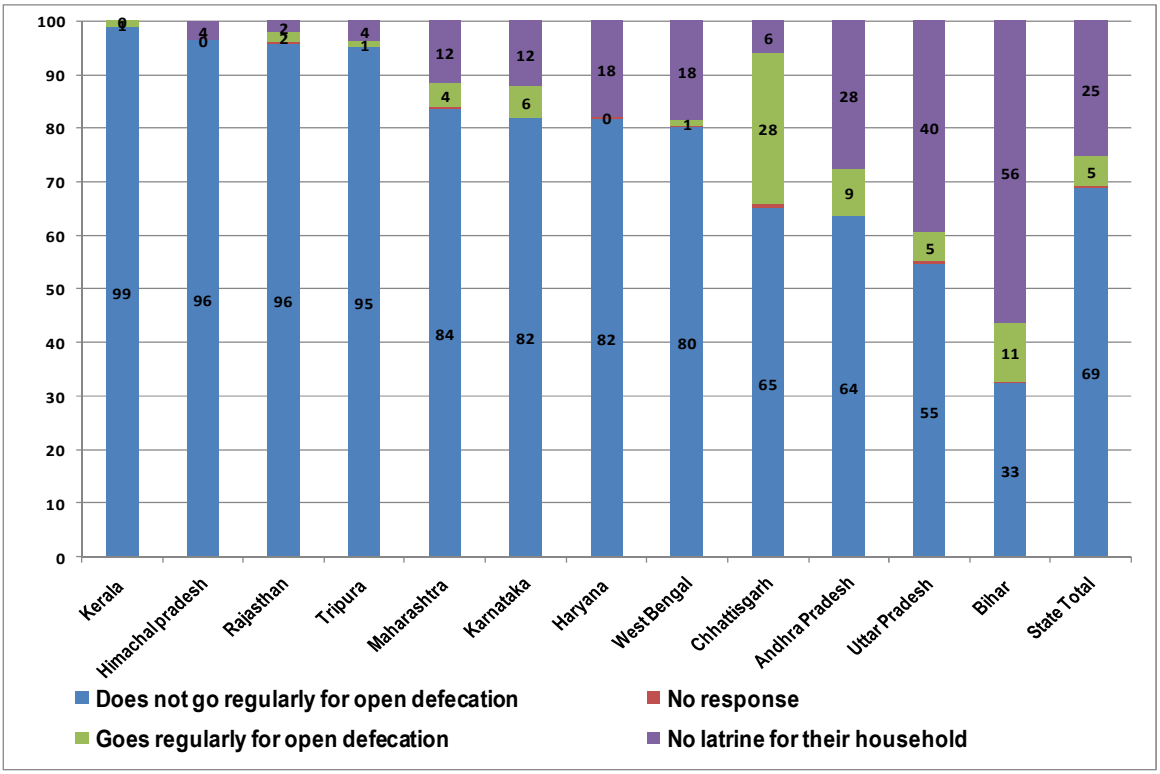
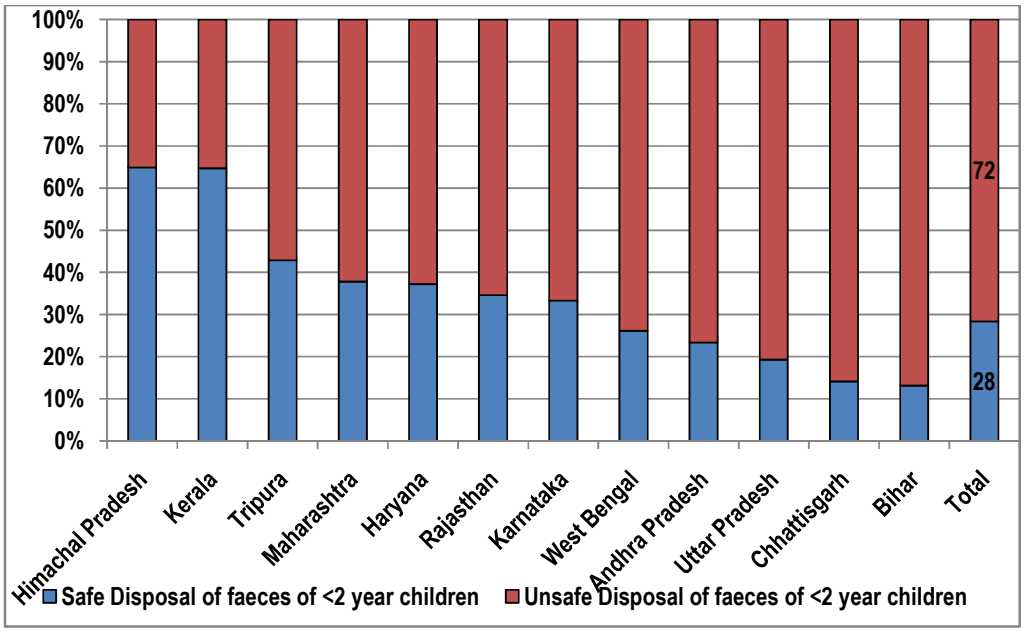


Fig 4.40: Children (excluding <2 year-olds) using latrine regularly (in percentage)



Overall, almost similar percentage of adults (5.4%) and children (5.5%) go for open defecation despite having access to a latrine. No significant difference was found among various age groups and gender groups in the case of slipping to open defecation despite having access to a latrine.

Fig 4.41: Practice for disposal of faces of children below 2 years of age (in percentage)



For assessing the safe and unsafe practices regarding disposal of faeces of children under two years of age, eligible households were interviewed. Eligible households were defined as those which had latrine and also had children below two years of age. From the various disposal practices that were reported, 'disposal of child faeces in latrine' and 'children using latrine' were categorised as 'safe practices'. Households throwing children's faeces – 'on the heap of cow dung or elsewhere', or 'in open space' or in 'the drainages outside the house' or using any other disposal method were all categorised as having 'unsafe practices. Overall, 'safe practices', accounted for overall 28% of the eligible households. Unsafe practices accounted for 72% of the eligible households consisted of 31% throwing children's faeces on the heap of cow dung or elsewhere, 20% disposing the same in open space, 15% of them disposing in drainages outside and 3% using other methods.

Fig 4.42: Percentage population reported to have regular usage of latrine (including <2 years' faeces disposal)

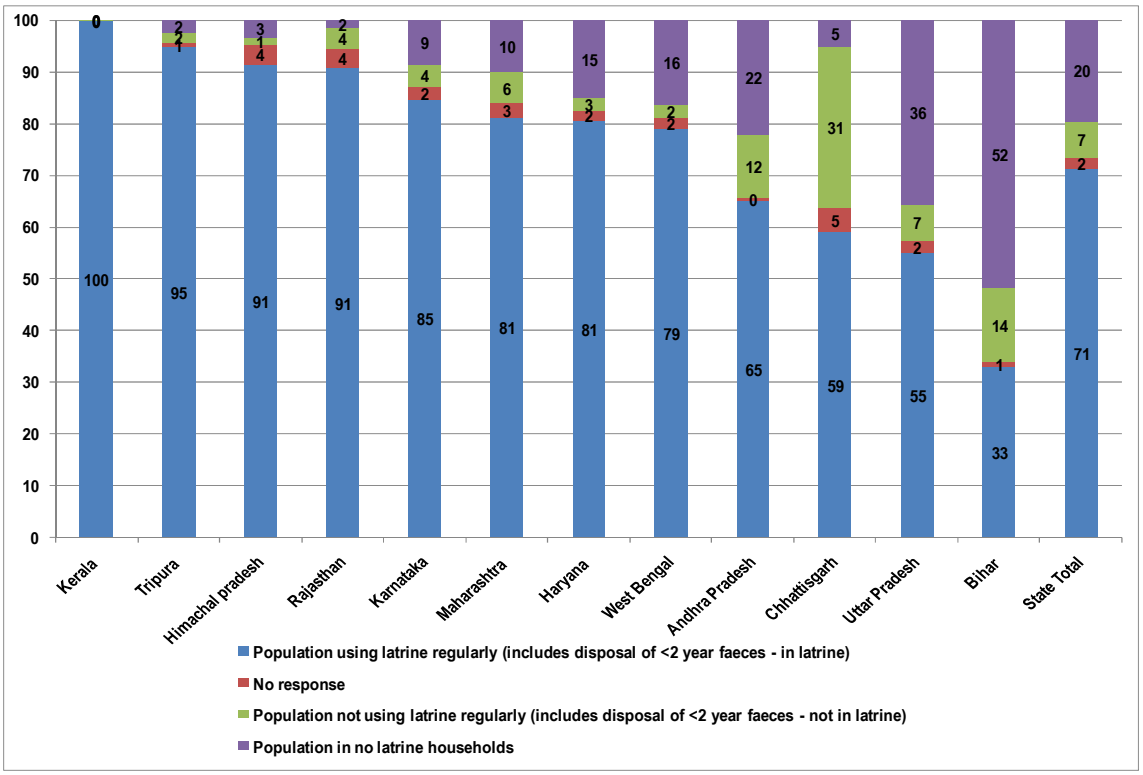
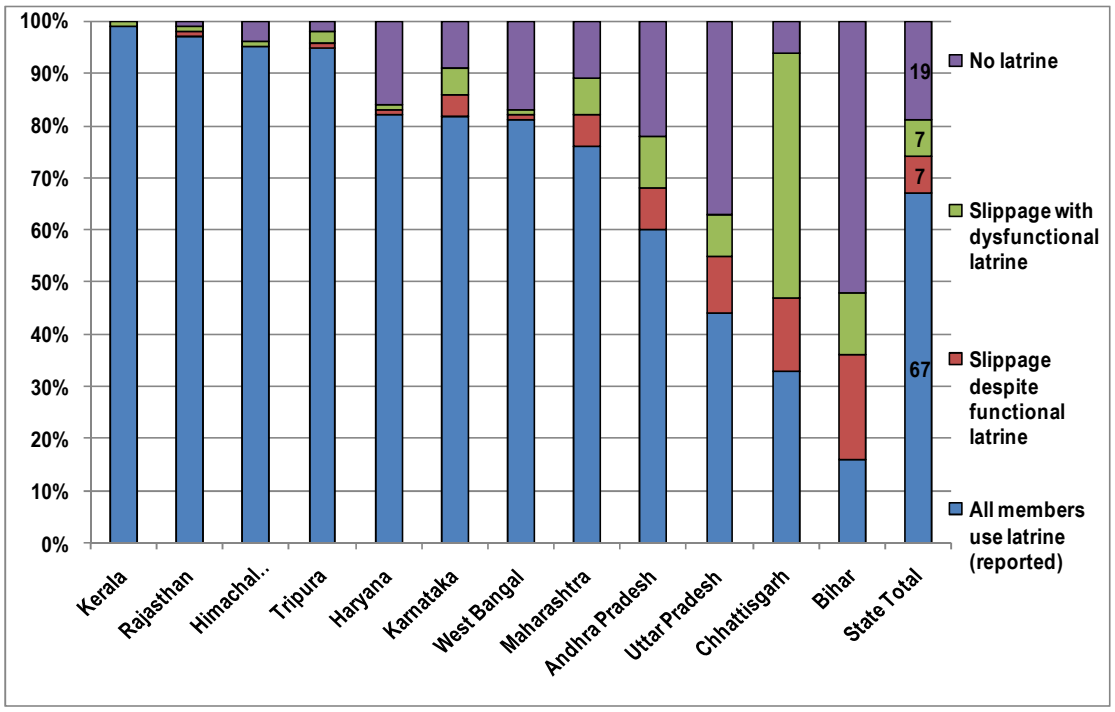


Table 4.11: Households reporting regular usage of latrine by all members (in percentage of households)

Household %	All members using latrine regularly	At least one member not using latrine regularly	No Latrine	Total households (Count)
Kerala	99	1	0	720
Rajasthan	96	2	2	540
Himachal Pradesh	96	1	4	420
Tripura	95	3	2	420
Haryana	82	2	16	540
Karnataka	82	9	9	540
West Bengal	81	2	17	720
Maharashtra	76	14	11	1620
Andhra Pradesh	60	18	22	900
Uttar Pradesh	44	19	37	2700
Chhattisgarh	33	61	6	420
Bihar	16	32	52	420
12 state	**67**	**14**	**19**	**9960**

Fig 4:43: Households reporting regular usage of latrine by all members or no regular usage by at least one member (slippage) or not having latrine (in percentage)



Reported usage of latrine and open defecation free status put together: Percentage households reporting regular usage of latrine:

Usage and ODF status: in terms of population

Overall, more than 71% of the population of the sample households does not go regularly for open defecation (reportedly uses latrine), while around 20% of the population does not have access to any latrine (and hence presumed to go for open defecation). This leaves around 7% of the population reportedly going for open defecation despite having a latrine, while for around 2%, no response was provided. Thus, population having no access to any latrine and reportedly going for open defecation despite having a latrine together account for around 27% of the population of sample households, while 71% population can be termed as open defecation free.

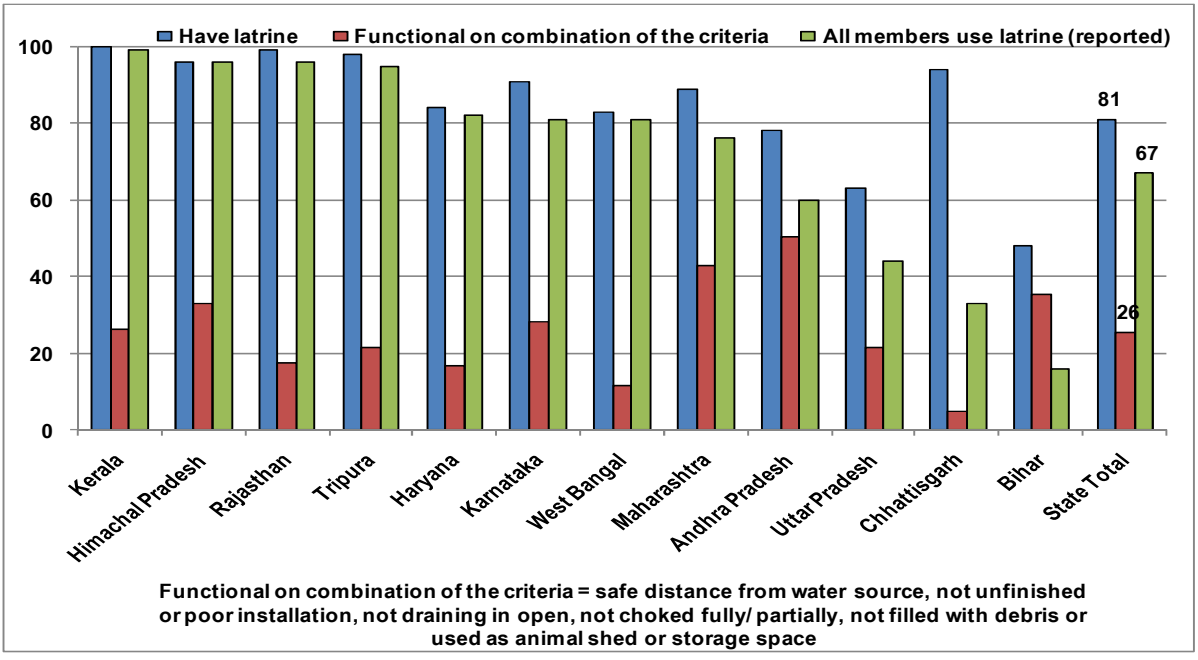
Usage and ODF status: in terms of households (all members)

Overall, around 67% of the sample households have all the members not going regularly for open defecation (reportedly using latrine and disposal practice of <2 year children's' faeces involves latrine), while around 19% of the households do not have access to any latrine (and hence presumed to go for open defecation). This leaves around 14% of the households, among which, at least one member is reportedly going regularly for open defecation despite having a latrine. Out of these 14%, around 7% households reported slippage while also having a dysfunctional latrine on the combination of criteria described earlier.

Thus, households having no access to any latrine and having at least one member reportedly going for open defecation despite having a latrine - together account for around 33.3% of the sample households, while 67% of the households can be termed as open defecation free (all members not going for open defecation regularly and disposal practice of <2 year children's' faeces involves latrine).

- Among the twelve study states, four states have around 95 to 99% NGP-GP-households reporting all the members (and 91 to almost 100% population) not going regularly for open defecation (reportedly using latrine and disposal practice of <2 year children's' faeces involves latrine), with the highest usage being reported in Kerala. The other three states are Rajasthan, Himachal Pradesh and Tripura (For population using: Tripura, Himachal Pradesh and Rajasthan).
- Around 76 to 82% of sample NGP-GP-households (and 79 to 85% population) in four states viz. Haryana, Karnataka, West Bengal and Maharashtra (For population using: Karnataka, Maharashtra, Haryana and West Bengal) report regular usage as mentioned above.
- Around 60% of households (and 65% population) in Andhra Pradesh report regular usage.
- Around 44% of households (and 55% population) in Uttar Pradesh report regular usage.
- Around 33% of households (and 59% population) in Chhattisgarh report regular usage.
- Around 16% of households (and 33% population) in Bihar report regular usage.

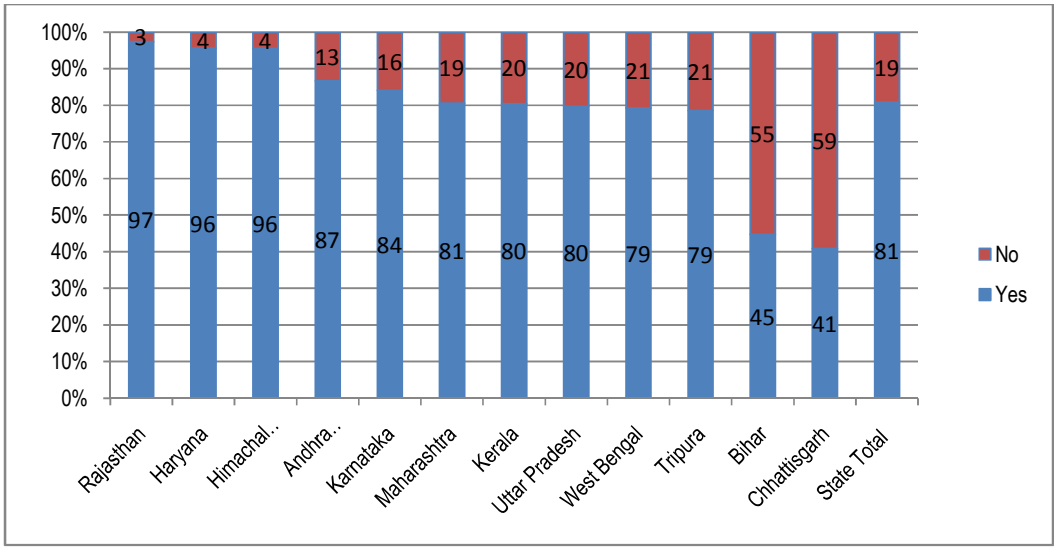
Fig 4:44: Households reporting regular usage of latrine by all members, observed functionality and access (in percentage)



2. Usage: observable factors (indirect and direct)

If observation of availability of water (for the purpose of latrine described earlier) in or around the latrine is taken as an indirect evidence of possibility of usage, more than 61% households show positive indications for possibility of usage. Other indirect observations for usage are presented below.

Fig 4.45: Availability of mug/tumbler/small vessel inside or nearby latrine for households



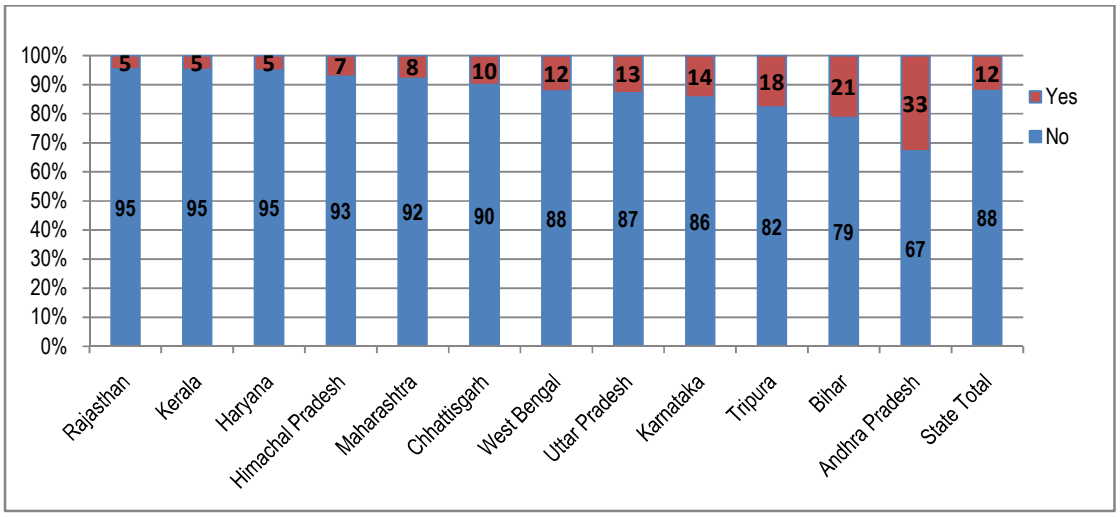
Among the households having latrine, 81% were observed to have a mug/ tumbler/ small vessel inside the latrine or nearby the latrine.

3. Cleanliness of toilets in households

Faecal materials observed on seat or floor or wall of the latrines for households

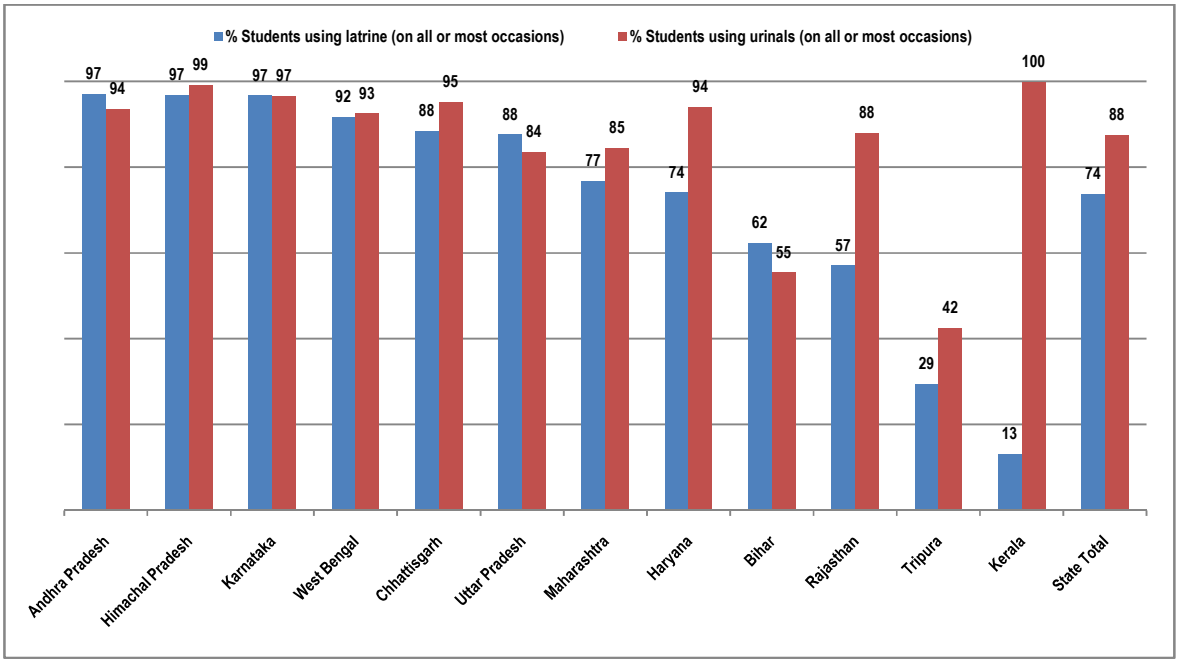
In overall 88% latrines were observed/ seen with no visible faecal material on seat or floor or wall or walking areas of the latrine. Rajasthan and Kerala is recorded on top with 95% latrines in each observed with no faecal materials while in Andhra Pradesh, 33% latrines were found with faecal material on seat or floor of the latrines.

Fig 4.46: Observation of visible faecal material on seat or floor or wall of the latrine or on the walking area of the latrine (in percentage)



4.2.2 Status of usage at school level: reported

Fig 4.47: Students using school sanitation facilities (in percentage of students)



Overall, 88% of students (during the group-interactions carried out under the study at school level) reported using school urinals, while 74% reported using school latrines. Explanation for the lower school-latrine use despite higher school-urinal use in Kerala can be found in qualitative data, which suggested that students tended to 'go home for latrine use, as most of them had latrine at homes and their homes were not too far-away from schools.

Detailed picture of gender-wise break-up of usage of school sanitation facilities is presented below.

Fig 4.48: Students using school latrine (in percentage of students)

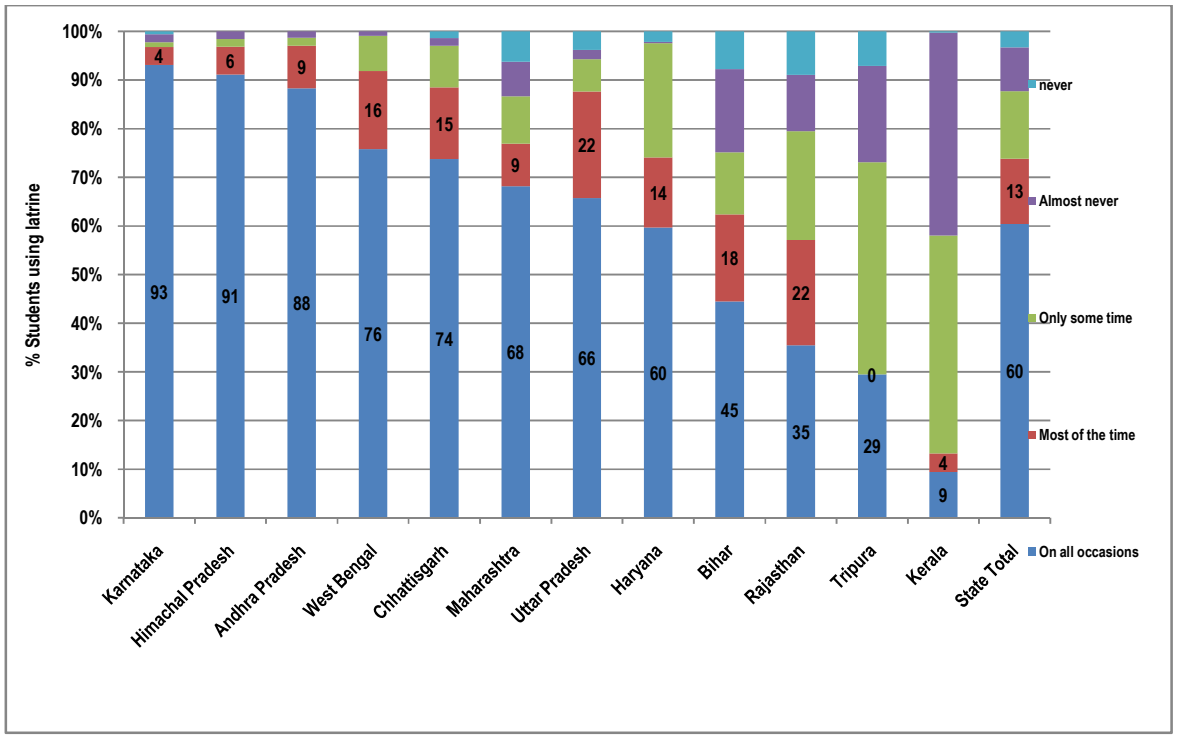


Fig 4.49: Girls using school latrine (in percentage of Girls)

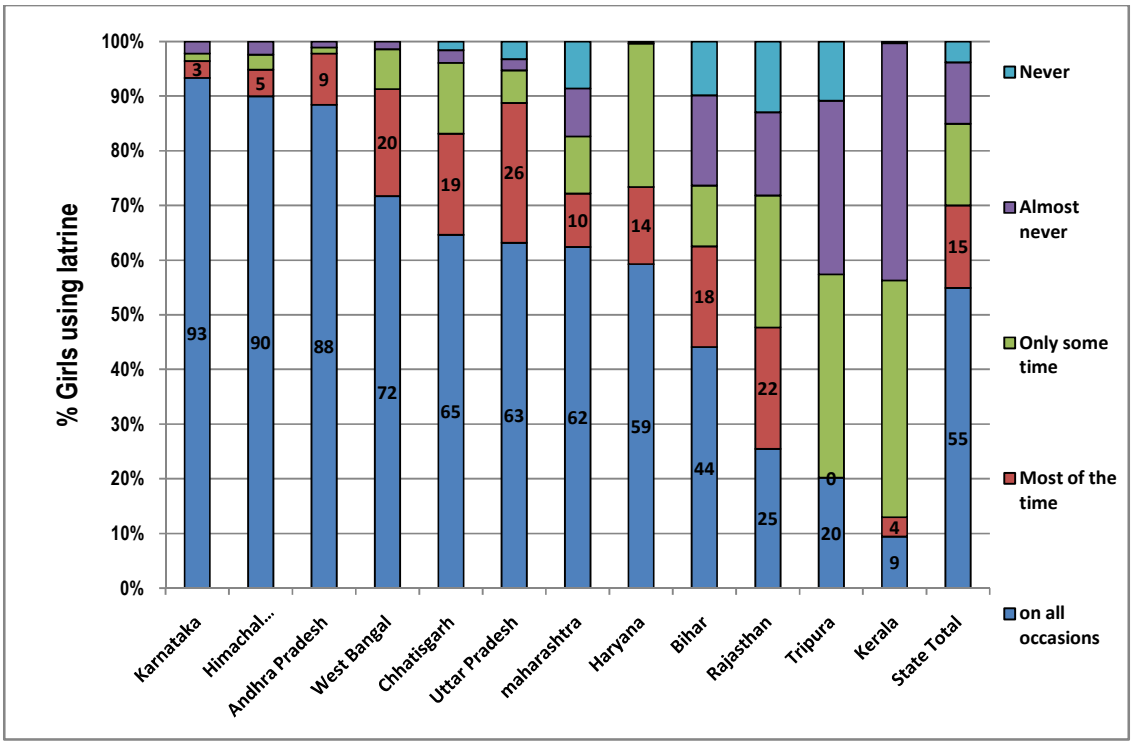


Fig 4.50: Boys using school latrine (in percentage of Boys)

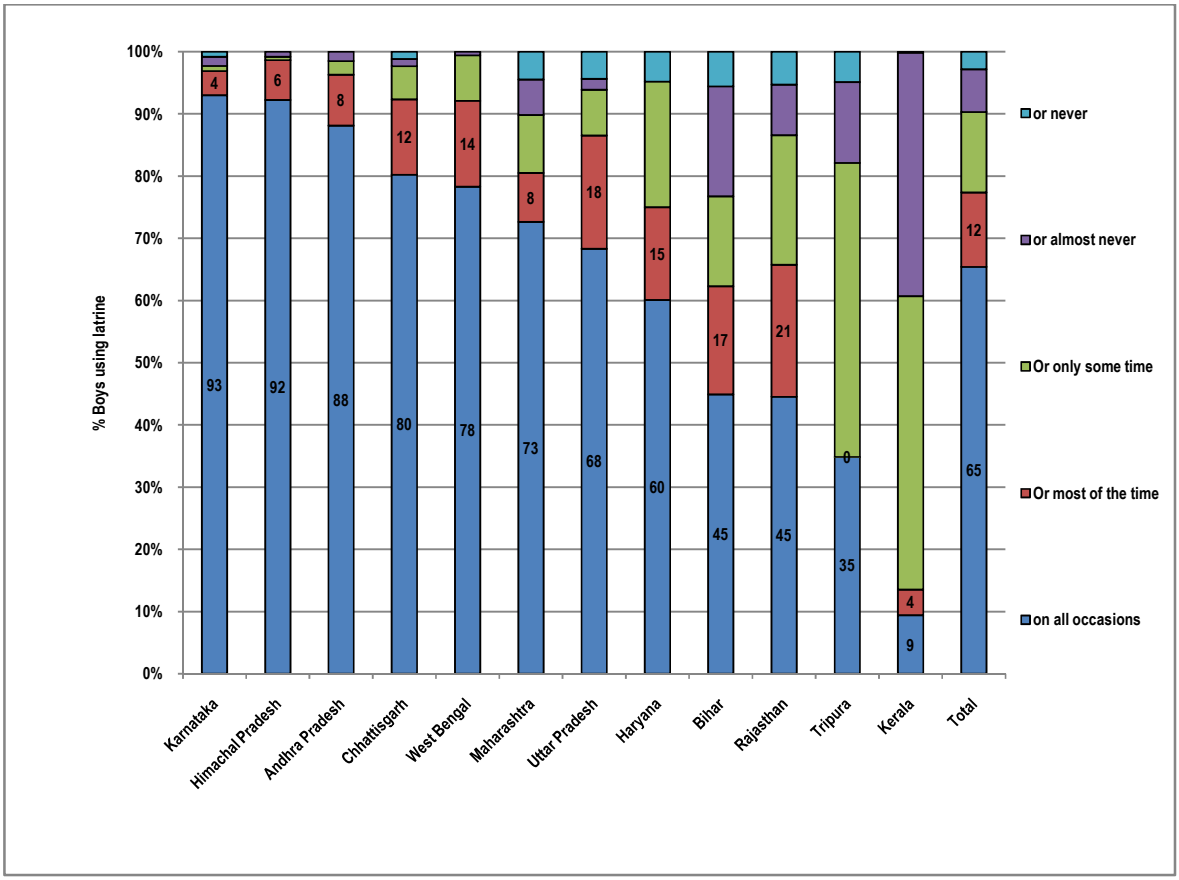


Fig 4.51: Students using school urinals (in percentage of students)

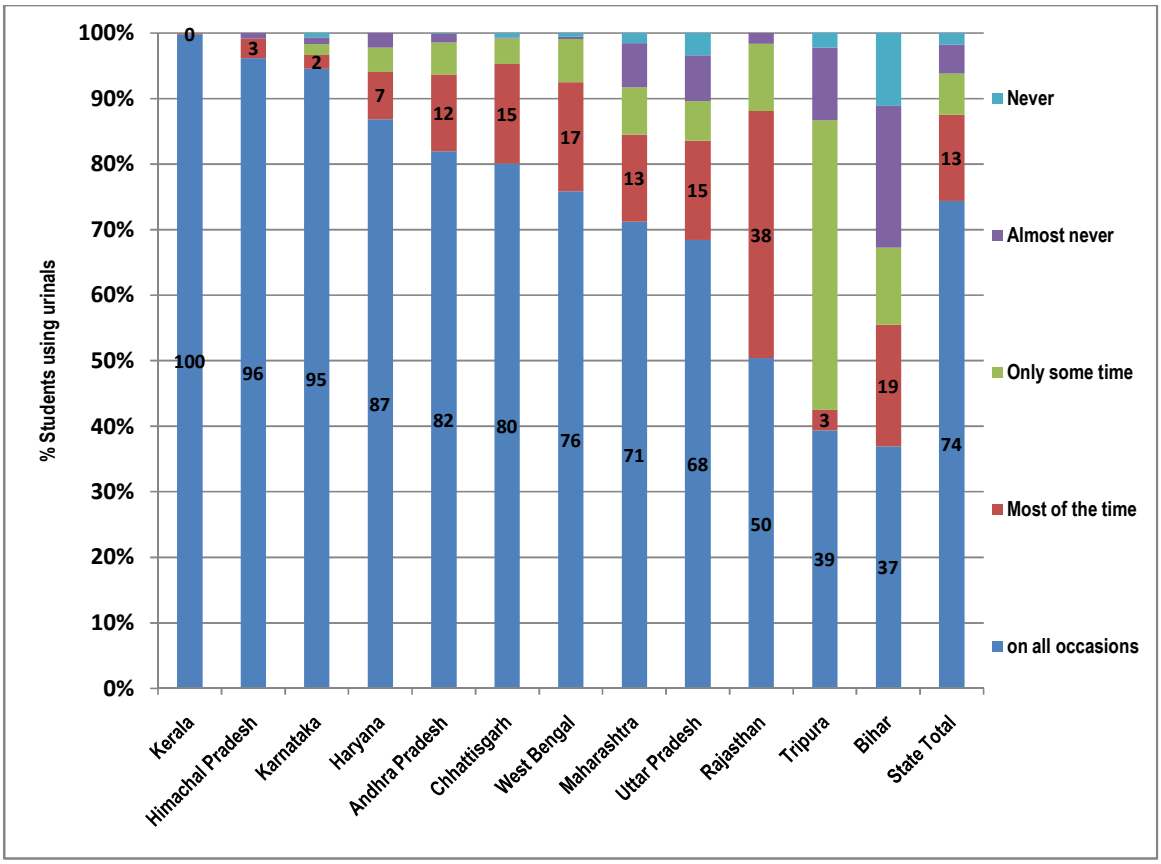


Fig 4.52: Girls using school urinals (in percentage of Girls)

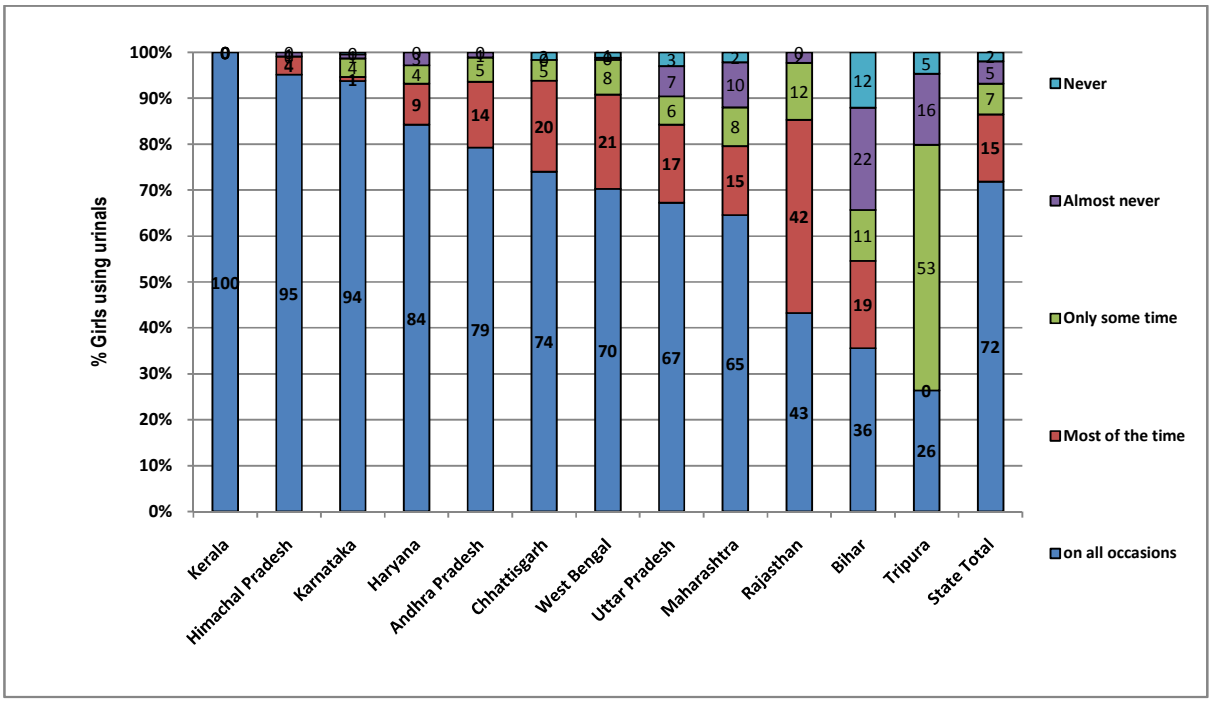
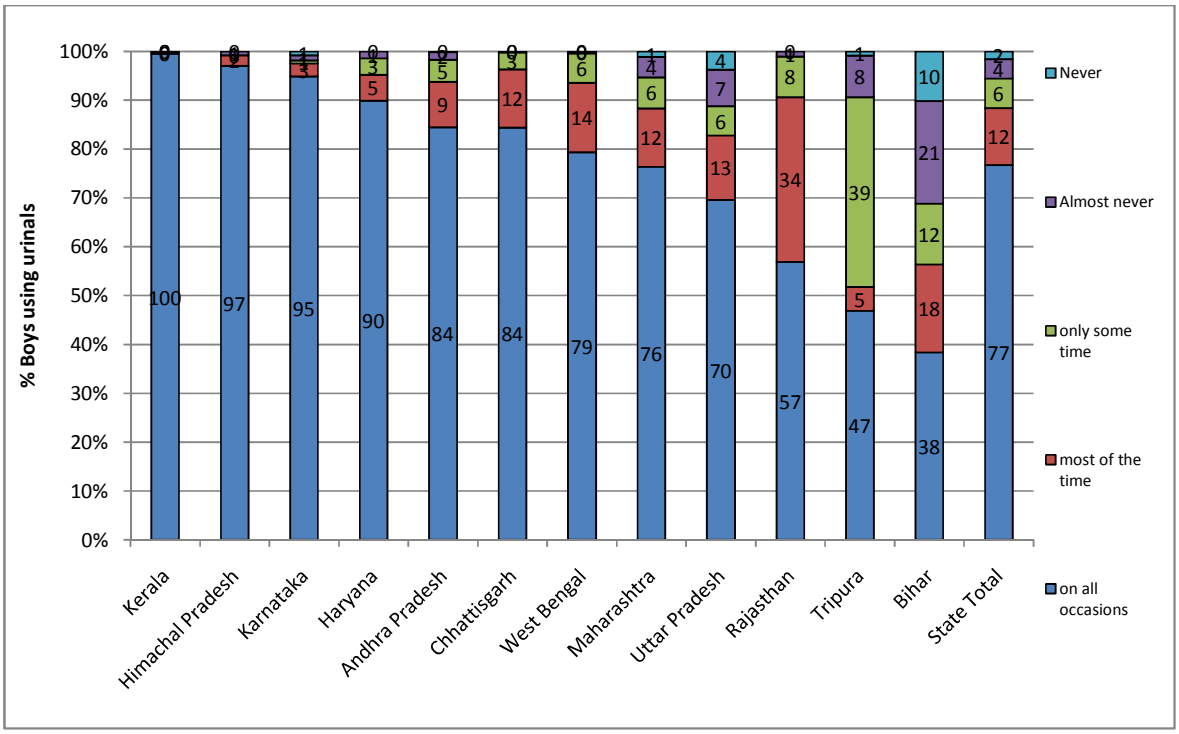
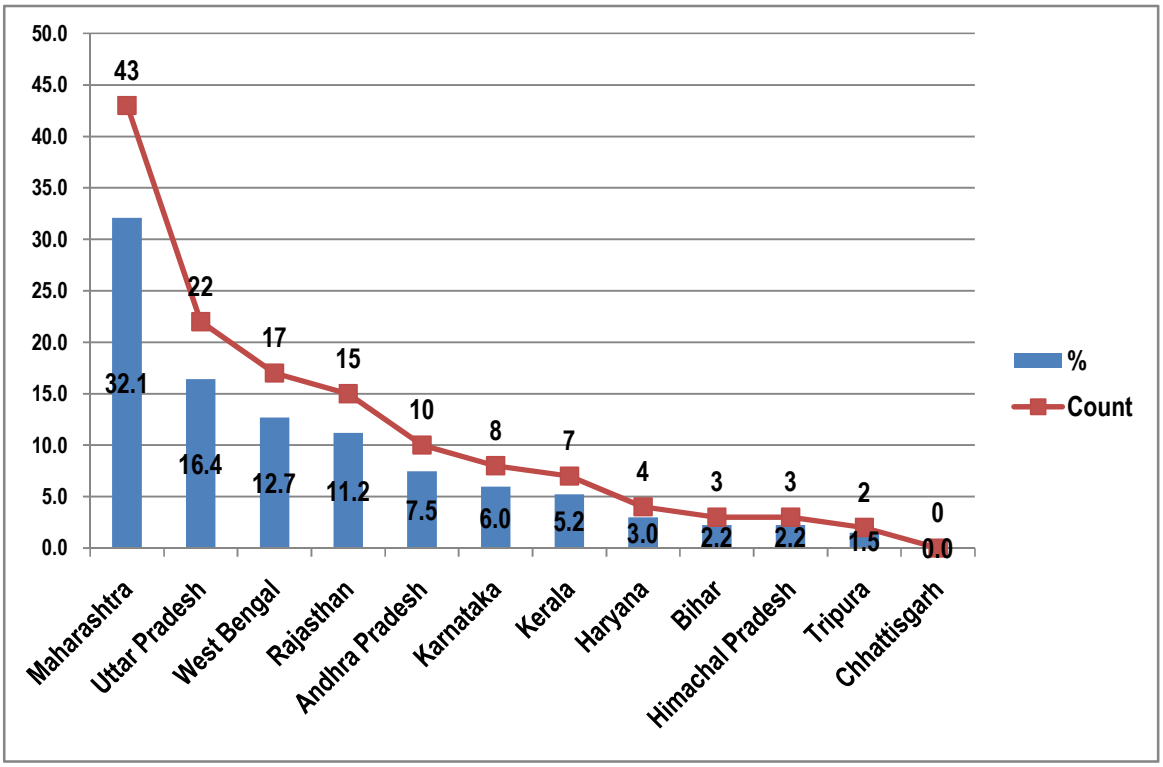


Fig 4.53: Boys using school urinals (in percentage of Boys)



4.2.3 Status of Community Sanitary Complexes (CSCs)

Fig 4.54: Count of CSCs found and percentage of CSCs found among the states (in percentage of total CSCs observed)

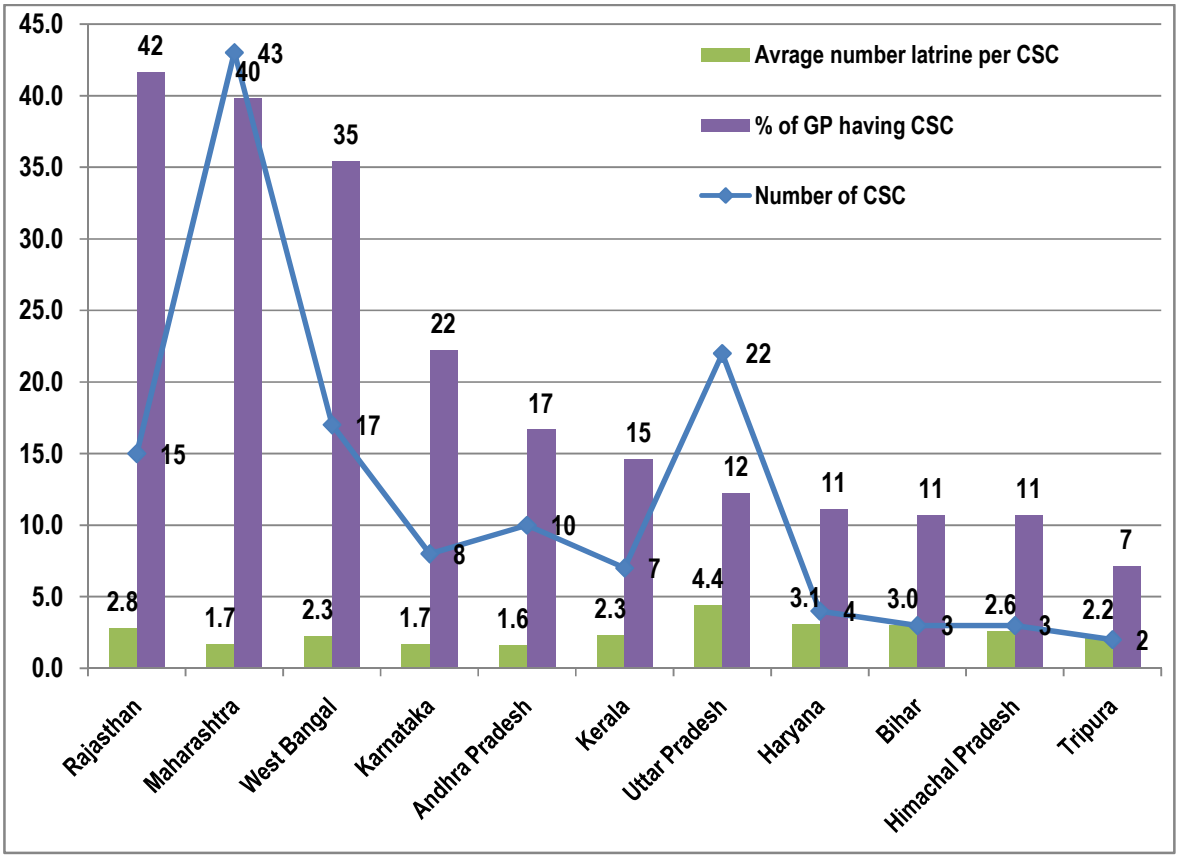


Overall 134 Community Sanitary Complexes (CSCs) were found among 134 NGP-GPs out of 664 NGP-GPs. Out of these 43 were found in Maharashtra, 22 in Uttar Pradesh, 17 in West Bengal, 15 in Rajasthan and the rest among the other states except none was found in Chhattisgarh.

The figure below shows the percentage of GPs in a state that were found to have a CSC. The highest percentage was found among Rajasthan, Maharashtra and West Bengal, having CSCs in 42% of GPs, 40% of GPs and 35% of GPs respectively. In Chhattisgarh, no CSC was found.

The CSCs were observed for number of latrines in each of the CSC. The average number of latrine per CSC was highest among Uttar Pradesh (4.4 latrine on an average in a CSC), Haryana (3.1 latrine per CSC) and Bihar (3.1 latrine per CSC).

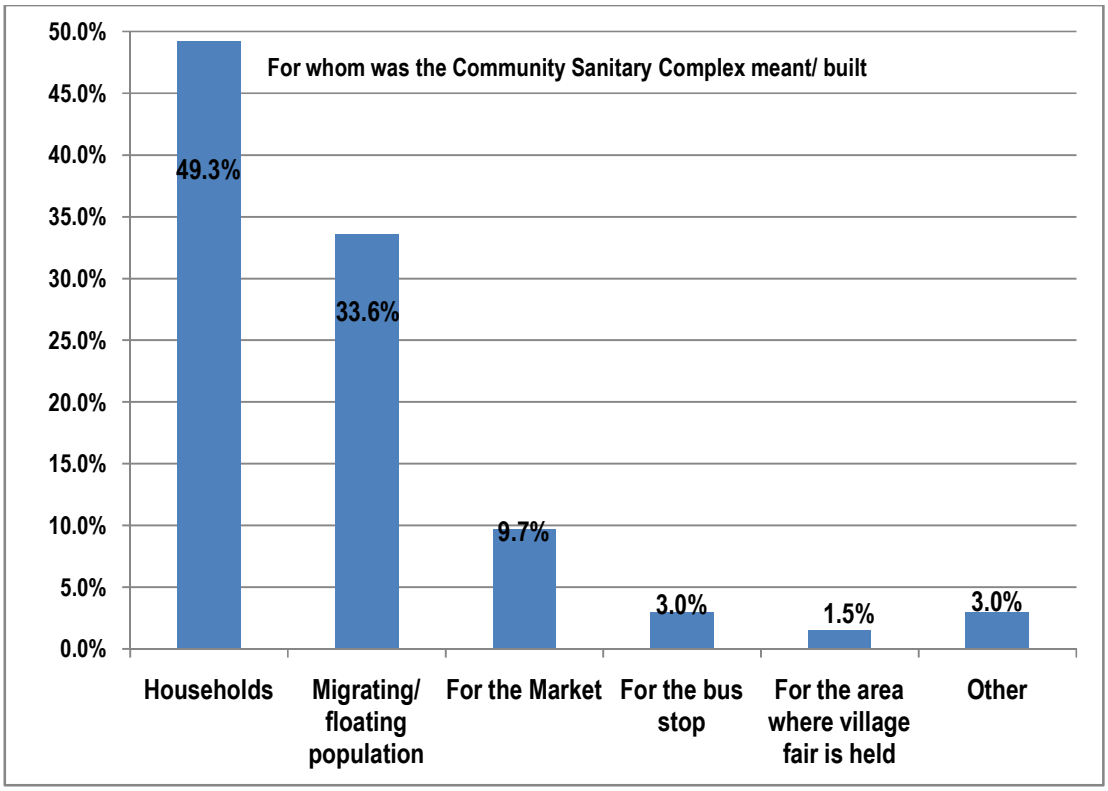
Fig 4.55: Community Sanitary Complexes found in sample NGP-GPs (in percentage and count)



When the PRIs or villagers were asked about the intended users of the CSCs, the following picture emerged.

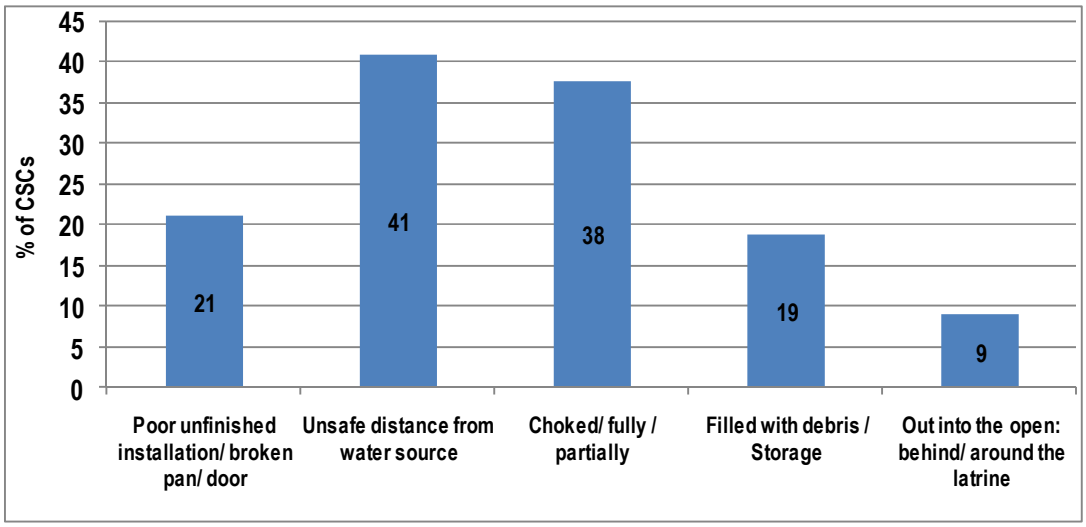
49% of the CSCs were reportedly meant for households (as shared latrine among a group of households or hamlet), 37% were meant for migrating or floating population, 10% for the market place users, 3% for the Bus-stop users, less than 2% were in the area where generally the village-fair took place and around 3% for other purposes.

Fig 4.56: Intended users of the Community Sanitary Complexes (in percentage of CSCs)



The CSC latrines were analysed on the functionality criteria similar to the criteria described under functionality of household latrine.

Fig 4.57: Functionality of the Community Sanitary Complexes (in percentage of CSCs)



Out of the 414 latrines found in 134 CSCs, 21% latrine were observed to have poor or unfinished installation (no pan, or no wall/ door, or broken pan or door), 41% latrine had their pits at an unsafe distance (less than 9.5 meters) from the nearest water source, 38% were found choked fully or partially, 19% were found filled with debris or used as storage and 9% were found draining in the open (the percentages are of the individual criteria. Hence some latrine had more than one features described here).

4.2.4 'Nirmal' status: Observation of the Panchayat area and status of solid and liquid waste management

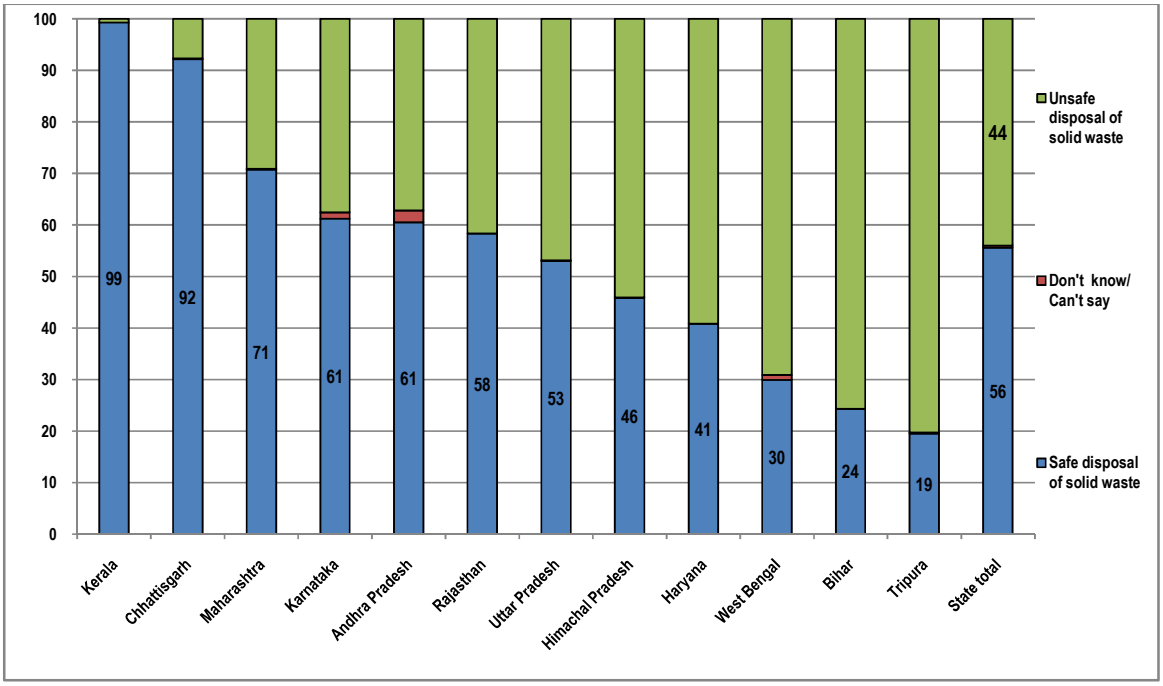
Table 4.12: Human faeces observed in the open/ drainage/ water body (in percentage of Gram Panchayats)

States	Around the Panchayat area/ fields/ On route - Human faeces seen in open space/ drainage/ water body (in Percentage of Gram Panchayats)	
Observation >>	**No**	**Yes**
Karnataka	100	0
Kerala	98	2
Haryana	97	3
Rajasthan	83	17
Himachal Pradesh	75	25
West Bengal	73	27
Maharashtra	72	28
Tripura	71	29
Uttar Pradesh	42	58
Andhra Pradesh	42	58
Chhattisgarh	14	86
Bihar	11	89
State Total	**62**	**38**

In around 62% of the NGP-GP panchayats (out of 664 NGP-GPs) no human faces could be observed at random in open spaces/ in drainages or around water bodies.

1. Solid waste management

Fig 4.58: Solid waste management at household level (in percentage of response)



Overall,

Around 56% of the responses provided by household respondents related to safe disposal practices in case of solid waste. Safe disposal is defined as combination of -

a. keeping garbage with the cow-dung/ other manure in the open and then use it in the field after it becomes manure: 28% or

b. putting in waste bin: 23% or

c. using the non-degradable as the filling for land/ road etc. 4% or

d. covered composting/ Vermin compost/ biogas, sending to purchasers of garbage items 2%.

Around 44% of the responses related to unsafe disposal of solid waste Unsafe disposal are defined as combination of –

e. putting directly in field: 25% or

f. burning: 16"% or

g. dumping on street/ outside/ unused land and not using it as manure: 15% or

h. dumping in used or unused water bodies: around 7%

Overall, 36% sample households reported availability of garbage collectors in their Panchayats, while 45% of the school/ anganwadis reported availability of garbage collector, whereas 51% of the PRI members (Sarpanch and one more PRI interviewed) and 47.5 % of the panchayat level groups/ CBOs reported availability of the garbage collector.

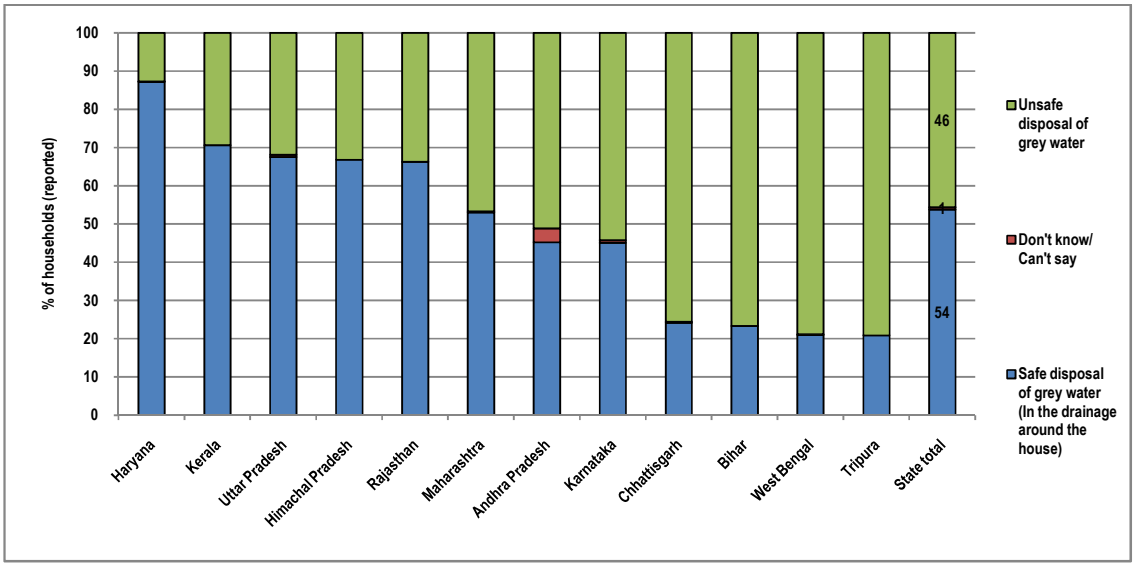
Overall, among the cases where a garbage collector was available, 36% were reported by the households to have been charging some amount for garbage collection. While the same was reported by other stakeholders as being 26% (School and anganwadi) 19% (PRIs) and 96% (groups/ CBOs).

A system to segregate plastic, glass, food, vegetables etc from the garbage at Panchayat level was reported by 8% of the households, 11% of school and anganwadis,15% of PRIs and 14% of CBOs.

Overall 53% Gram Panchayats had observable garbage dumping around the panchayat area/ fields/ on route.

2. Liquid waste management

Fig 4.59: Liquid waste management reported by households (in percentage of response)



Methods for grey water disposal (for drainage to prevent water logging)

Overall, around 54% of the responses provided by the household respondents related to safe disposal of water from their bathroom, kitchen etc. (grey water) into the drainage around the households. Among less than 46% responses related to unsafe disposal, around 29% related to drainage of grey water into the open space around the household. 9% responses related to the grey water going into unused water bodies, while 5% related to the liquid waste going into used water bodies. Others and don't know/ can't say accounted for around 3% of the responses.

In case of school and anganwadis 38% reported grey water draining into the drainage around the premises, 34.5% into the open space, 21.5% into unused water bodies and 8.3 % into used water bodies.

Whether all water sources have proper platforms and drainages around them

Overall, around 24% households reported all the water sources having proper platforms and drainage around them, while 28% reported that most of the water sources had the same.

Among the other stakeholders, 43% and 40% PRIs, 36% and 40% CBOs reported proper platforms and drainages for 'all' and 'most of 'water sources respectively.

Regarding proper drainages along all or most of the roads, positive response was reported by 20% (all) and 24% (most of the roads) of the sample households, 27% and 34% of the PRIs, 25% and 35% of the CBOs respectively.

Proper drainage: village level

When asked about where the grey water from the panchayat drains to/ drainages lead to, 50% responses of the PRIs reported the water draining finally into unused water bodies, 26% reported it going 'in the ground', 12% reported it draining into used water bodies, while 10% reported that the drained water evaporates.

When the same question was put to the CBOs, 45% reported the water draining finally into unused water bodies, 43% reported it going 'in the ground', 12% reported it draining into used water bodies, while 7% reported that the drained water evaporates.

Observation of water logging

Overall, around 35% sample Panchayats were found to have no observable water logging inside the premises that were visited (school, anganwadi, households and others), while 44% of the sample Panchayats were found to have no observable water logging in or around the panchayat area.

ANGANWADI KENDRA TOILET, SAMSHERPUR

NON FUNCTIONAL TOILET FILLED WITH DEBRIS IN BIRMATHANA GP

DRAINAGE OF GREY WATER IN ALWAR SC COLONY

LOW COST TOILET, SOUTH TRIPURA

UTTAR KANNADA

UP, JAUNPUR, SAIDANPUR3 INDRA AWAAS

KAMLESHWAR , NAGPUR

CHAPTER 5

Impact & Hygiene Factor

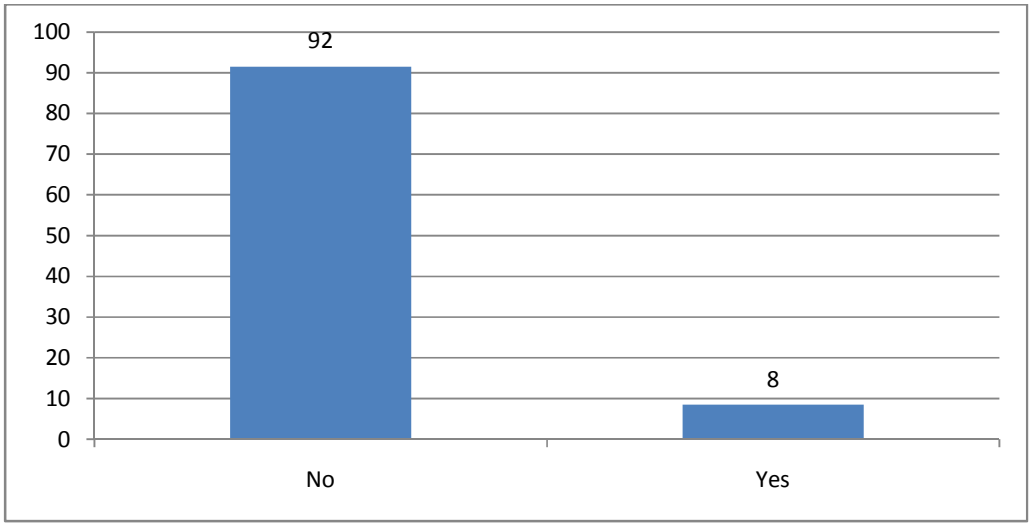
CHAPTER 5: IMPACT AND HYGIENE FACTOR

The following chapter gives an idea about the impact of NGP on issues like health, education, economics, gender and social inclusion in the NGP-GPs and also an insight into hygiene and drinking water related practices. The major and visible impact was on health and relations between both genders in the panchayat. The incidence of diarrhoea in the NGP-GPs is perceived to be reduced to a great extent and reduction of water borne diseases has also been noticed as reflected in graphs given in the chapter.

5.1 IMPACT ON HEALTH

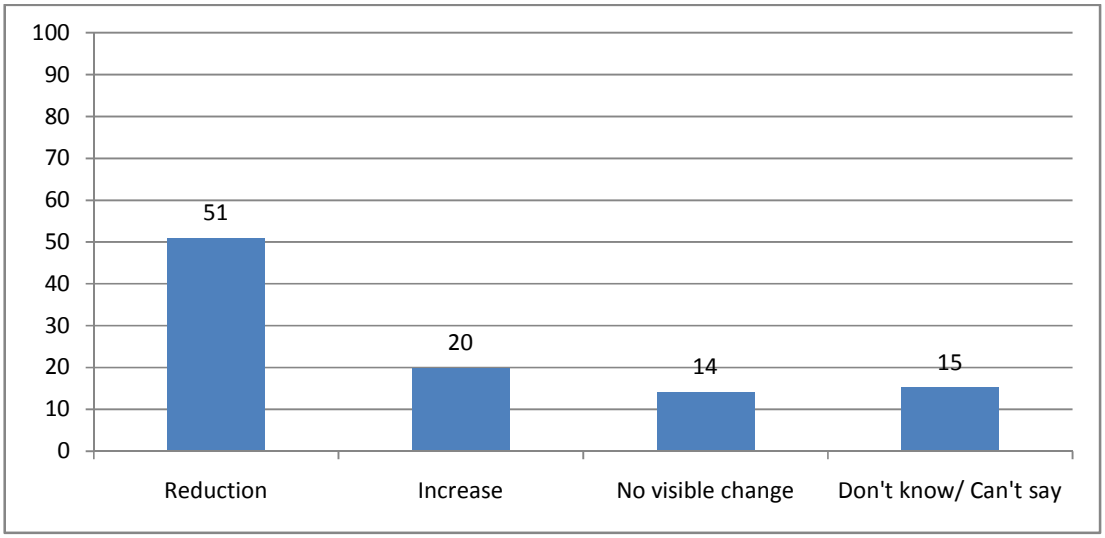
5.1.1 Water Borne Diseases

Fig 5.1: Incidences of diarrhoea in households: Two week recall (in percentage)



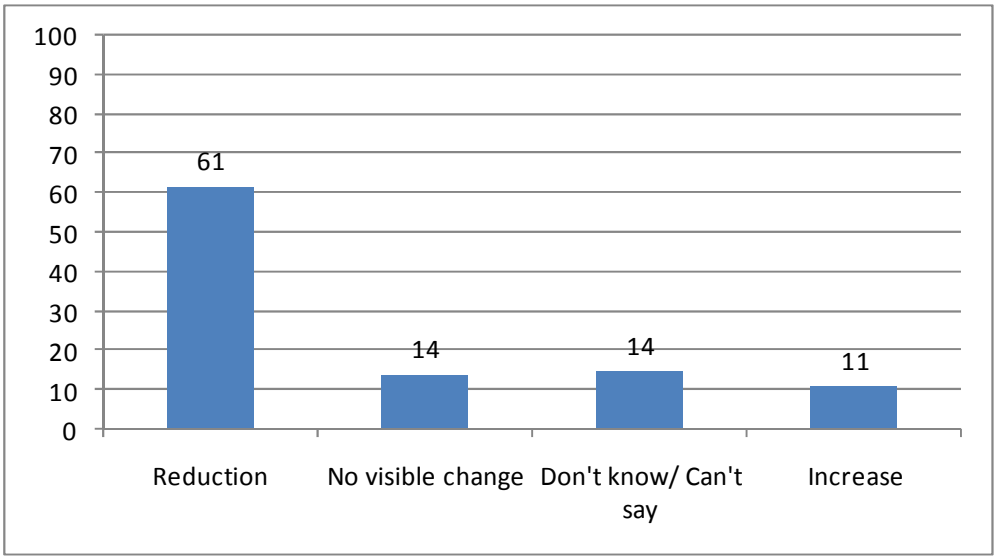
Incidence of diarrhoea (more than three loose stools during any 24 hours in last two weeks) among household- members - was reported to be 'nil' by around 92% of the households. While 8% said they have had at least one member of their family down with diarrhoeal symptoms in the past two weeks.

Fig 5.2: Households reported change in the number of days the children suffered with diarrhoea in a year (in percentage)



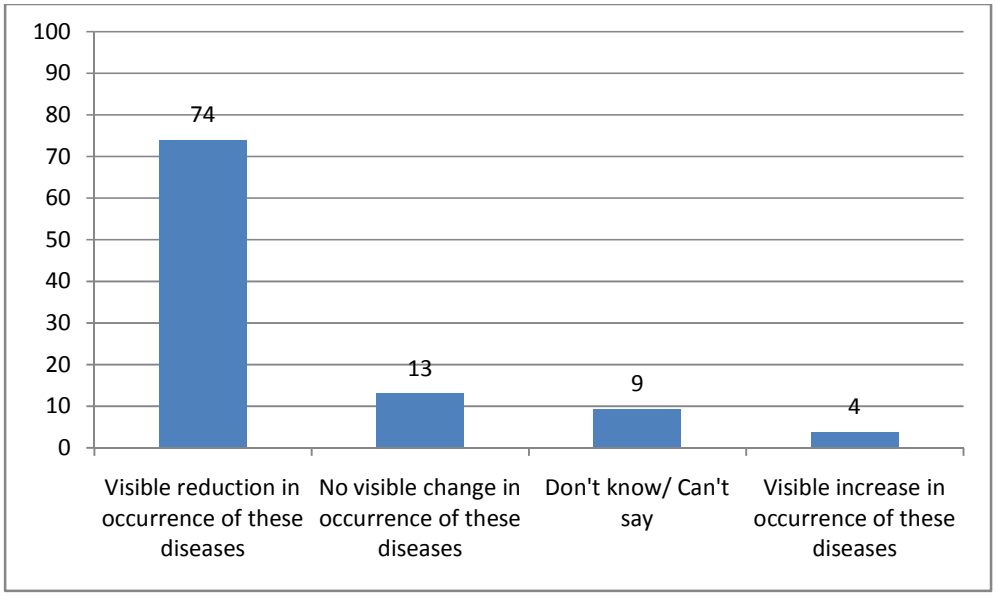
Reduction, after latrine construction, in the average annual number of days the children of the household suffered with diarrhoea - was reported by 51% of the households. 14% did not notice any visible change while 15% had no idea of any change. Interestingly 20% reported increase in the occurrence of diarrhoea.

Fig 5.3: Households reported change in the occurrence of water borne diseases (in percentage)



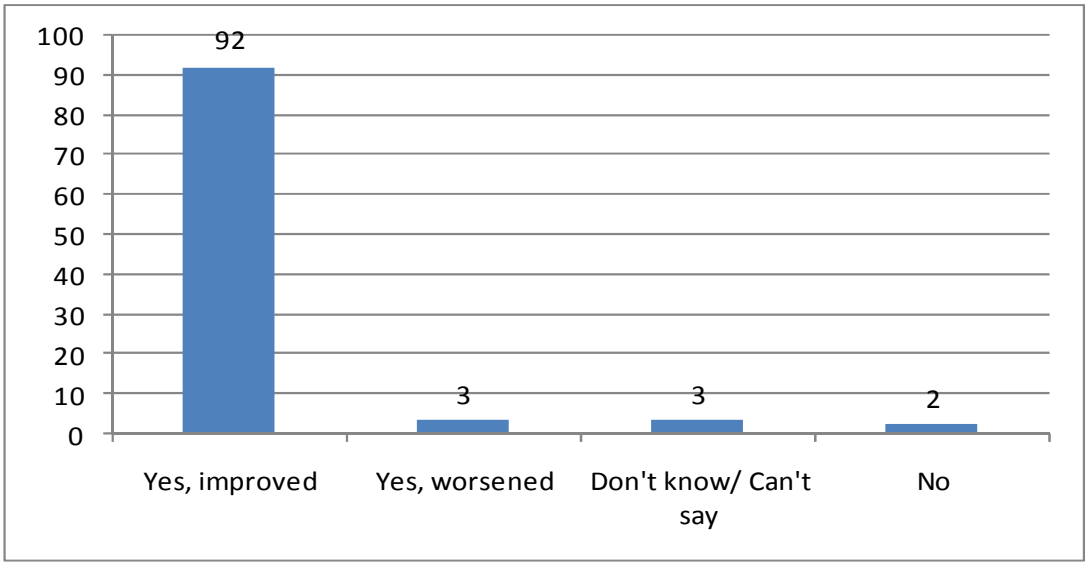
The occurrences of water-borne diseases such as (diarrhoea, dysentery, jaundice, intestinal worms, UTI, dengue, malaria, chickengunia, typhoid etc) are on the decline according to 61% of the households. 14% noticed no change in the situation. Interestingly, 11 per said these diseases were on the rise. 14 per cent respondents had no idea about the scenario.

Fig 5.4: Health workers reported change in the occurrence of diseases in households (in percentage)



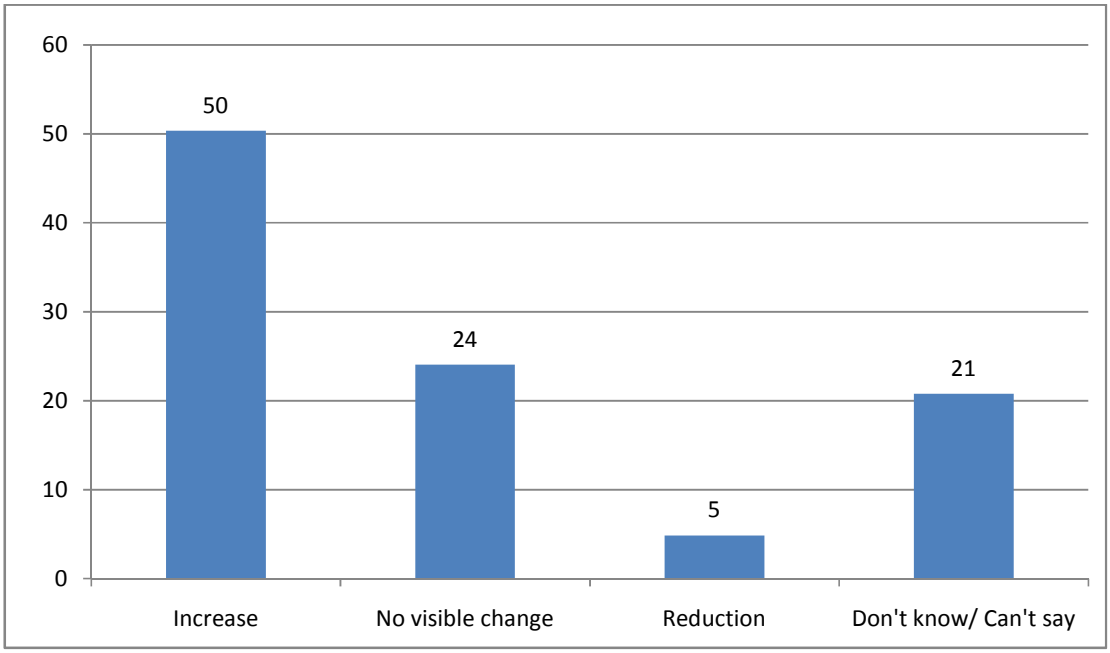
The household observations regarding the waterborne diseases seems to have found support from the health workers (74%) who too feel that there has been less number of waterborne disease cases as a result on the construction of latrines. About 13% respondents felt no change in disease occurrence, 9% respondents had no views on this aspect while 4% said that there was a visible increase in the occurrence of the disease after the latrines were constructed.

Fig 5.5: Health workers opinion regarding understanding of the households about water and excreta related diseases (in percentage)



A significant 92% health workers have said that the households understanding about water and excreta related diseases has improved in comparison to situation when the latrines had not been constructed.

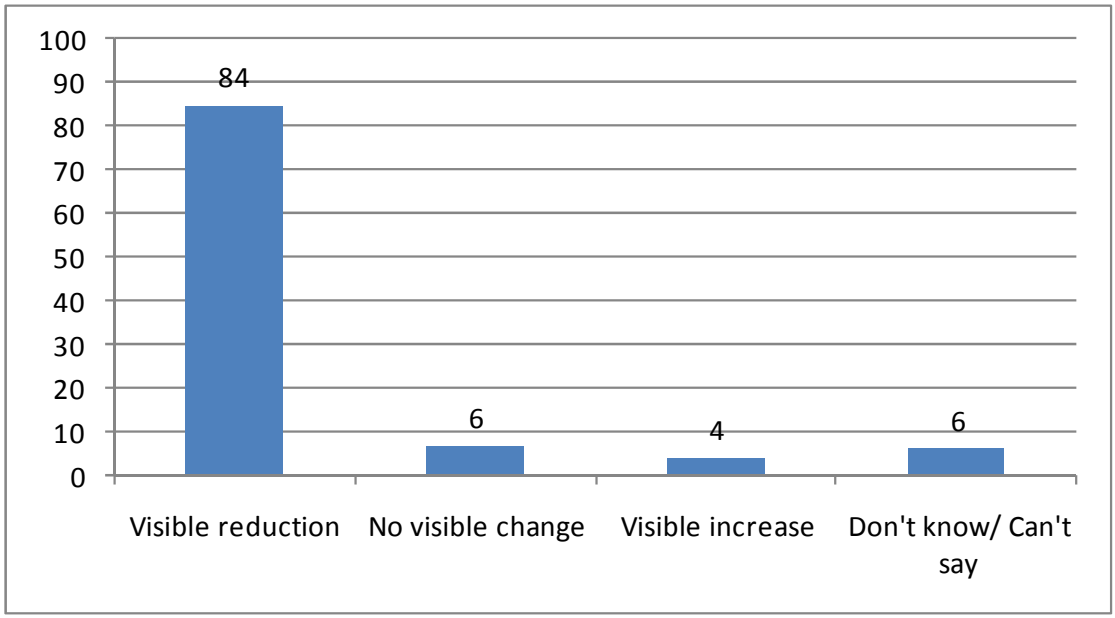
Fig 5.6: Households reported change in weight of the children (in percentage)



The finding reveals overall 50% sample households reporting gain in the body weight of the children after construction of latrines, whereas 24% felt no visible change. However 5% of the household said that the kids have lost weight.

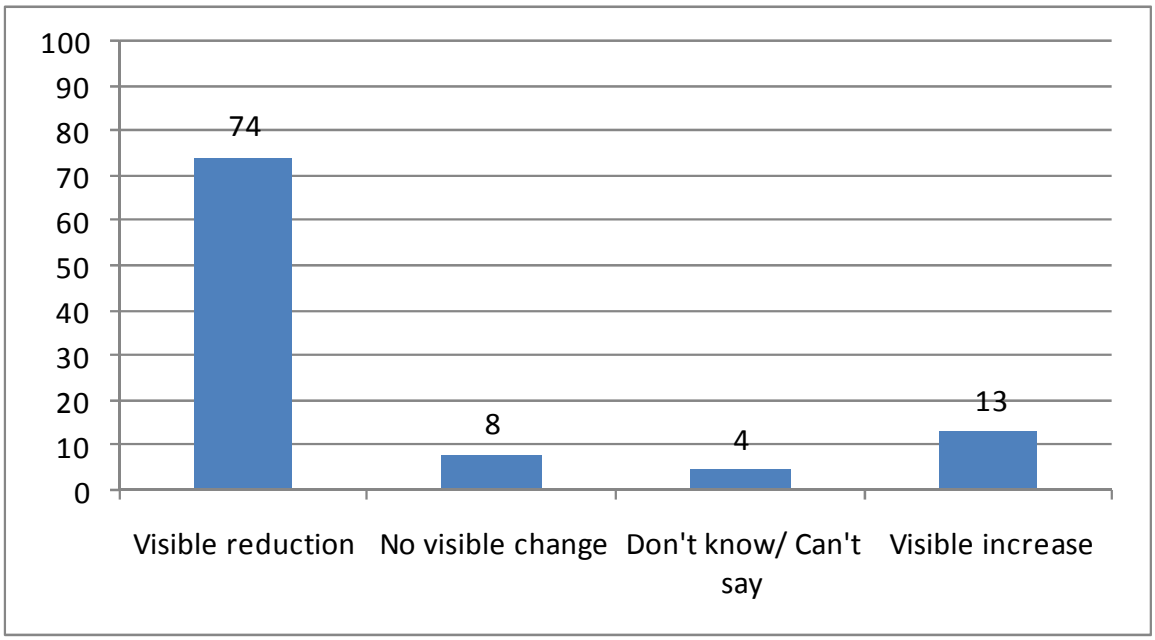
5.1.2 Mother and Infant Mortality Incidence

Fig 5.7: Infant mortality (in percentage)



Infant mortality has been on the decline after the latrines were constructed said 84% of the health workers. Only a small 6% countered this scenario, while 4% said that the child mortality rate has increased. The remaining 6% health workers had no views on this issue.

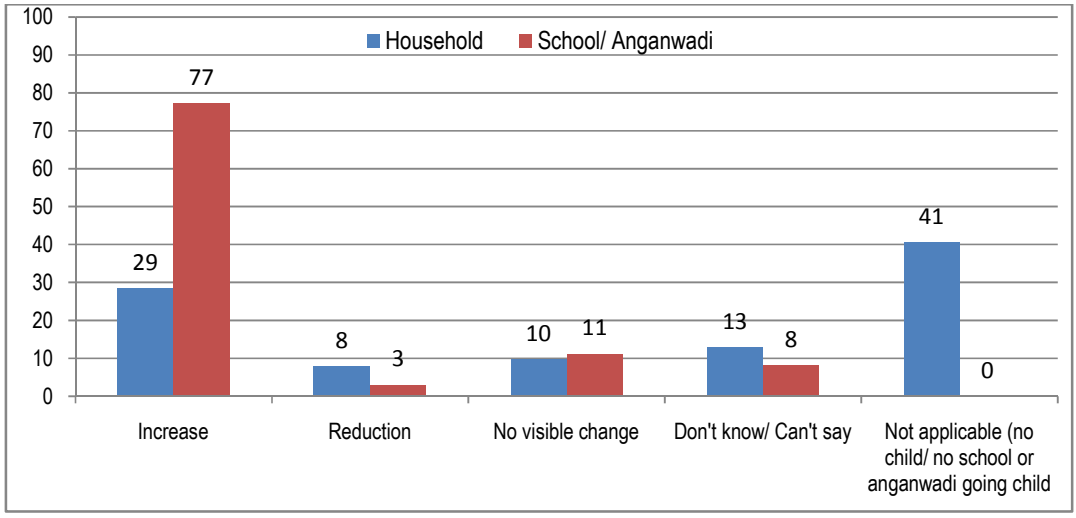
Fig 5.8: Maternal mortality (in percentage)



There has been a visible and impressive reduction in maternal mortality compared to what the situation was before latrine construction say 74% of the health workers. About 8% respondents did not notice any visible change while some 13% said that maternal mortality has been on the increase…

5.2 IMPACT ON EDUCATION

Fig 5.9: Children actually attended schools or anganwadis (in percentage)

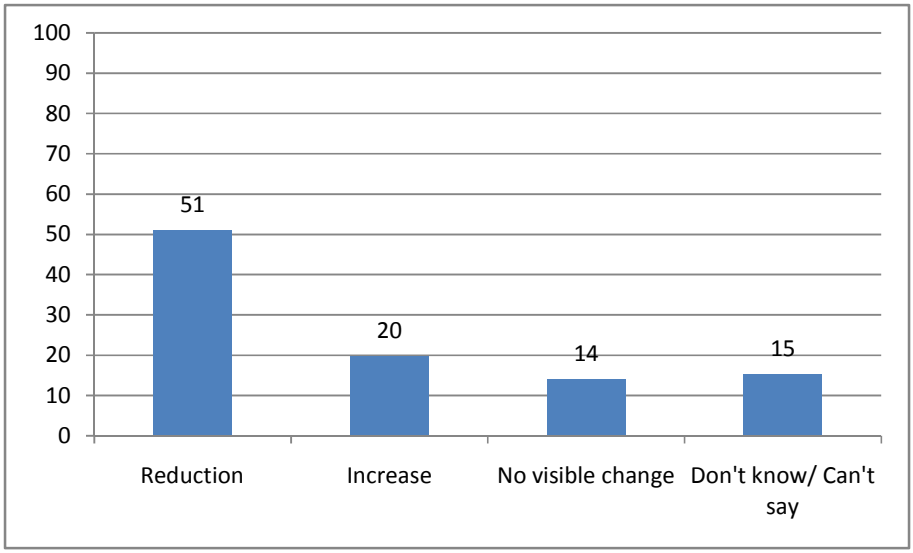


There was a marked difference in the responses received from two different categories of respondents, namely, households and school/ anganwadi workers regarding the attendance.

While 77% of the school/ anganwadi workers claimed that the attendance had shot up, on the other hand only 29% households felt that the attendance had increased. 8% in household and 3% in school/ anganwadi reported reduction, whereas 10% in household and 11% in school/anganwadi noticed no visible change in the level of attendance of children.

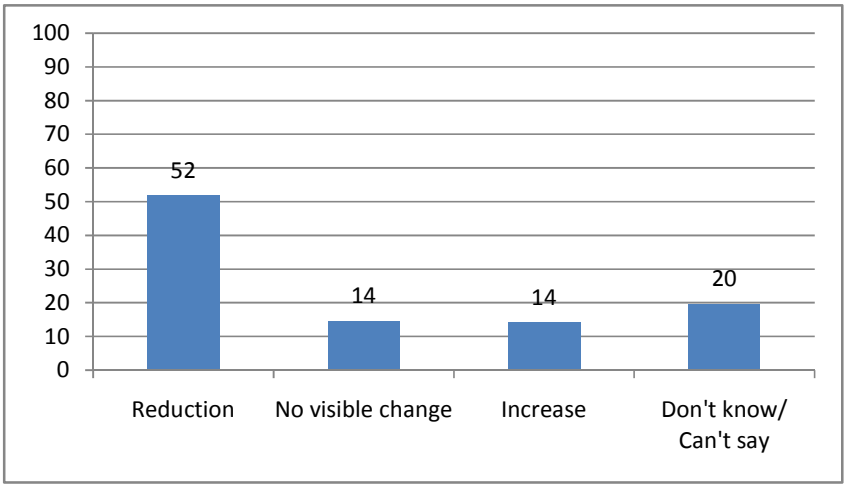
5.3 IMPACT ON ECONOMICS

Fig 5.10: Increase or decrease in the working days of household adults due to illness (in percentage)



The construction of latrines had led to less number of man-days lost of the working adults due to illness according to 51 % of the household respondents. 14% did not register any change in the situation while 15% had no idea. The remaining 20 % had the view that the number of days lost due to illness has increased.

Fig 5.11: Increase or decrease in households' total expenditure on treatment in a year (in percentage)

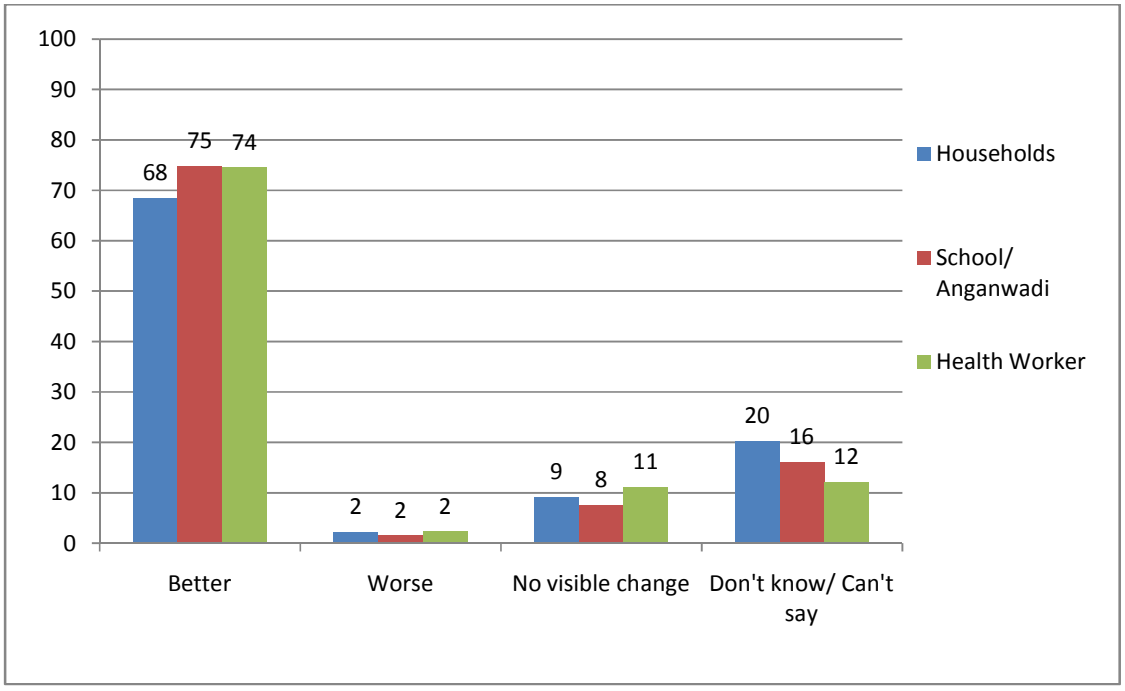


The response to the previous question regarding the man-days lost due to illness and the question above regarding changes noticed in treatment costs is indicative of the fact that construction of latrines has had a positive impact on the households' health budget. At least 52% respondents said that the medical expenses have reduced, 14% did not notice a change while 20% had no views. Some 14 % respondents said that the medical expenses have gone up.

5.4 IMPACT ON GENDER

5.4.1 Improvement in Gender Relations

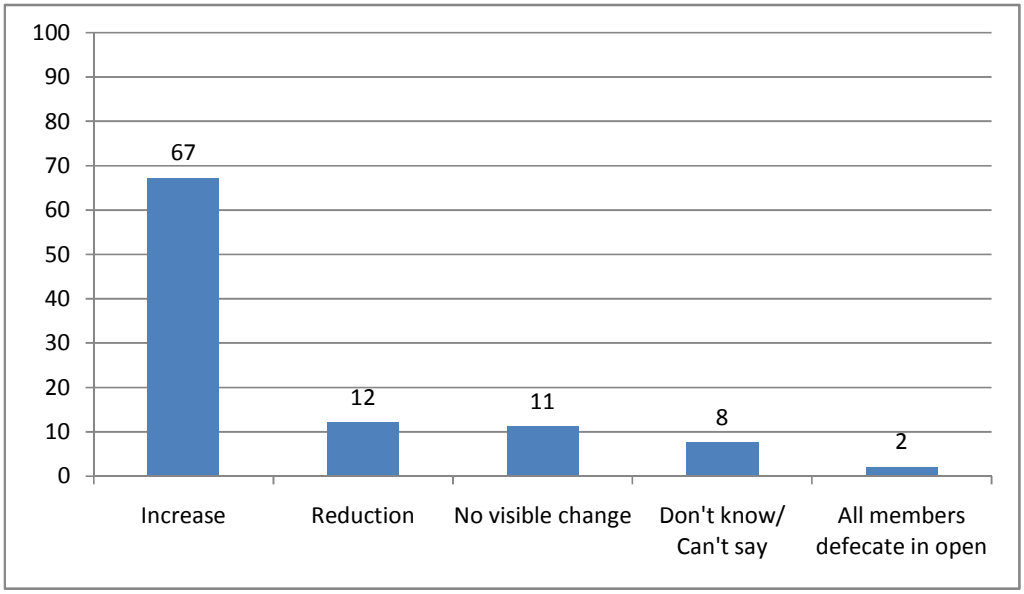
Fig 5.12: Relations (and attitudes towards each other) between both gender in the panchayat due to NGP



There are almost in unanimity amongst the households, school/ anganwadi and health workers so far as the positive changes observed in the relations (and attitudes towards each other) between both genders in the panchayat due to NGP. Between 68-75% of the respondents mentioned above feel that the relations have become better. Only a miniscule 2% felt that the relations have become worse. Others (8-11%) did not register any change while (12-20%) had no views on this aspect.

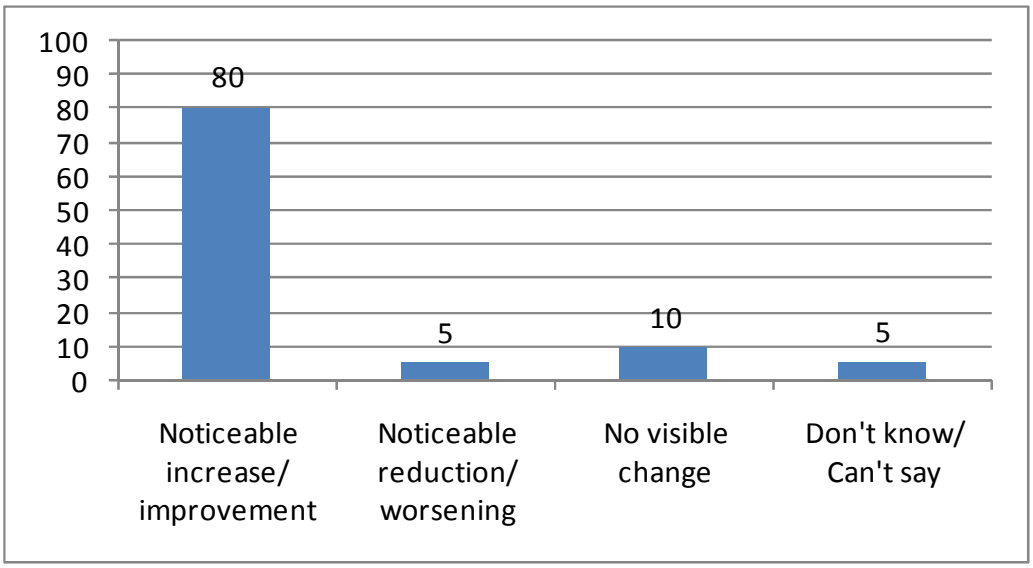
5.4.2 Female Gender Security and Safety

Fig 5.13: Households reported change in the level of physical security and safety felt by women and girls (in percentage)



Enhanced sense of personal security among women and girls was reported by 67% of the household respondents, as a result of the use of the latrines that were constructed. 12% felt otherwise. 11% did not notice any change.

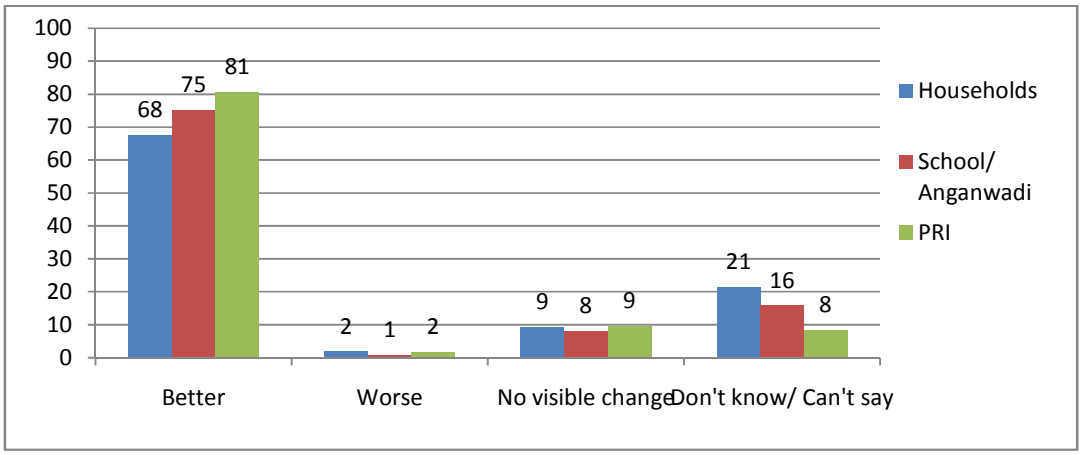
Fig 5.14: Schools/ anganwadis reported change in the level of physical security and safety felt by women and girls (in percentage)



The survey findings indicates that construction of latrines have helped women and girls. 80% of school and anganwadis reported improvement/ increase in the level of safety and physical security felt by women and girls. Only 5% respondents believed that safety and physical security of women and girls have worsened in comparison to previous year when the latrines had not been constructed. 10% respondents did not find any visible change in the level of safety and physical security.

5.5 IMPACT ON SOCIAL INCLUSION

Fig 5.15: Change in the social inclusion of scheduled castes or scheduled tribes due to NGP



As high as 68% to 81% of the households, school/ anganwadi and PRI confirm the view that social inclusion of SC/STs have improved. There are about 8% - 9% respondents who are of the opinion that there was no evidence of such a change while 8% - 21% respondents had no views to share on this issue. Only a negligible 1% - 2% felt that the social inclusion of the ST/STs that the situation has worsened.

5.6 STATUS OF HYGIENE PRACTICES (HAND WASHING AND DRINKING WATER)

5.6.1 Hand Washing Practices

Regarding safe hand washing practices 'after defecation', around 52% households reported that the all the household members wash hands on all or most occasions and used either soap or fresh ash. Regarding the same being true for 'before eating food', around 40% responded positively.

Fig 5.16: Safe hand washing reported after defecation (in percentage)

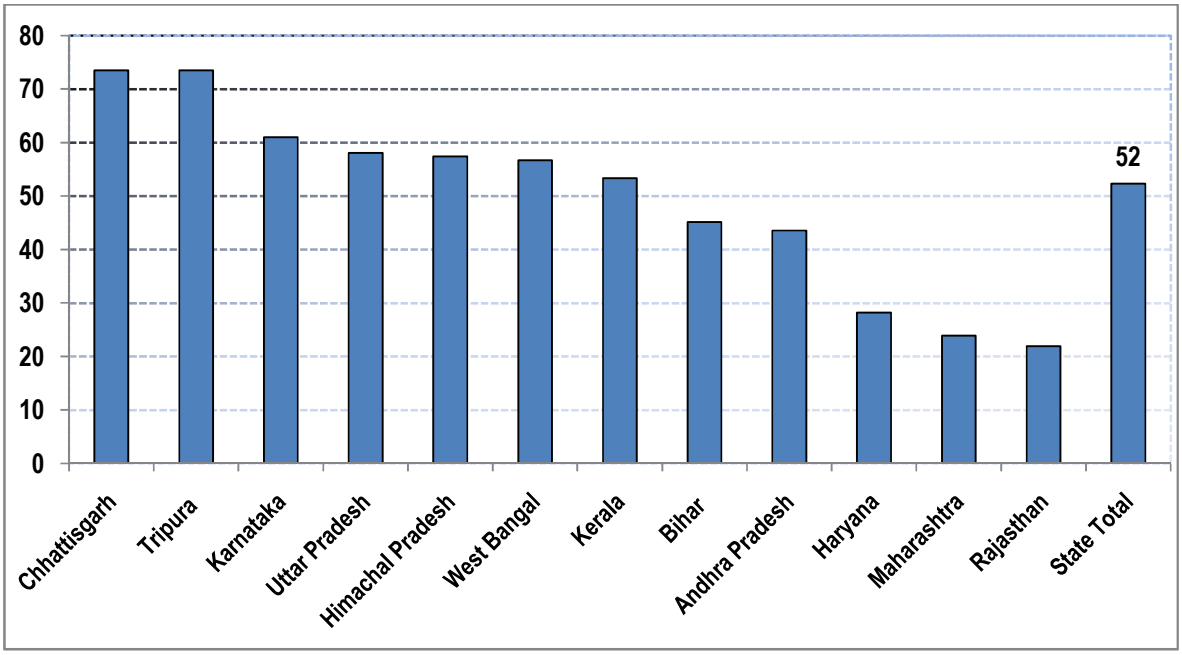
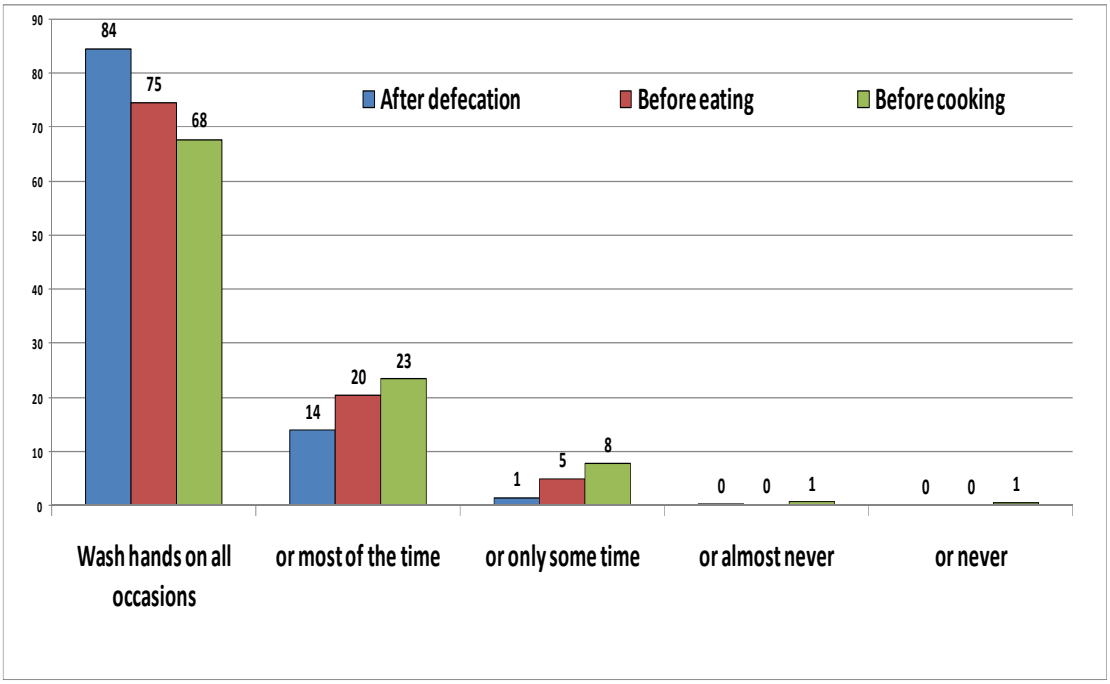


Fig 5.17: Frequency of washing hands reported among households (in percentage)

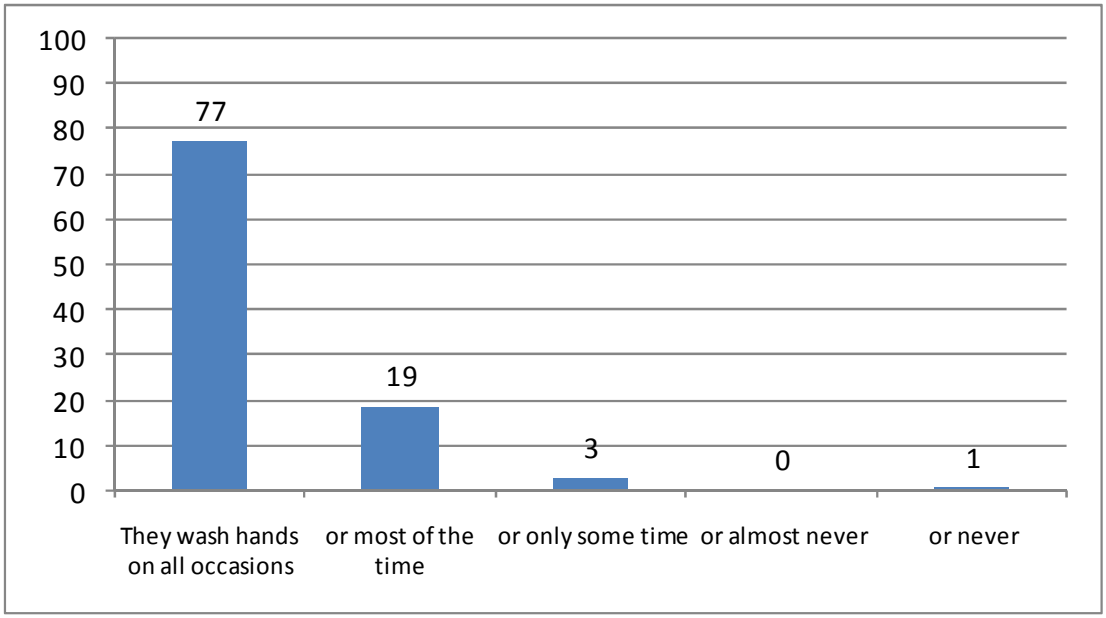


Regarding washing hands after defecation, 84% sample households said they wash hands on all occasions while 14% wash most of the time and 1% reported that they are very regular with the practice.

Washing hands before meal is a dominant (75%) practice amongst the household members who responded to the questionnaire. 20% wash hands before meal most of the time. Only 5% were reported that they wash hands only some time.

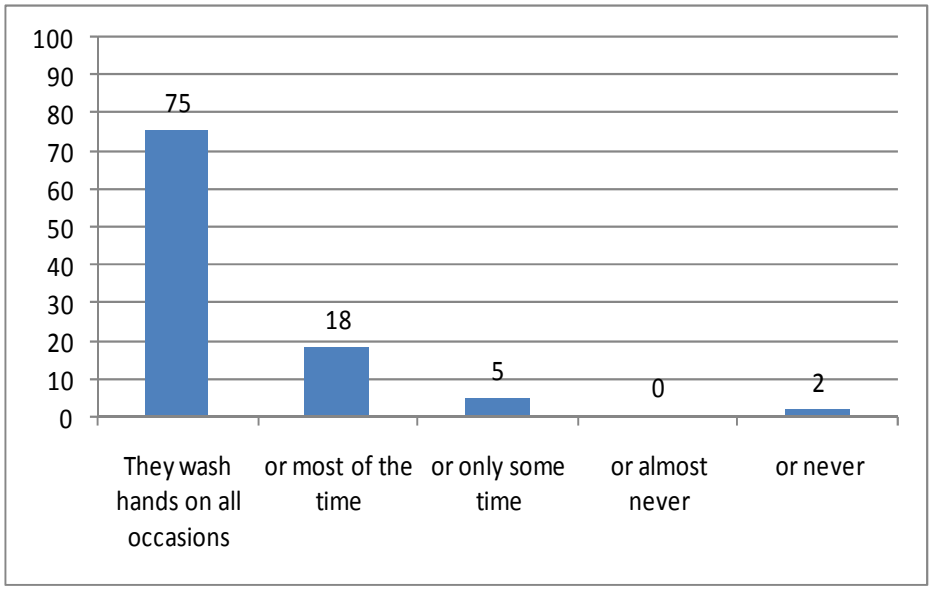
Washing hands before cooking in the responding households was a regular practice in 68% of the sample. 23% respondents said that they wash hands most of the time and 8% only some time.

Fig 5.18: Schools/ anganwadis staff reported washing hands before eating (in percentage)



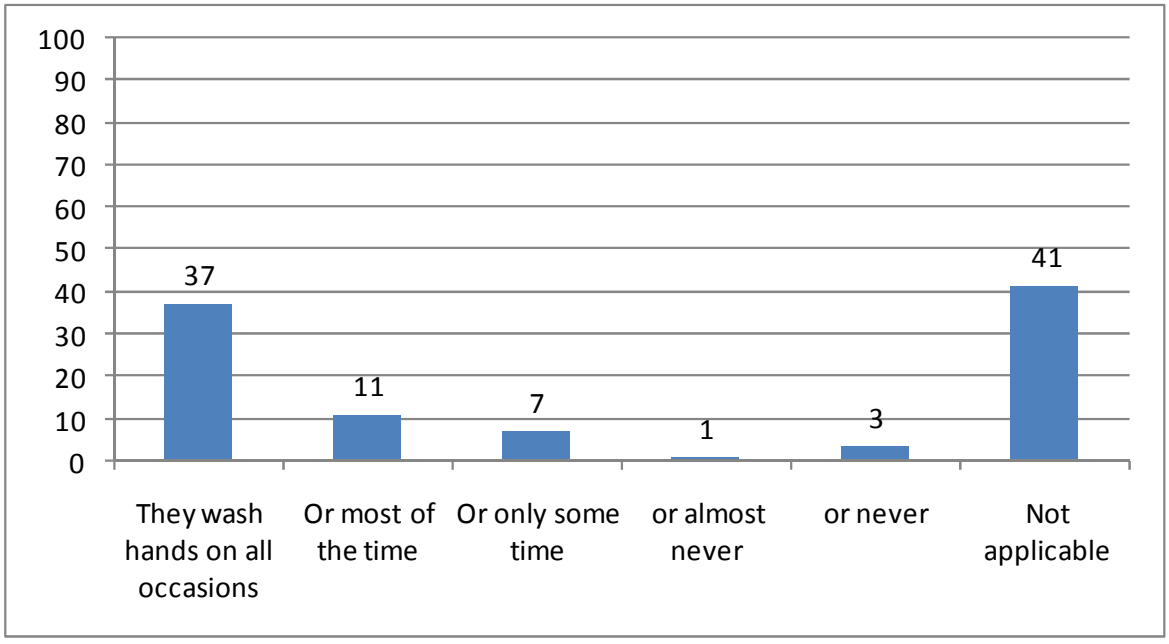
The school and Anganwadi staff too has been washing hands before eating food as a dominant (77%) practice. Nearly 19% wash their hands most of the time before eating food. Only 3% reported that only some time they wash hands before eating.

Fig 5.19: Schools/ anganwadis staff reported washing hands before cooking (in percentage)



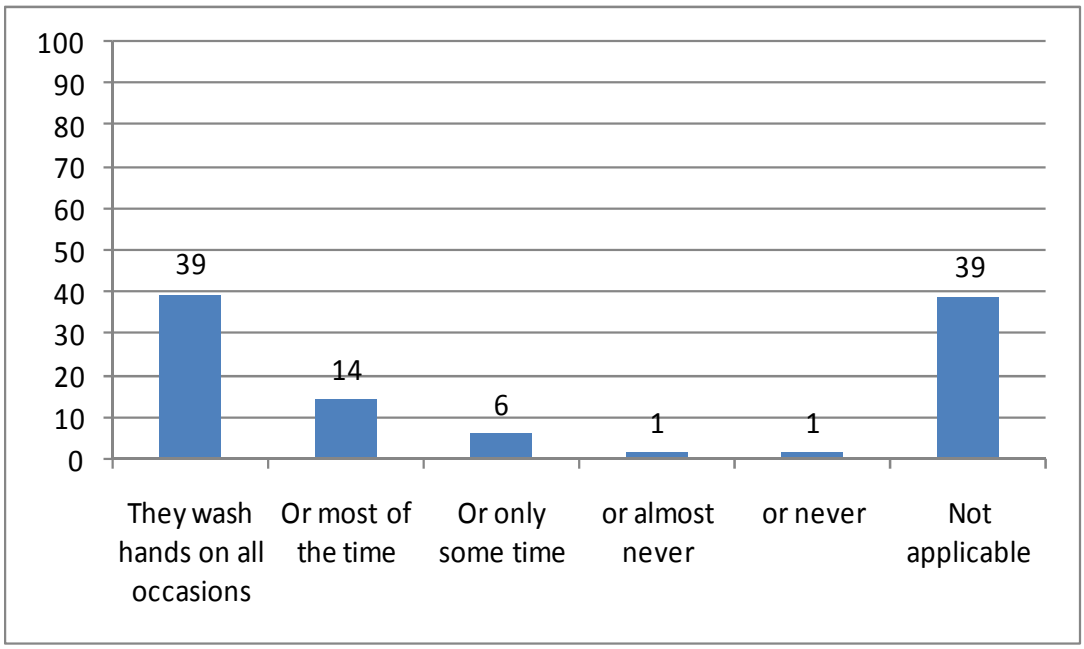
Washing hands before cooking amongst the school/ anganwadi staff is a much seasoned practice (75%) in comparison to the households which was 68% as explained in the figure before the one above. 18% respondents said that they wash hands most of the time and 5% said that they do so only some time.

Fig 5.20: Schools/ anganwadis staff reported washing hands before eating (in percentage)



In only 37% households' hand washing practices has been reported before feeding the children. Nearly 11% respondents in households wash their hands most of the time not always. The 41% not applicable response is attributed to the households wherein the children are independent (above 12 yrs of age).

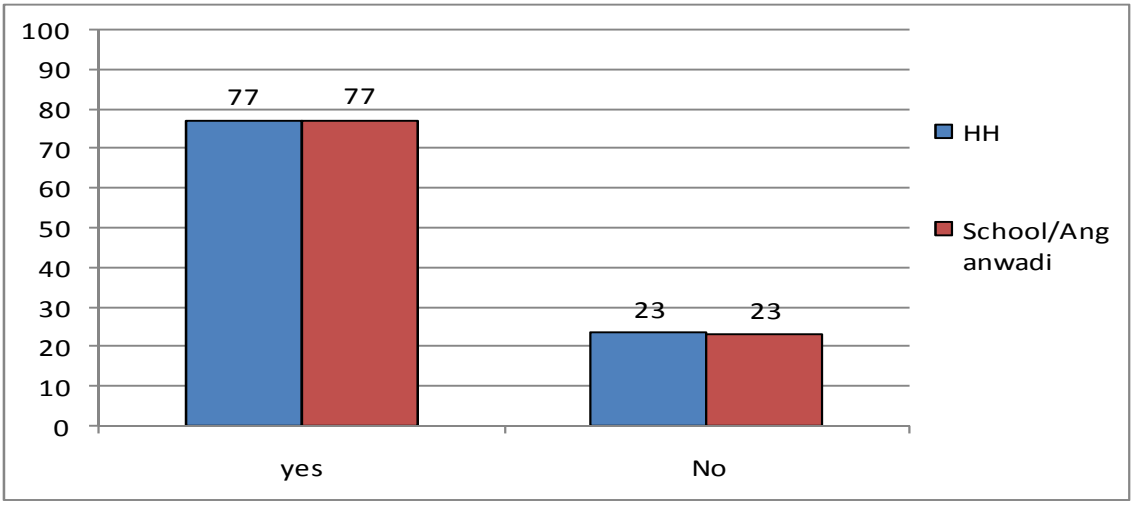
Fig 5.21: Households reported washing hands after handling livestock (in percentage)



Out of 6122 households who have livestock, approx 39% (2387 households) wash hands on all the occasion after handling live stock whereas negligible 1% (61 households) said that they never and almost never wash their hands.

5.6.2 Availability of Soap or Fresh Ash for Hand Washing

Fig 5.22: Availability of soap or fresh ash for hand washing around the latrine/ hand washing facility: Observation (in percentage)



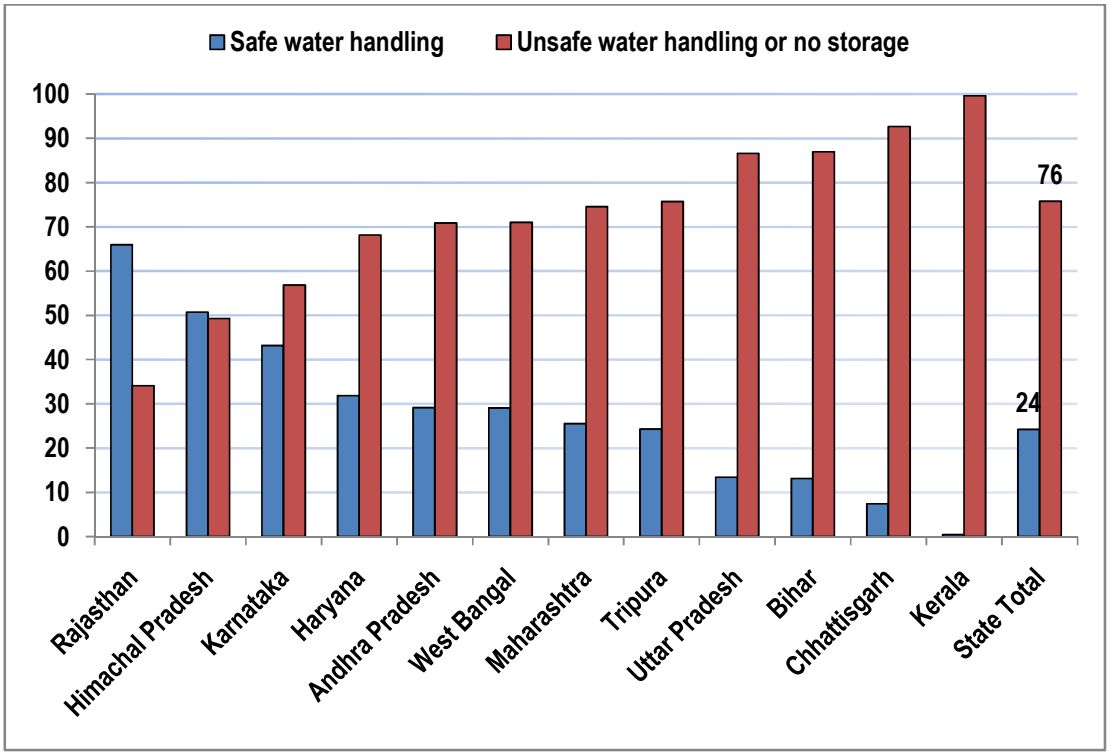
Responses regarding the availability of soap or fresh ash around the latrine/ hand washing area reveal that in around 80% of the cases it is there while in little over 22% cases (households and School/ Anganwadi) do not have these items.

5.6.3 Safe Drinking Water Storage and Handling

Water handling practices prevalent among households, school and anganwadis were defined as safe practices if they involved

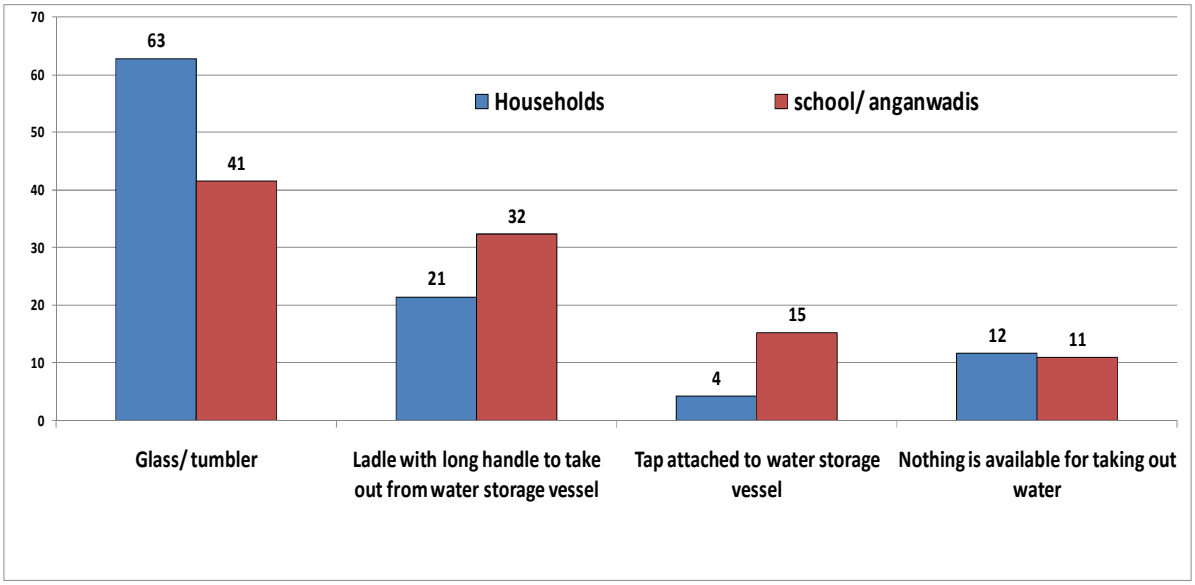
- Either using a ladle with long handle
- Or a tap attached to the drinking water storage vessel/ facility
- Or the household respondents reported that they tilted the vessel to take out drinking water.

Fig 5.23: Safe practices for drinking water handling (in percentage of households)



The figure given below describes safe water handling practices among households, school and anganwadis.

Fig 5.24: Methods followed for taking out drinking water from the water storage vessel (in percentage)

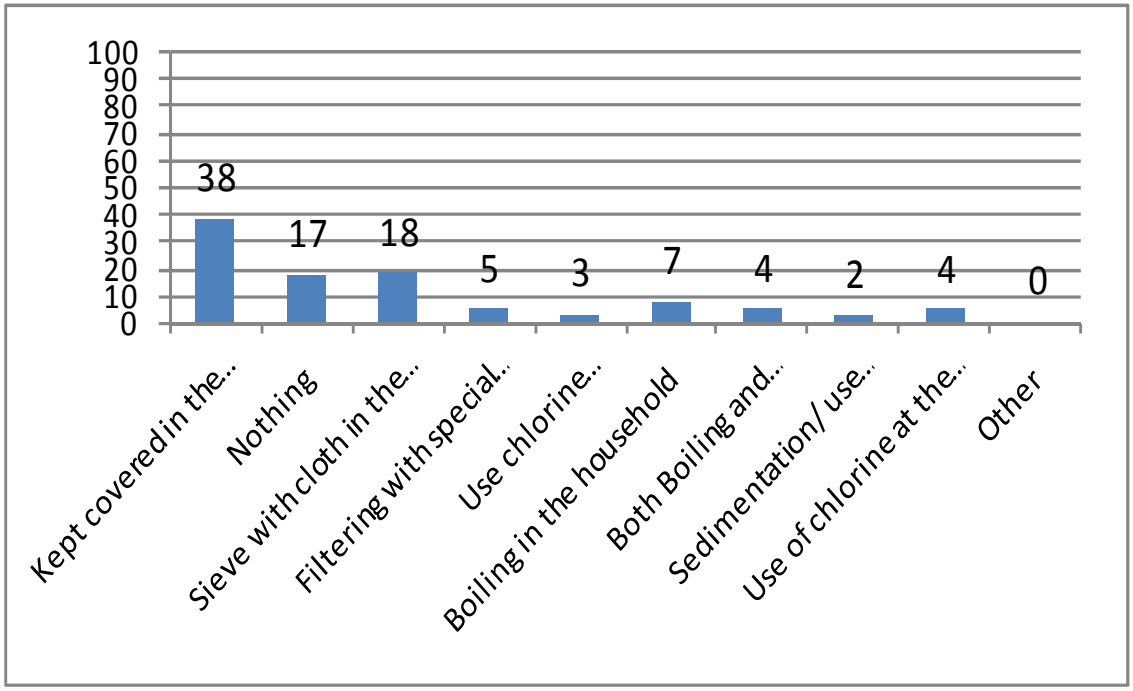


Thus, out of 83% sample households that store drinking water, only 25% of those 83% use safe water handling practice and out of 76% of the sample schools and anganwadis that store drinking water, only 47% of those 76% use safe water handling practice.

It has been observed that from the 8252 (83% of the) sample households who store drinking water, 63% of them use glass or tumbler to take out the water from water storage vessel. Whereas 12% of the total households sample have no particular utensil to take the drinking water out from the water vessel. Only 21% of the households use ladle with long handle for this purpose , while 4% had tap attached to the vessel.

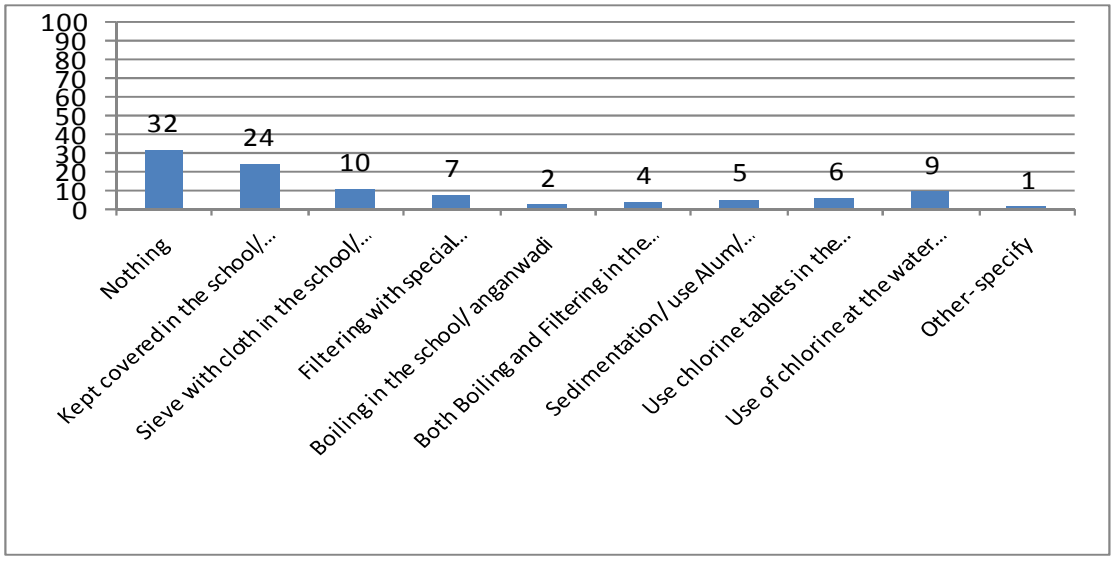
Out of 1950 (76% of the sample) schools and anganwadis in 12 states who store drinking water 41% of them use glass or tumbler to take out drinking water from the vessel. In 11% of the schools and anganwadis nothing in particular is kept to take out from the water storage vessel. 32% of the schools and anganwadis use ladle with long handle. 15% of the schools and anganwadis use water storage facility that had tap attached to it.

Fig 5.25: Methods used for keeping the water clean and pure at households or at source (in percentage)



Nearly 38% of the households reported that they cover their drinking water storage container in order to keep the water clean and pure. About 17% of the total households in 12 states do nothing to keep the water clean or pure. Sieving the water is practised in 18% of the sample households. Only 4% of the total sample use chlorine at the source for cleaning the water. Boiling water is seen as a practice in 7% of the households.

Fig 5.26: Methods used for keeping the water clean and pure by schools/ anganwadis (in percentage)

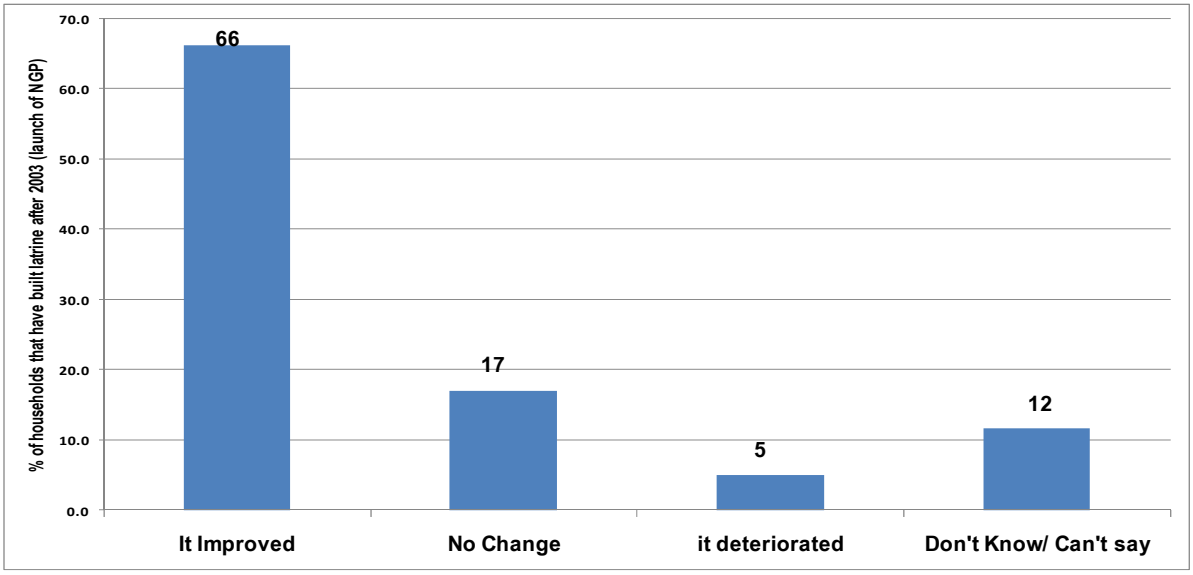


Regarding methods adopted for keeping the water clean and pure, it was reported that in nearly 24% schools and anganwadis water is kept covered, 10% sieve water with cloth and 9% use chlorine at water source. Around 7% schools/ anganwadis also filter water with special equipments. 32% of the schools and anganwadis take no measures to keep the water clean and pure.

5.7 Impact of NGP process (on TSC): Improvement or deterioration in the pattern of usage of latrine

The households that have built their latrine before 2003 (before NGP was launched), were asked about their observation - of whether the pattern of usage of their already constructed latrine by their household members – had improved or deteriorated, after the NGP year of their Panchayat (the year that their respective Panchayat received NGP was read out of to the m). 66% of these eligible households reported that the household pattern of usage had improved (implying the impact of preparation/ IEC activities of NGP). 17% felt there was no change in the usage pattern. 5% reported deterioration in the usage pattern, while 11% had given no response.

Fig 5.27: Improvement or deterioration in household pattern of latrine usage after their respective NGP year (in percentage)



MAHILA MELAVA , SOCIAL INCLUSION OF FEMALES OF ALL CASTES FROM THE SATARA DISTRICT

40 THOUSAND WOMEN ATTENDED THIS MELAVA.

CHAPTER 6

Sustainability of NGP Status

CHAPTER 6: SUSTAINABILITY OF NGP STATUS

This chapter will present the study findings related to four aspects of sustainability of NGP status, viz. factors critical for achieving the NGP eligibility, reasons for not using latrine, factors critical for sustaining the NGP status and utilisation of NGP amount (for recommended, prohibited and other purposes).

An attempt is also made to look at sustainability from three major dimensions of social-institutional, technical-financial and environmental/ impact sustainability.

6.1 FACTORS CRITICAL FOR ACHIEVING NGP STATUS

6.1.1 Construction of Individual Household Latrine (IHHL)

1. Present impediments/ reasons for not constructing IHHL: reported by households that do not have access to latrine at present

When households having no IHHL were asked about the reasons (termed here as present impediments/ present reasons), to which they attribute non-construction of IHHL for their household, their responses were mainly recorded among three categories.

- First category of response was when respondents attributed non-construction of IHHL mainly to their perceived neglect by PRI (the Sarpanch) due to various reasons. The perceived reasons for neglect included 'we were neglected because… we were poor/ SC/ ST/ woman-headed households/ live in interior areas).
- Second category of response was when they attributed non-construction of IHHL mainly to their own reservations/ reluctance/ refusal due to various reasons. The reported reasons for refusal included poverty, water scarcity, or 'did not want the latrine'.
- Third, if they attributed non-construction of IHHL mainly to independent reasons such as 'we did not have enough land/ we became a separate household later' or others, they were recorded as such. Also if they attributed neglect or refusal to the reason of water scarcity, it was later combined into a single category of water scarcity.

For the purpose of analysis, the reasons which figured prominently (had a larger share) in the data, were made into a category on their own. The smaller reasons were merged into the larger groups where appropriate.
Thus,

1. '**Poverty** (we were neglected/ refused)' is presented as a single group, combining the responses of 'we were (felt) neglected because we were poor' and 'we refused because we were poor'.
2. **Not enough land** is presented independently.
3. **We were neglected** (other reasons)' is presented as a single group, combining the responses of 'we were (felt) neglected because… we were not one of the kins/ favourites/ groups in favour of the Sarpanch/ Pradhan, …we belonged to SC/ST/ minority religion, …our head of the household is a woman/ very old/ a differently abled person, …we live in interior areas'.
4. **Separate household later** is presented independently.
5. **Water scarcity** (neglected/ refused) is presented as a single group, combining the responses of 'we were (felt) neglected because there is water scarcity' and 'we refused because there is water scarcity'.
6. **'Did not want the latrine'** includes the response 'we refused because we did not want the latrine'.

Fig 6.1: Present reasons for not constructing IHHL: Reported by households without access to latrine
(in percentage of reasons)

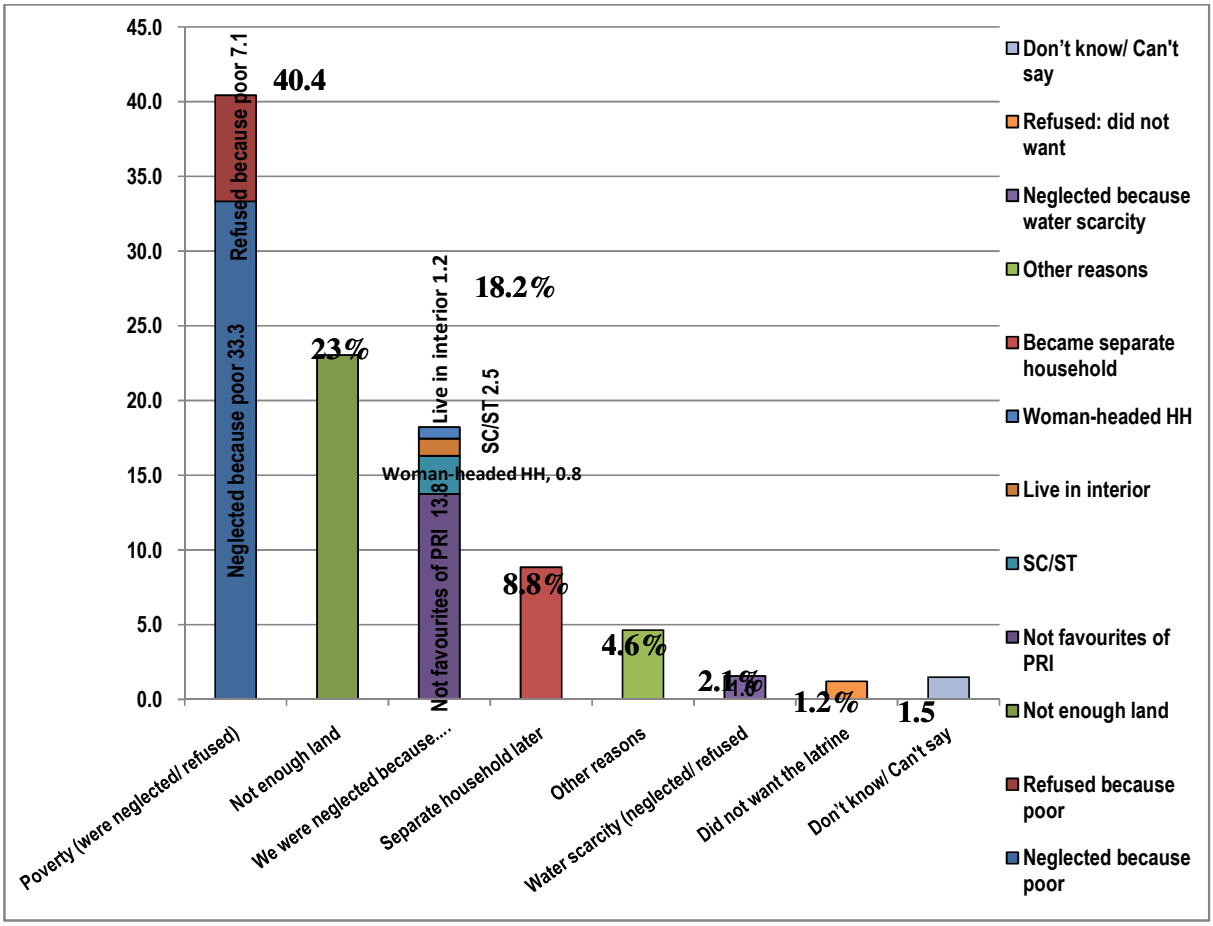


Fig 6.2: Present reasons for not constructing IHHL: States arranged in descending order of access
(in percentage of reasons)

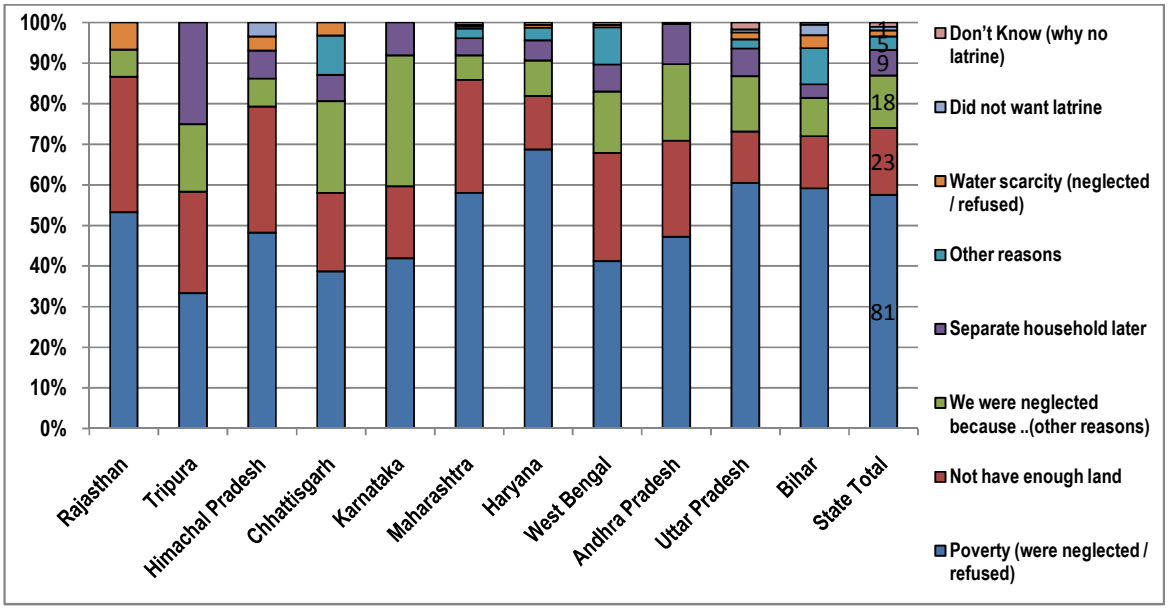


Fig 6.3: Present reasons for not constructing IHHL: overlaid on percentage of households without access to latrine: States arranged in descending order of access (in percentage of households)

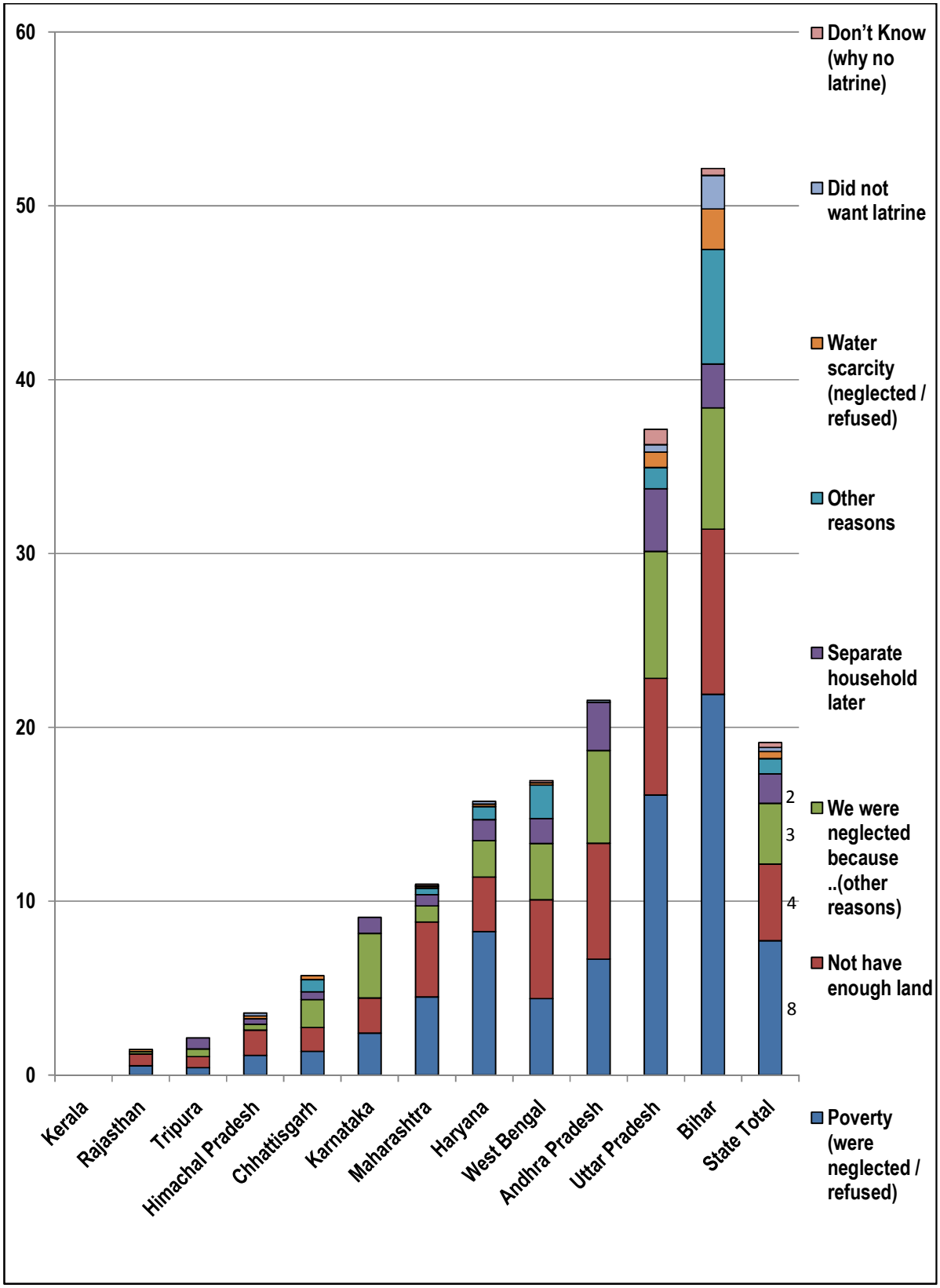


Table 6.1 a: Present reasons for not constructing IHHL: overlaid on percentage of households without access to latrine: States arranged in descending order of access (in percentage of households)

% of sample households	Poverty (were neglected / refused)	Not have enough land	We were neglected because ..(other reasons)	Separate household later	Other reasons	Water scarcity (neglected / refused)	Did not want latrine	Don't Know (why no latrine)
Kerala	0	0	0	0	0	0	0	0
Rajasthan	1	1	0	0	0	0	0	0
Tripura	0	1	0	1	0	0	0	0
Himachal Pradesh	1	1	0	0	0	0	0	0
Chhattisgarh	1	1	2	0	1	0	0	0
Karnataka	2	2	4	1	0	0	0	0
Maharashtra	4	4	1	1	0	0	0	0
Haryana	8	3	2	1	1	0	0	0
West Bengal	4	6	3	1	2	0	0	0
Andhra Pradesh	7	7	5	3	0	0	0	0
Uttar Pradesh	16	7	7	4	1	1	0	1
Bihar	22	9	7	3	7	2	2	0
State Total	**8**	**4**	**3**	**2**	**1**	**0**	**0**	**0**

Table 6.1 b: Reasons for not having IHHL: overlaid on percentage of households

S. No	% of sample households	Total
1	Poverty (were neglected / refused)	8.0
2	Not have enough land	4.0
3	We were neglected because ..(other reasons)	3.0
4	Separate household later	2.0
5	Other reasons	1.0
6	Water scarcity (neglected / refused)	0.0
7	Don't Know (why no latrine)	0.0
8	**No access to IHHL (total)**	**19.1**

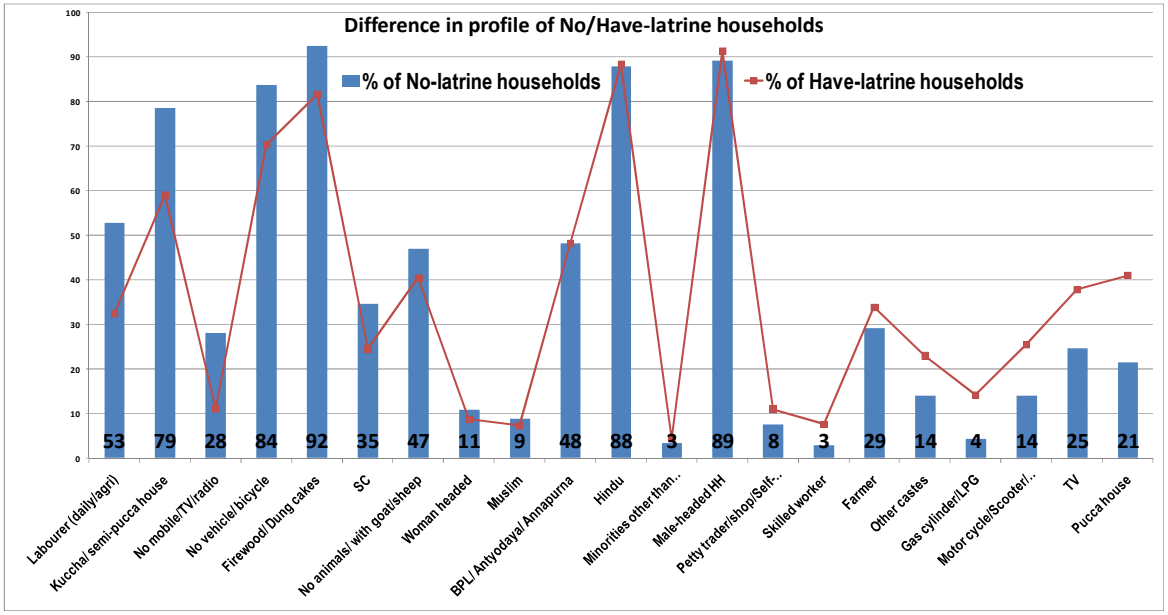
Overall, the present impediments to constructing an IHHL, as reported by the households that do not have an IHHL are as follows (Given in parentheses are: approximate % of households that reported that reason – obtained by overlaying these reasons on the households that do not have access to latrine):

- Reasons directly related to poverty constitute the single biggest factor constituting 40% of the reasons for not constructing an IHHL. The two parts of this factor are: 'We were neglected because we are poor' - topping the list of reasons and 'we refused because we were poor' (together reported by approximately 6.4% households).
- This is followed by 'not enough land' as the second largest reason i.e. 23% of the reasons (reported by approximately 4.4% households).
- 'We were neglected (by the PRI) because…' of reasons other than poverty constitutes the third largest group of reasons reported by households amounting to 18% of the reasons. These reasons for felt neglect include – 'were neglected… because not kin/ favourites of the PRI': 14%, 'were neglected… because we belong to Scheduled Caste/ Tribe: 3%', 'were neglected… because we live in interior areas: 1%' and 'were neglected… because the head of the household is a woman':1% (together reported by approximately 3.5% households).

- Together these three groups, viz. poverty, not enough land and neglect by PRI cover around 82% of the reasons reported by households for not having an Individual Household Latrine (reported by approximately 15.6% of the households out of 19.1% households that do not have access to a latrine).
- Alternatively felt 'neglect by PRI' attributed to various reasons (neglected because 'we are poor':33.3%, combined with not favourites/kin, SC/ST, interior area, woman-headed: 18%) is the single largest factor amounting to more than 51% of the reasons. (reported by approximately 9.9% of the households out of 19.1% households that do not have access to a latrine)

2. Profile of the households not having access to latrine (compared to profile of households having access to latrine)

Fig 6.4: Profile of the households not having access to latrine (compared to profile of households having access to latrine): (in percentage of that No/Have-latrine households)

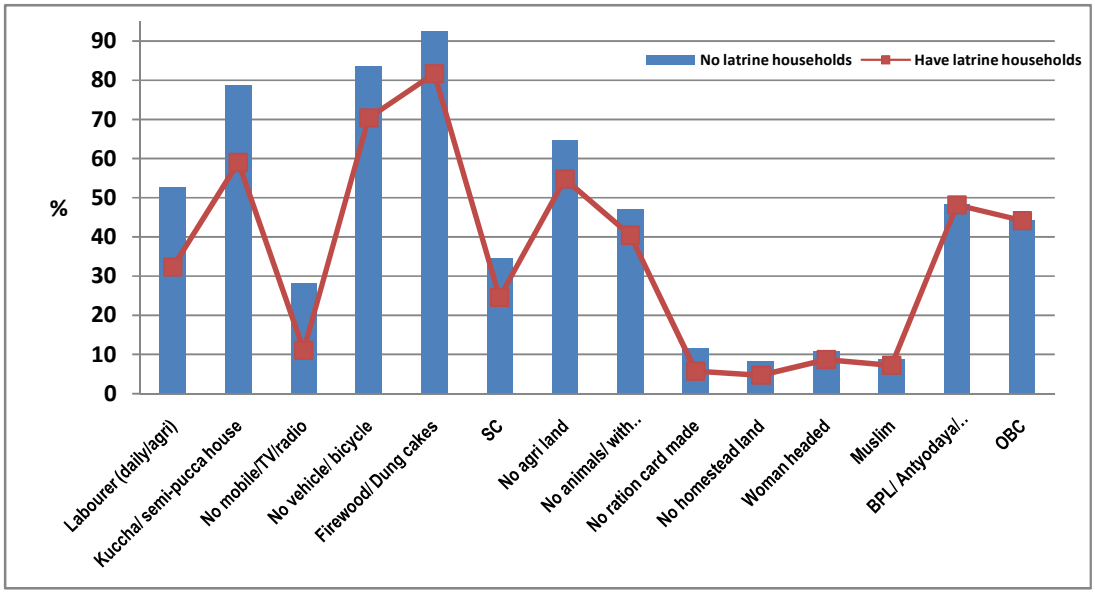


Profile of No-latrine households

Overall, the factors – found to be more accentuated in the socio economic profile of the households that do not have access to latrine (No-latrine households), as compared to profile of households that have access to latrine (Have-latrine households) are as follows: (arranged in descending extent of accentuation/ differentiation between have and have-nots)

- The primary occupation is labour for wages (as daily wage labourers or agricultural labourers) (difference of 20%). To elaborate, the figure shows that while 53% of the No-latrine households have their primary occupation as labour for wages (daily wage labour or agricultural labour), only 32% of the Have-latrine households have this primary occupation. i.e. the primary occupation of labour for wages – is found accentuated among No-latrine households (more) by 20% as compared to Have-latrine households.
- Have Kuchha/ semi-pucca (at least walls are Kuchha) type of house (difference of 20%)
- Do not have any phone/ mobile/ TV or radio (difference of 17%)
- Either have no vehicle of their own or have bicycle (difference of 13%)
- Firewood is their primary source of cooking fuel, followed by dung cakes (difference of 11%)
- Head of the household belongs to a Scheduled Caste (SC) (difference of 10%)
- Have no animals as assets followed by having goat/sheep (difference of 7%)
- Ration card is not made for their household (may/ may not have applied) (difference of 6%)

Fig 6.5: Profile of No-latrine households (in detail)

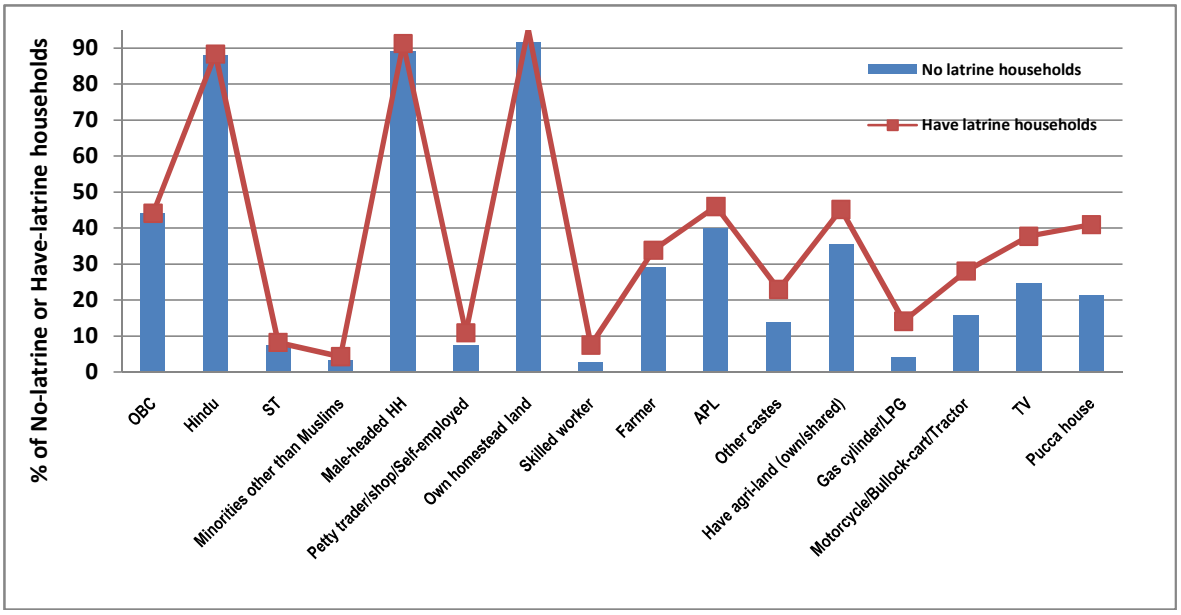


Profile of Have-latrine households

Similarly, the factors found to be more accentuated in the socio-economic profile of Have-latrine households, as compared to profile of No-latrine households are as follows: (arranged in ascending extent of accentuation/ differentiation between have and have-nots):

- Having an APL ration card (difference of 6%)
- Belonging to 'Other castes' (other than SC/ ST/ OBC) (difference of 9%)
- LPG/ Gas cylinder as the primary cooking fuel (difference of 10%)
- Having motorcycle/ scooter or a tractor (difference of 13%)
- Having a TV (difference of 13%)
- Having a Pucca house (difference of 20%)

Fig 6.6: Profile of Have-latrine households (in detail)



Thus, the highlights in the socio-economic profile are:

No-latrine households are characterised by poverty. Two topmost indicators of being poor (difference of around 20% on either indicator) were found to be the following:

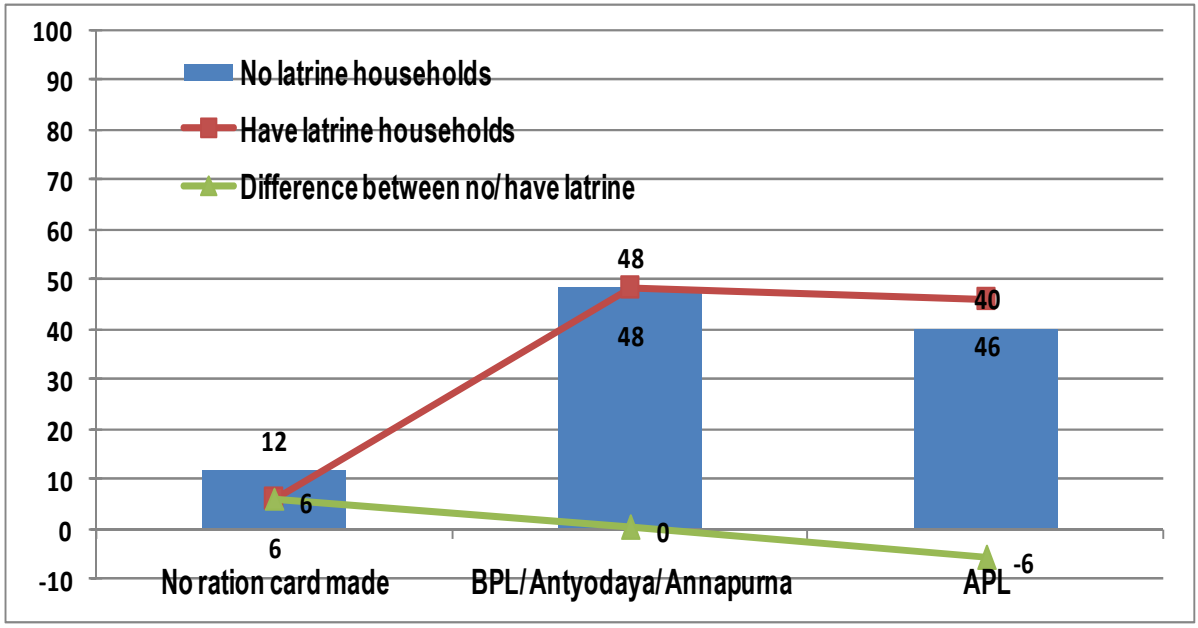
1. Primary occupation of the household being 'labour for wages' (as daily wage labourers or agricultural labourers) and
2. Have *Kuchha/ semi-pucca* type of house

If ration card status is to be looked at as an indicator of poverty, 'not having a ration card at all' is what differentiates (with a difference of around 6%) from the have-latrine households.

'Having BPL/ Annapurna/ Antyodaya ration card' is not what differentiates a no-latrine and a have-latrine household as the difference is of only around 0.1%.

'Having APL card' is found more (difference of around 6%) among have-latrine households mainly to the extent 'Having no ration card at all' is found more (difference of around 6%) among no-latrine households.

Fig 6.7: Profile of No-latrine and Have-latrine households in terms of ration card status (in detail)



Additional characteristic of Have-latrine households is

- **Belonging to castes 'Other than SC/ ST/ OBC' (is a factor found more among Have-latrine households) (difference of around 9%).**

This corroborates two of the present impediments (reasons) leading to not constructing a latrine, reported by the No-latrine households, viz. Poverty (Because we were poor - we were neglected/ we refused) and 'We were neglected because we belong to SC/ST'.

3. Past impediments/ reasons for not constructing their latrine earlier: reported by households that has access to latrine at present

Fig 6.8: Past reasons for not constructing their latrine earlier: Reported by households having access to latrine (in percentage of reasons)

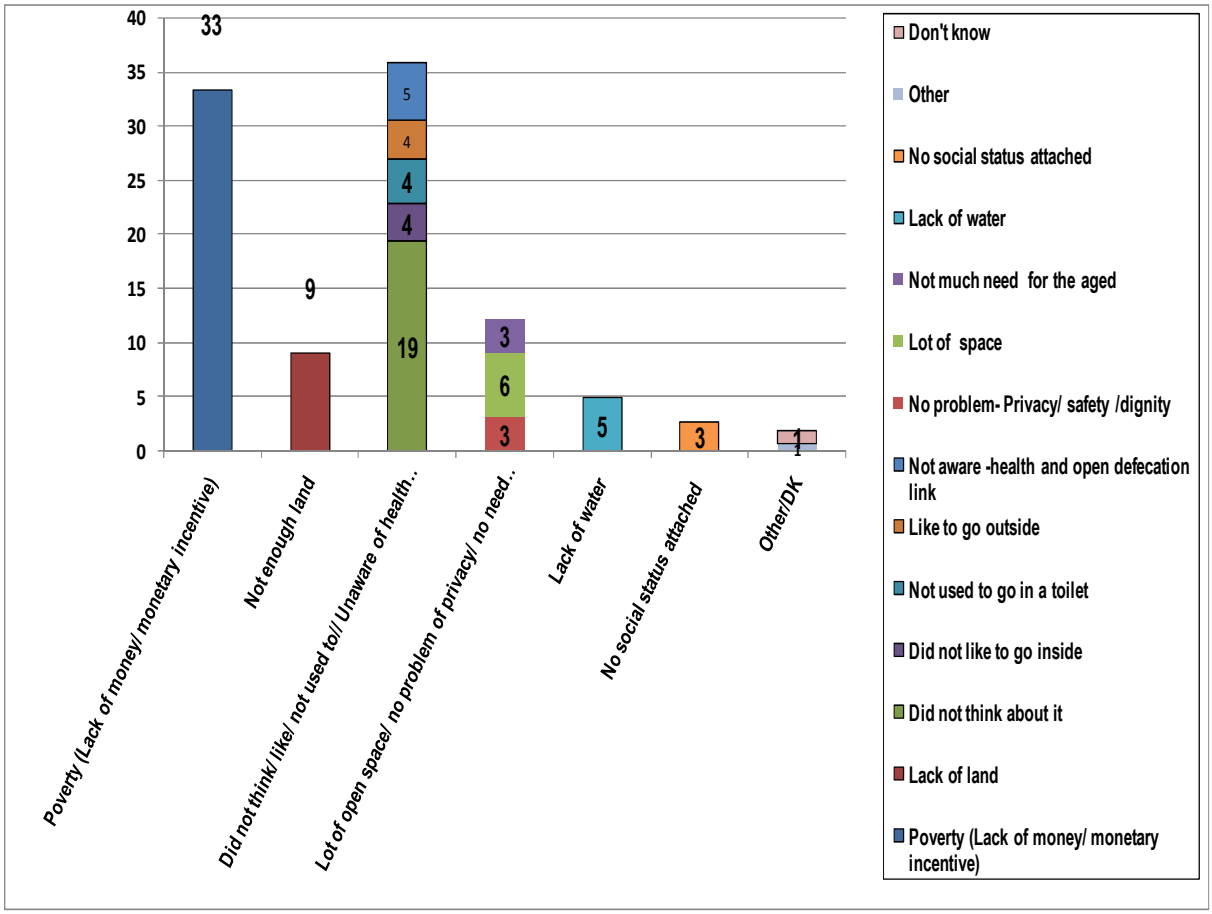


Table 6.2: IHHL not constructed earlier (in percentage)

S. No.	Reasons	12 state
1	Lack of money/ monetary incentive	33
2	Did not think about it	19
3	Lack of land	9
4	Lot of space	6
5	Not aware -health and open defecation	5
6	Lack of water	5
7	Not used to go in a toilet	4
8	Like to go outside	4
9	Did not like to go inside	4
10	No problem- Privacy/ safety /dignity	3
11	Not much need for the aged	3
12	No social status attached	3
13	Others	1
14	Don't know	1

Fig 6.9: Past reasons for not constructing their latrine earlier: States arranged in descending order of access (in percentage of reasons)

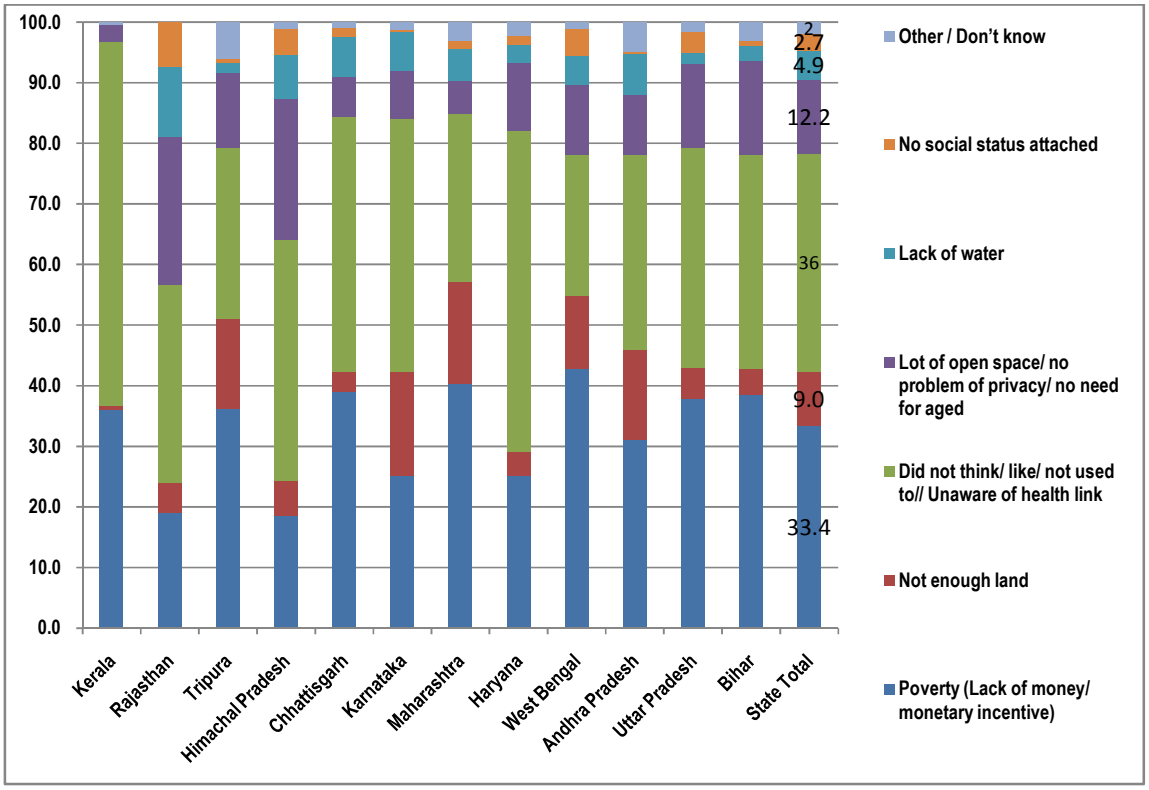
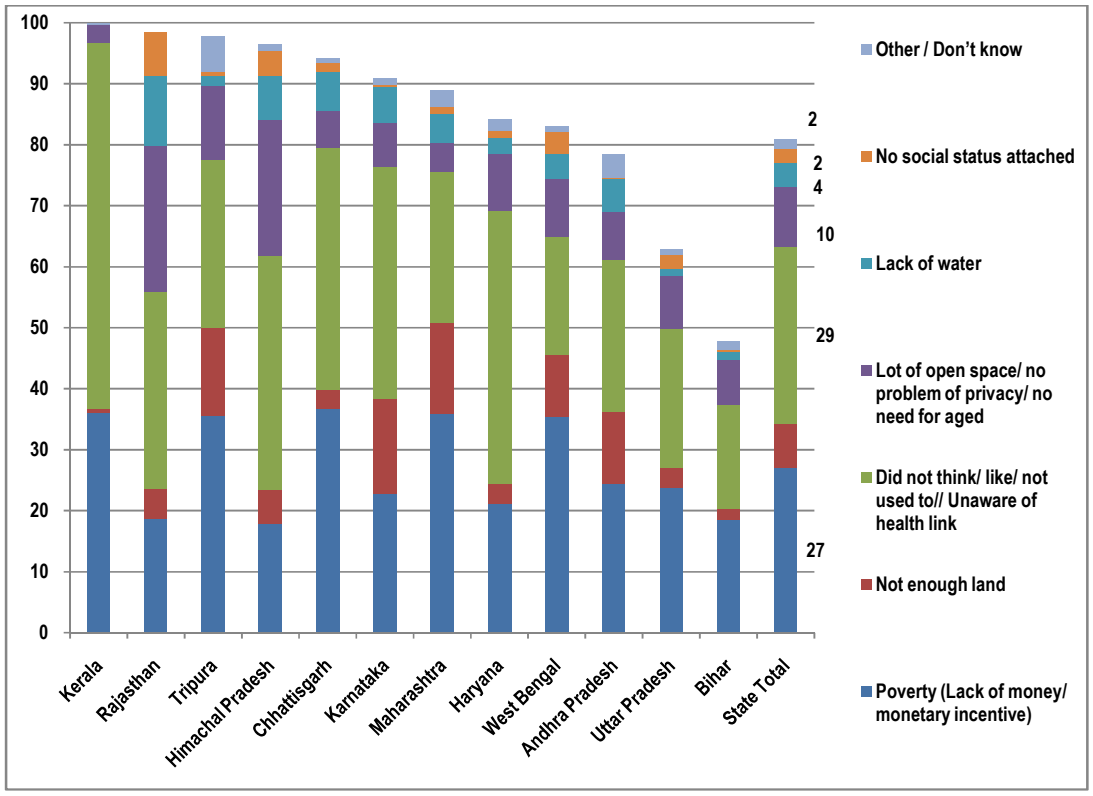


Fig 6.10: Past reasons for not constructing their latrine earlier: overlaid on percentage of households without access to latrine: States arranged in descending order of access (in percentage of households)

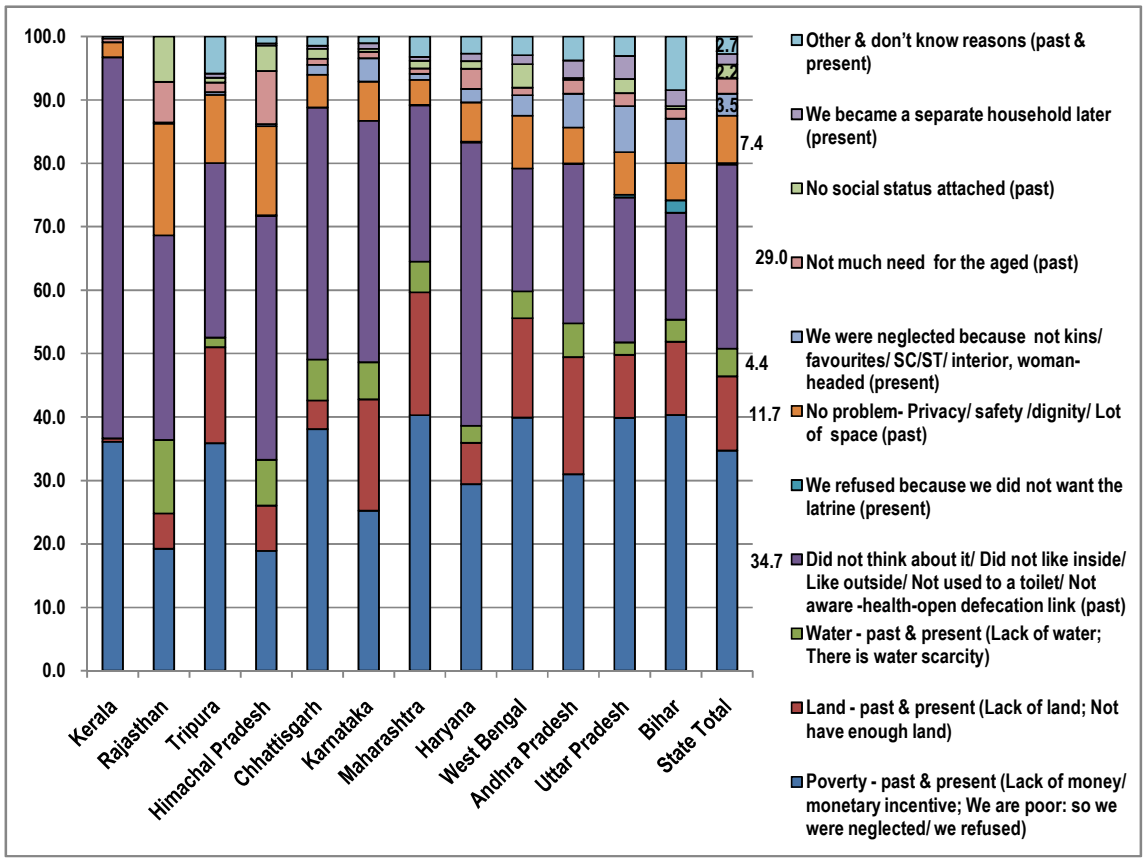


Overall, the past impediments to constructing a latrine earlier, as reported by the households that have access to a latrine are as follows (Given in parentheses are: approximate % of households that reported that reason – obtained by overlaying these reasons on the households that have access to latrine):

- Reasons directly related to poverty constitute the single biggest past factor constituting 33.3% (one third) of the past reasons for not constructing their latrine earlier (reported by approximately 27% households).
- 'Lack of land' for constructing latrine: is NOT the second largest past reason, as it constitutes only 9% of the reasons (reported by approximately 7.3% households).
- 'Did not think about it' earlier is the second largest past reason amounting to 19.3% (just less than a fifth) of the reasons (reported by approximately 15.6% households).

4. Impediments/ reasons for not constructing latrine: present and past reasons combined

Fig 6.11: Combined past and present reasons for not constructing latrine: reported by households (in percentage of households)



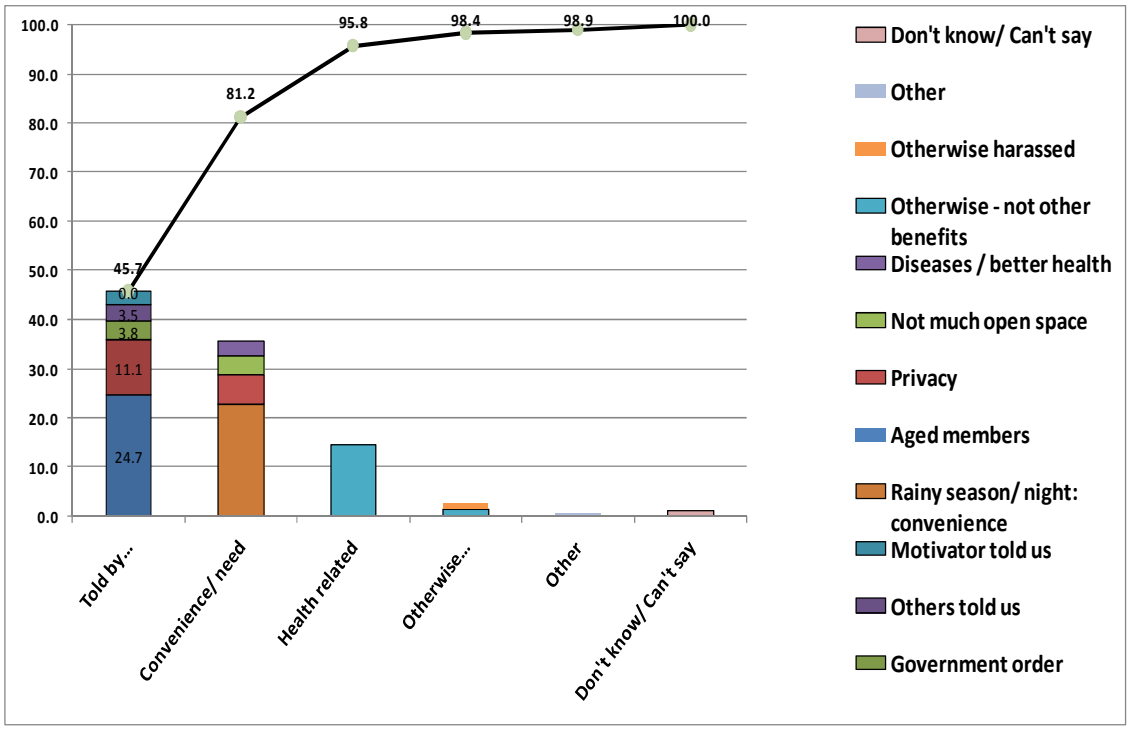
Overall, when present and past impediments to constructing a latrine are looked together in terms of approximate % of households that reported that reason, following picture emerges:

- **Poverty:** reasons directly related to poverty constitute the single biggest factor, for both present and past, reported by approximately 34.7% (more than one third) of the households.
- '**Lack of land'** for constructing latrine is reported by approximately 11.7% households (past and present combined): 'Not enough land' is the second largest present reason (for the households that do not have IHHL at present) for approximately 4.4% households, while it is not the second largest past reason, but is still reported by approximately 7.3% households.
- **'Did not think about it' earlier** is the second largest past reason reported by approximately 15.6% households.

- '**We were neglected (by the PRI) because…' of reasons other than poverty** constitutes the third largest group of present reasons, reported by approximately 3.5% households. These reasons for felt neglect include – 'were neglected… because not kin/ favourites of the PRI', 'were neglected… because we belong to Scheduled Caste/ Tribe, 'were neglected… because we live in interior areas' and 'were neglected… because the head of the household is a woman'.
- **Alternatively felt 'neglect by PRI'** attributed to various present reasons (neglected because 'we are poor' combined with because… not favourites/ kin, SC/ST, interior area, woman-headed) is the single largest present reason reported by approximately 9.9% of the households.
- **Water scarcity** is also a reason (past and present combined) reported by 4.4% households, especially in Rajasthan, Himachal, Chhattisgarh and Bihar.

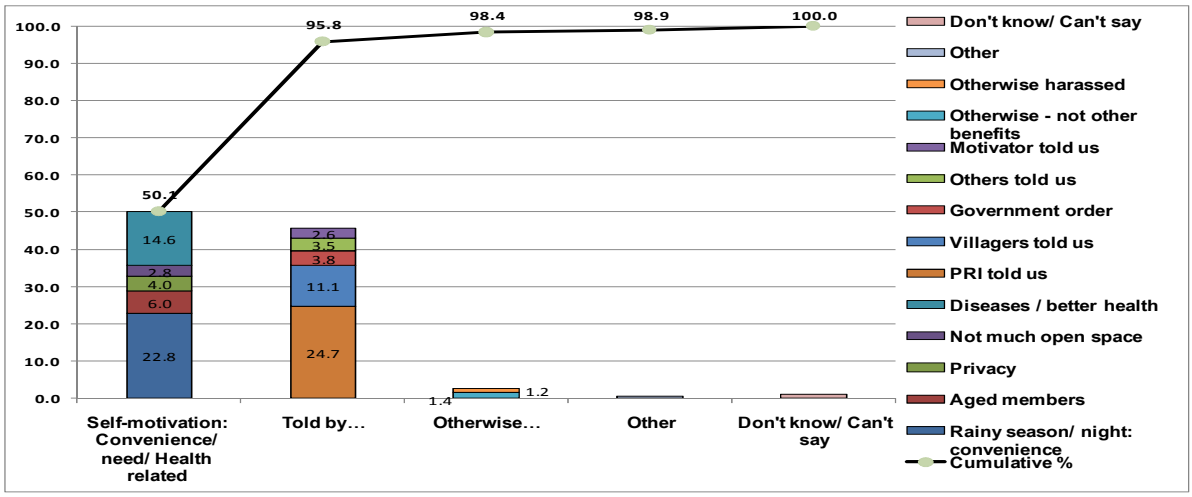
6.1.2 Motivating Factors for Toilets Construction and Usage

Fig 6.12: Motivating factors for constructing latrine (in cumulative percentage)



- Overall, 'told by' PRI/ villagers/ 'a government order'/ others or by motivator is the single largest group of reasons (46%) reported by the households, as the factors that led to decision of latrine construction.
- This is followed by convenience during seasons or nights, of elderly members and privacy related needs being the second largest group of reasons (33 % of the total reasons reported).
- 15% of the reasons related to diseases or better health.
    - More than 93% of the reasons are covered by these three groups of reasons as shown by the cumulative line shown in the figure above.

Fig 6.13: Motivating factors for constructing latrine: self motivation convenience health related (in cumulative percentage)



- Alternatively, self-motivation (convenience during seasons or nights, of elderly members and privacy related needs combined with the reasons related to diseases or better health) forms the single largest group of reasons (50%) reported by the households, as the factors that led to decision of latrine construction.
- This is followed by 'told by' PRI/ villagers/ 'a government order'/ others or by motivator (46 % of the total reasons reported).
    - Around 96% of the reasons are covered by these two groups of reasons as shown by the cumulative line shown in the figure above.

The figure below shows the state wise picture of the reasons that motivated the households that have built a latrine.

Fig 6.14: Reasons, which motivated households to construct latrine state wise (in percentage)

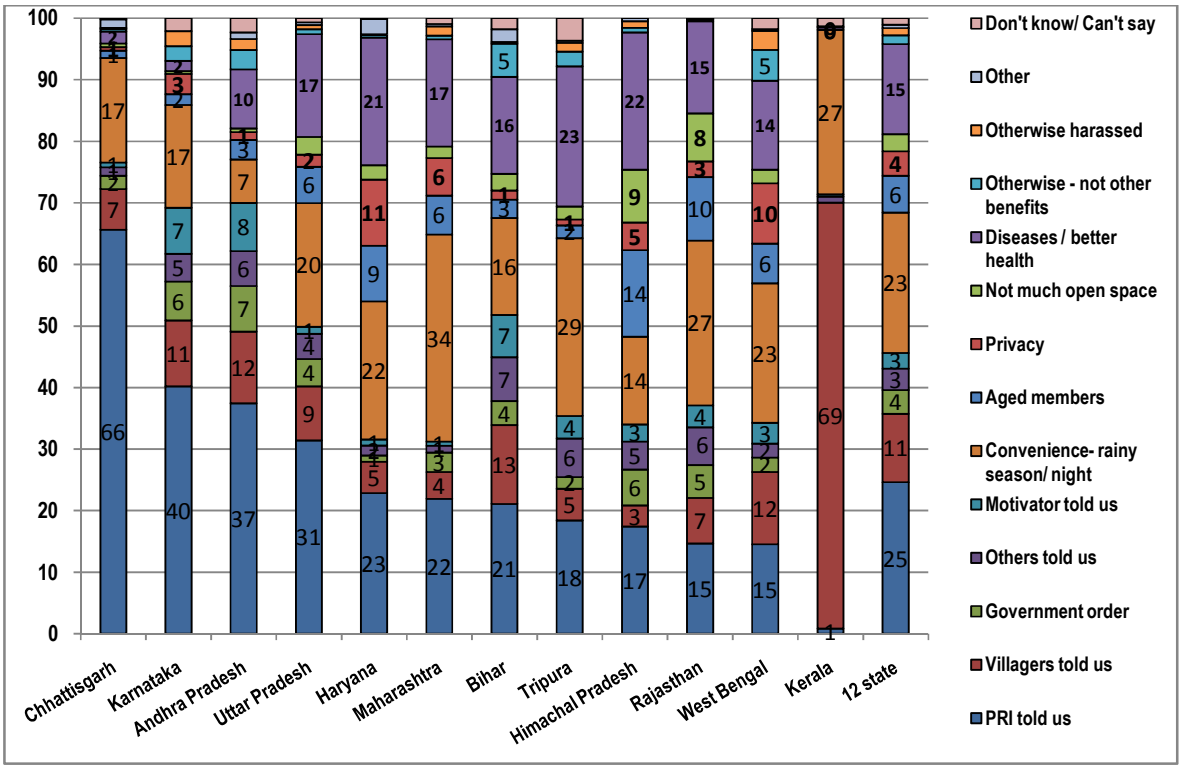


Fig 6.15: Motivating factors: Reasons for constructing latrine overlaid on sample households: state wise (in percentage of households)

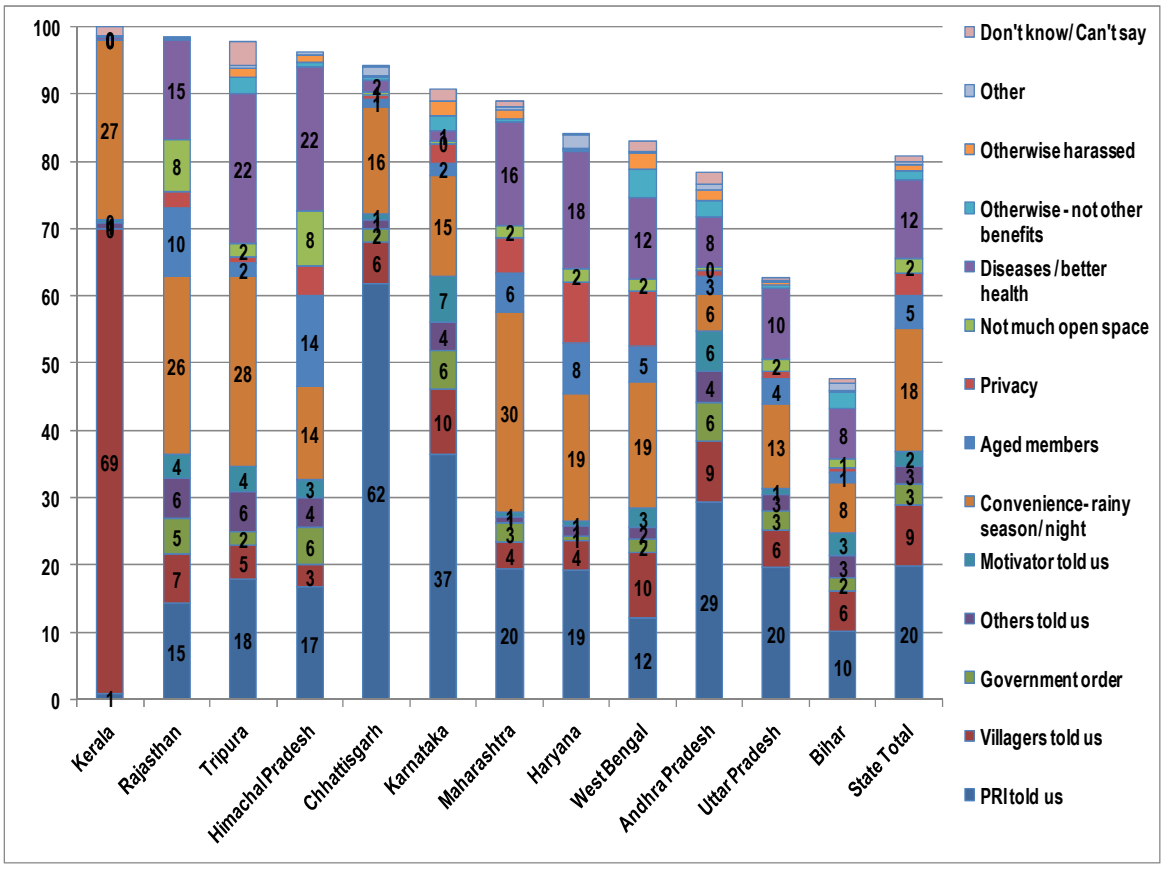
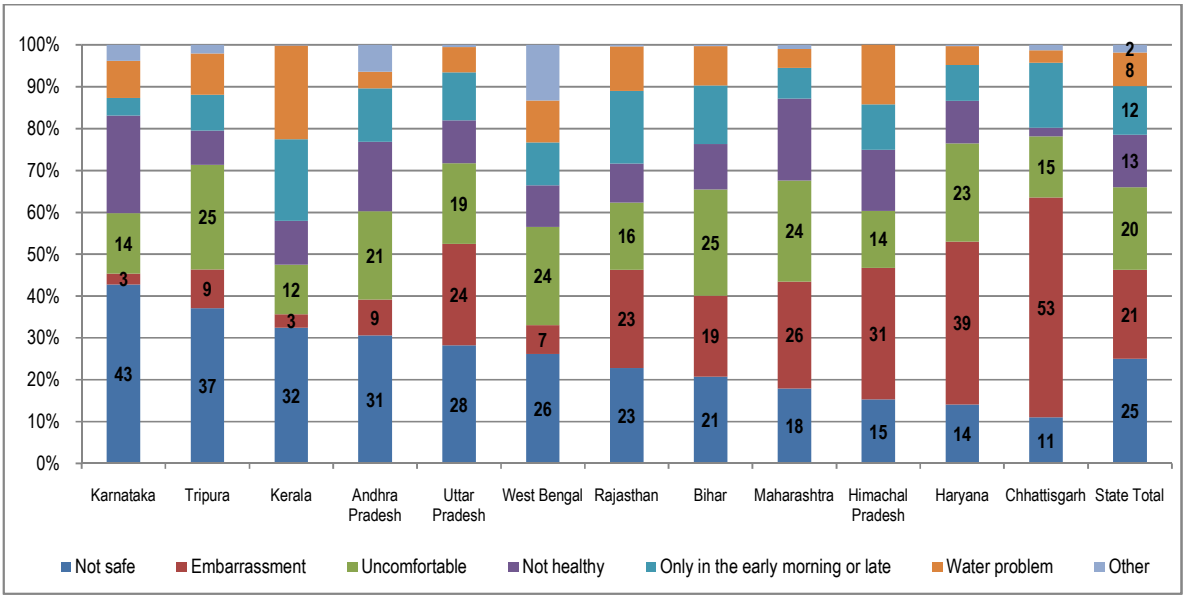


Fig 6.16: Problems faced in open defecation (in percentage)



Safety and security is the major problem in open defecation reported 24% (highest in Karnataka and Tripura 43% and 37% respectively and lowest 11% in Chhattisgarh). Followed by second largest response (21%) feeling embarrassment (highest 53% in Chhattisgarh and minimum 3% in Karnataka and Kerala each). In addition to these 20% also report that open defecation is uncomfortable. 13% reported that it is not healthy and 8% water problem whereas 20% reported water problem in Kerala.

Fig 6.17: Problems faced in open defecation in past and present arranged in order of access (in percentage)

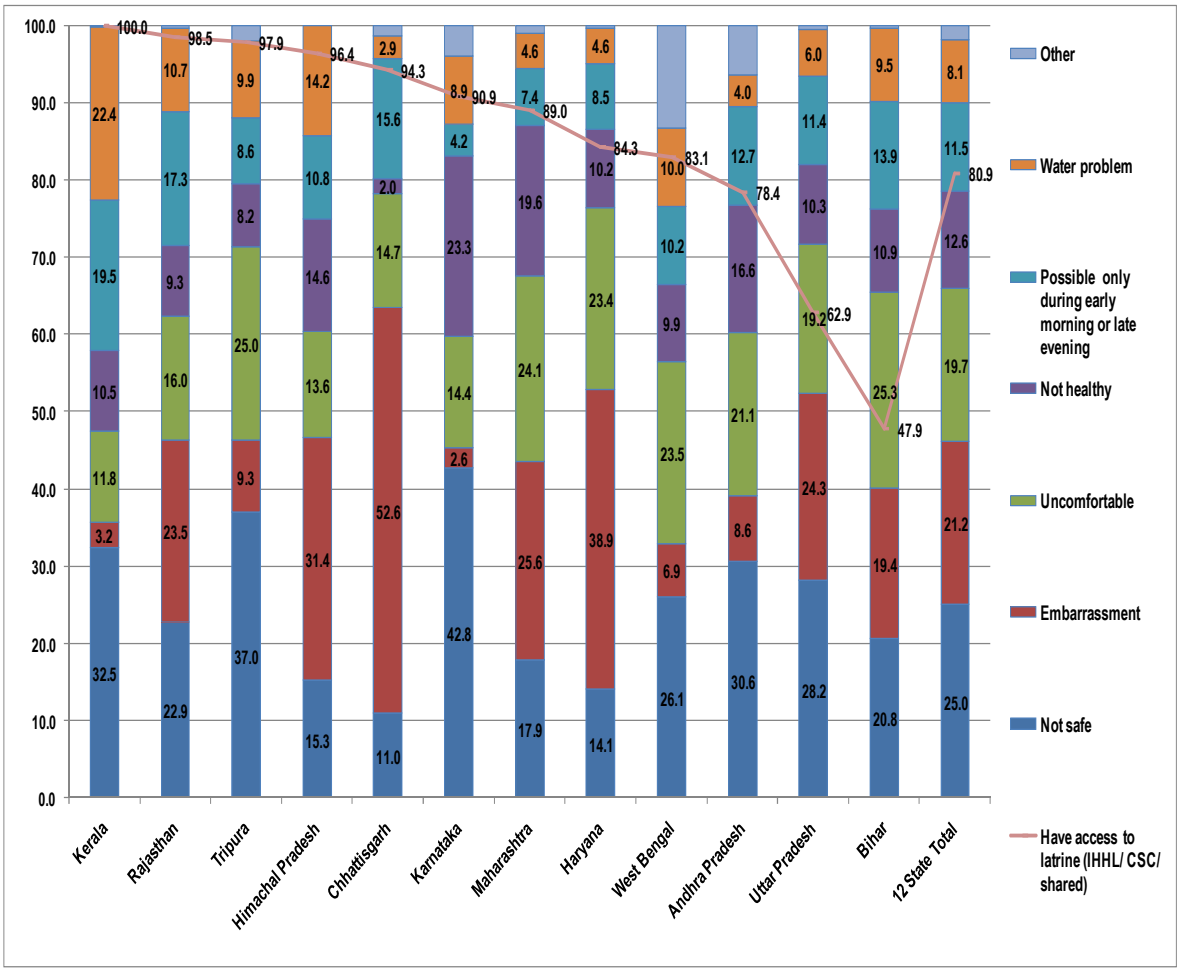
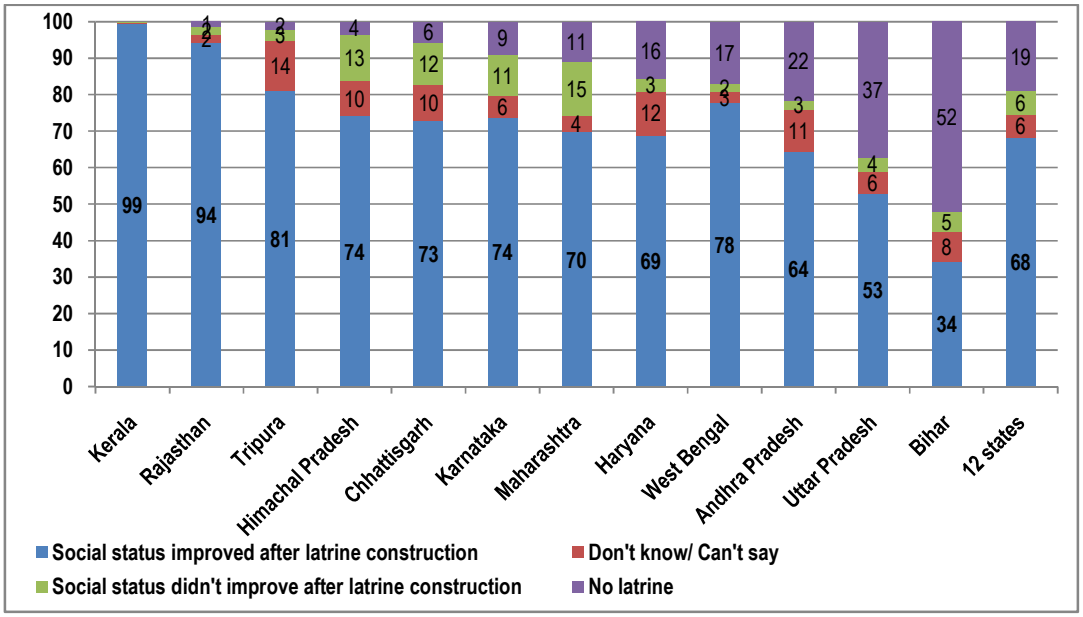


Fig 6.18: Social status of households after constructing the toilets (in percentage)



Overall 68% of the total households feel that their social status has improved after latrine construction.

Table 6.3: Comparison of 'reason for not constructing' and 'Current coverage'

State	Reasons (earlier)						Current coverage	Reasons(now)					
	Lack of money/ monetary incentive	Land lack/ lot, ok privacy	Lack of water	Did not Think/ like/ used to	Not aware -health and open defecation	Not much need for aged		Poverty	Not enough land	Neglected: not favourite/ SC/T, interior, woman-headed	Became separate household	Water scarcity	Other reasons
Kerala	36	3	0	46	14	1	100	0	0	0	0	0	0
Rajasthan	19	30	12	26	7	7	99	36	45	9	0	9	0
Tripura	36	27	2	25	3	2	98	20	30	20	30	0	0
Himachal Pradesh	18	25	7	36	4	9	96	32	41	9	9	5	0
Chhattisgarh	39	10	7	37	5	1	94	24	24	28	8	4	12
Karnataka	25	24	6	39	3	1	91	27	22	41	10	0	0
Maharashtra	40	23	5	25	2	1	89	41	39	8	6	1	3
Haryana	25	13	3	49	4	4	84	52	20	13	8	1	5
West Bengal	43	27	5	19	5	1	83	26	34	19	8	1	11
Andhra Pradesh	31	23	7	25	7	3	78	3	31	25	13	0	0
Uttar Pradesh	38	19	2	30	6	3	63	43	18	20	10	2	3
Bihar	39	17	2	31	4	3	48	42	18	13	5	4	13
Total	**33**	**21**	**5**	**31**	**5**	**3**	**81**	**40**	**23**	**18**	**9**	**2**	**5**

Table 6.4: Comparison of motivating factor for construction-decision, current coverage and social status (in percentage)

State	Motivating factor for construction-decision Reasons					Current coverage	Social status improved after construction
	Pradhan/ Sarpanch/ PRI/ Govt. told us	Villagers/ other/ motivator told us	Convenience/ needs	Health awareness	Otherwise harassed		
Kerala	1	71	27	0	0	100	99
Rajasthan	20	17	47	15	0	99	94
Tripura	20	15	34	23	4	98	81
Himachal Pradesh	23	11	41	22	2	96	74
Chhattisgarh	68	9	19	2	1	94	73
Karnataka	47	23	22	2	5	91	74
Maharashtra	25	6	48	17	2	89	70
Haryana	24	8	45	21	0	84	69
West Bengal	17	17	41	14	8	83	78
Andhra Pradesh	45	25	12	10	5	78	64
Uttar Pradesh	36	14	31	17	1	63	53
Bihar	25	27	23	16	6	48	34
Total	**29**	**17**	**36**	**15**	**3**	**81**	**68**

Overall, among the factors critical for achieving 100% coverage

- Poverty and lack of (enough) monetary incentive emerge as the leading impediment.
- Lack of enough land is found consistently to be the second largest impediment.
- Among current hurdles 'Neglect by PRI (for reasons other than poverty)' is the third largest. Whereas, for past, ignorance and 'not used to/ do not like inside' etc. (apprehensions about behavioural change) seem to have been dominant before latrine construction.

- Did not think about it' earlier is the second largest past reason for not constructing latrine earlier.
- Water scarcity is also a factor found to be an impediment, especially in Rajasthan, Himachal, Chhattisgarh and Bihar.

Among the probable enabling factors; the other large factors are:

- Perceived improvement in social status and
- Self-motivational factors (convenience during rainy season/ night/ day; need for privacy, need for aged family members, lack of enough open space for open defecation). The role of IEC activities behind these reported factors might be worth giving credit to.

6.1.3 Years since latrine construction, net increase in sanitation usage and duration of concentrated effort at latrine construction

Another point to keep in mind while considering the factors that might be critical for achieving NGP is – 'the year when the toilets have been constructed'. The following figure shows the percentage of households that had latrine by the end of a particular year (prior to TSC- 1998 till 2010) as reported by the household respondents:

Fig 6.19: Year of construction of household latrine (Percentage of households)

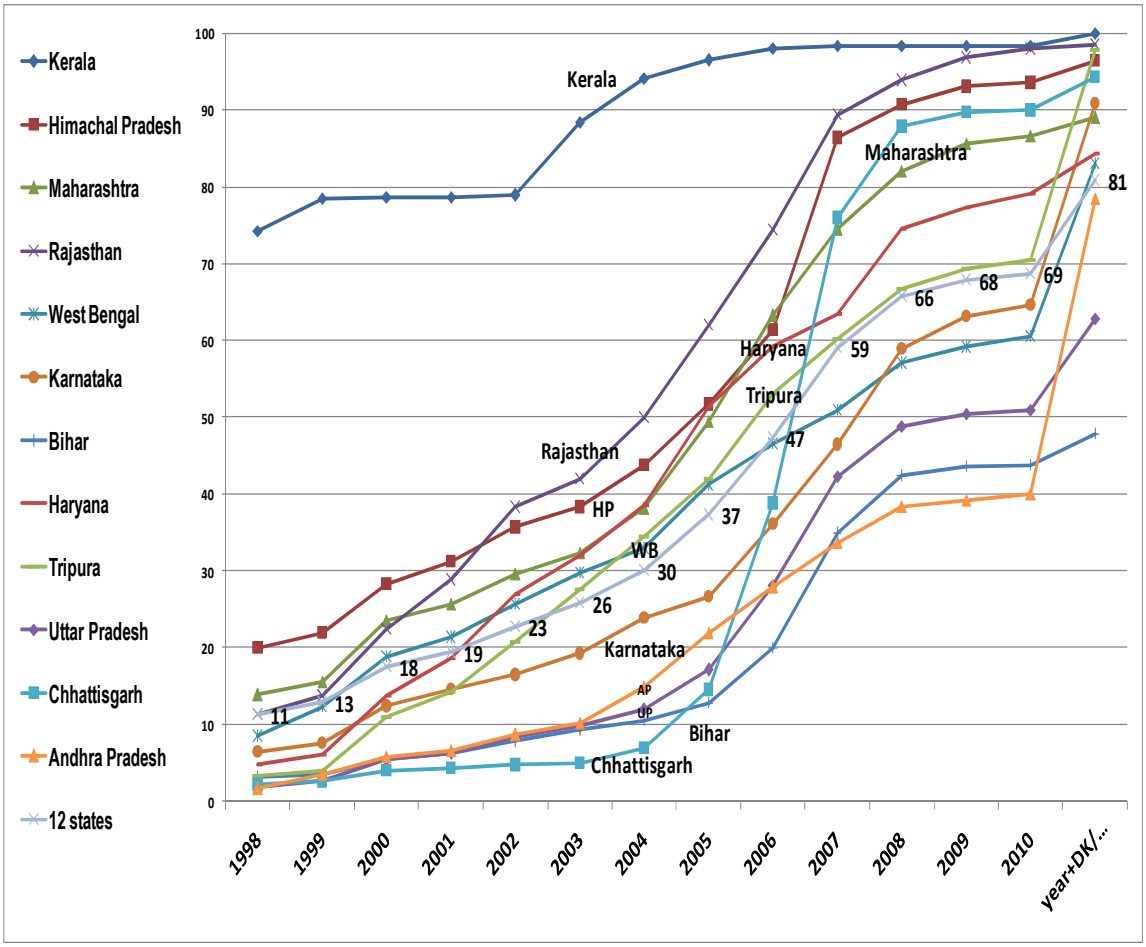


Table 6.5: Year wise sample HHs having latrine (cumulative percentage)

States/Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total coverage (+DK/CS)
Kerala	74	78	79	79	79	88	94	97	98	98	98	98	98	100
Himachal Pradesh	20	22	28	31	36	38	44	52	61	86	91	93	94	96
Maharashtra	14	16	24	26	30	32	38	50	63	75	82	86	87	89
Rajasthan	11	14	22	29	38	42	50	62	74	89	94	97	98	99
West Bengal	8	12	19	21	26	30	33	41	47	51	57	59	61	83
Karnataka	6	8	12	15	16	19	24	27	36	46	59	63	65	91
Bihar	3	4	5	6	8	9	10	13	20	35	42	44	44	48
Haryana	5	6	14	19	27	32	39	51	59	64	75	77	79	84
Tripura	3	4	11	14	21	28	35	42	53	60	67	69	70	98
Uttar Pradesh	2	3	6	6	8	10	12	17	28	42	49	50	51	63
Chhattisgarh	2	3	4	4	5	5	7	15	39	76	88	90	90	94
Andhra Pradesh	2	4	6	7	9	10	15	22	28	34	38	39	40	78
Total	**11**	**13**	**18**	**19**	**23**	**26**	**30**	**37**	**47**	**59**	**66**	**68**	**69**	**81**

As is evident from the graph, as per reported by household's year of latrine construction:

- Kerala started with the highest percentage of the sample households (74%) already having a latrine, even before TSC was launched (before 1999) and by 2003 end, 88% of its sample households already had a latrine.
- By 2003 calendar year end, (the year during which NGP scheme was announced), Rajasthan and Himachal Pradesh had 42% and 38% of the sample households already having a latrine.
- Whereas Maharashtra, Haryana, West Bengal and Tripura had between 32% to 28% sample households already having a latrine, by the end of 2003.
- While in Karnataka, 19% of the sample households reported already having a latrine by December 2003.
- Between 5% to 10 % sample households in Uttar Pradesh, Andhra Pradesh, Bihar and Chhattisgarh reported already having a latrine by 2003 year-end.

This data is further corroborated by the qualitative data, which presents a plausible conjecture: 'Some Gram Panchayats had, with the long years of preparation before NGP, reached a substantial extent of household latrine coverage earlier, and hence were invited/ instructed/ facilitated to apply for NGP sooner. As the years of NGP award passed by, mainly the Gram Panchayats with either a large percentage/ large absolute number of households or facing difficult/ challenging issues were left. Hence, for them, a lot work, and a lot of preparation time was needed before 100% coverage could be planned for NGP application.'

The table below 'Year wise sample HHs having latrine (cumulative percentage): arranged in descending order of total access before launch of TSC' shows the states arranged in the descending order of percent households that had latrine even before TSC, i.e. by the end of the year 1998.

The years have been marked (cell coloured) to denote the pair of years when there was a 5% or more than 5% increase in the households having latrine. The lighter colour/ yellow denote such increase before launch of NGP, while the darker colour/ green denote such increase during or after the year of announcement of NGP i.e.2003).

Table 6.6: Year wise sample HHs having latrine (cumulative percentage): arranged in descending order of total access before launch of TSC

States/Year	1998 Before TSC	1999 TSC	2000	2001	2002 Before NGP launch	2003 NGP launched	2004 Before 1st NGP award	2005 1st NGP awarded	2006	2007	2008	2009	2010	Total coverage (2010 +DK/CS)
Kerala	74	78	79	79	79	88	*94*	97	98	98	98	98	98	100
Himachal Pradesh	20	22	28	31	36	38	*44*	52	61	86	91	93	94	96
Maharashtra	14	16	24	26	30	32	*38*	50	63	75	82	86	87	89
Rajasthan	11	14	22	29	38	42	*50*	62	74	89	94	97	98	99
West Bengal	8	12	19	21	26	30	*33*	41	47	51	57	59	61	83
Karnataka	6	8	12	15	16	19	*24*	27	36	46	59	63	65	91
Bihar	3	4	5	6	8	9	*10*	13	20	35	42	44	44	48
Haryana	5	6	14	19	27	32	*39*	51	59	64	75	77	79	84
Tripura	3	4	11	14	21	28	*35*	42	53	60	67	69	70	98
Uttar Pradesh	2	3	6	6	8	10	*12*	17	28	42	49	50	51	63
Chhattisgarh	2	3	4	4	5	5	*7*	15	39	76	88	90	90	94
Andhra Pradesh	2	4	6	7	9	10	*15*	22	28	34	38	39	40	78
Total	11	13	18	19	23	26	*30*	37	47	59	66	68	69	81

Andhra Pradesh, Tripura, Karnataka and West Bengal have not been highlighted due to the large extent of 'Don't know/ Can't say' response (DK/CS – for the year of latrine construction as reported by household respondents).

Overall, 4 years show concentrated efforts at latrine construction (2004 to 2007) in the sample NGP-GPs, which have won NGP during 2005 to 2008. This supports the conjecture that latrine construction rate receives a major fill-up, once a Gram Panchayat (Sarpanch/ PRI) decides to apply (or applies) for NGP.

The tables below present the factors considered to assess the link between sustained usage (in 2010, from the primary data) given in column number 14, and the duration of concentrated efforts at latrine construction (denoted by coloured cells in column number 1 to 13). The cells (and the respective states) have been coloured progressively from green to red depending upon their sustained usage in 2010 denoted in column number 14. The colours near to green (the top row) denote better 'sustained usage', while those towards the red (the bottom row) denote not so good 'sustained usage'.

Table 6.7: Link between 'Net increase in sustained usage (in 2010 as compared to 1998)' and the 'Duration of concentrated efforts at latrine construction'

States/Year	1998 Before TSC	1999 TSC	2000	2001	2002 Before NGP launch	2003 NGP launched	2004 Before 1st NGP award	2005 1st NGP awarded	2006	2007	2008	2009	2010	Total coverage (2010 +DK/CS)	2010 Usage % = All members using latrine regularly
Column number	1	2	3	4	5	6	7	8	9	10	11	12	12	13	14
Kerala	74	78	79	79	79	88	*94*	97	98	98	98	98	98	100.0	99
Haryana	5	6	14	19	27	32	*39*	51	59	64	75	77	79	84.3	82
Rajasthan	11	14	22	29	38	42	*50*	62	74	89	94	97	98	98.5	96
Himachal Pradesh	20	22	28	31	36	38	*44*	52	61	86	91	93	94	96.4	96
Maharashtra	14	16	24	26	30	32	*38*	50	63	75	82	86	87	89.0	76
Uttar Pradesh	2	3	6	6	8	10	*12*	17	28	42	49	50	51	62.9	44
Chhattisgarh	2	3	4	4	5	5	*7*	15	39	76	88	90	90	94.3	33
Bihar	3	4	5	6	8	9	*10*	13	20	35	42	44	44	47.9	16
Total	11	13	18	19	23	26	*30*	37	47	59	66	68	69	80.9	67

To assess the link between sustained usage (in 2010, from the primary data) and the duration of concentrated efforts at latrine construction, following factors were considered:

1. **What was the coverage percentage in 1998**, i.e. before TSC started? This was calculated on the basis of percentage of households that mentioned the year of construction of their latrine as any year before 1998 or the year 1998 itself (year = calendar year according to the respondents).

   This is shown in the column number 15 in the following table.

2. **What was the coverage percentage in 2002**, i.e. before NGP was launched? This was calculated on the basis of **cumulative** percentage of households that mentioned the year of construction of their latrine as any year before 2002 or 2002 itself. This is shown in the column number 16 in the following table.

3. **What was the usage percentage in 2010**, in terms of percentage of households, which reported that all members were using the latrine regularly (No member was going for open defecation regularly). i.e. usage sustained in 2010. This is shown in the column number 14 in the following table.

4. Count/ Number of pairs of years, which show concentrated effort (5% or more than 5% increase) at latrine construction. This signifies the duration of concentrated effort.

   This is shown in the column number 18 in the following table.

5. Column19 in the following table shows the difference between 2010 usage % and 1998 coverage %. This is done to account for/ adjust the initial difference in coverage that the states have had even before TSC.

   This (column number 19) in a way shows the increase in sanitation that happened since the launch of TSC (in terms of end usage minus initial coverage, based on the primary data).

To assess the link between duration of concentrated effort and net increase in sustained sanitation (end use minus initial construction/ coverage) the states are arranged in descending order of column no. 18 (duration of concentrated effort).

Table 6.8: Link between 'Net increase in sustained usage (in 2010 as compared to 1998)' and the 'Duration of concentrated efforts at latrine construction'

States/Year	2010 Usage % = All members using latrine regularly 2010	1998 Before TSC: Coverage	2002 Coverage Before NGP	2010 Usage % - 2002 Coverage %	Duration of concentrated effort at latrine construction (years)	Net increase in sustained sanitation = 2010 Usage % minus 1998 Coverage %	19-17 = achieved during 1999-2002 i.e. TSC before NGP
Column number	14	15	16	17	18	19	20
Kerala	99	74	79	20	2+...	25	5
Haryana	82	5	27	55	9	77	22
Rajasthan	96	11	38	58	8	85	27
Himachal Pradesh	96	20	36	60	7	76	16
Maharashtra	76	14	30	46	5	62	16
Uttar Pradesh	44	2	8	35	4	42	6
Chhattisgarh	33	2	5	28	4	31	3
Bihar	16	3	8	8	3	13	5
Total	67	11	23	44	4	55	11

(2010 Usage % - 1998 Coverage %) - 2010 Usage % - 2002 Coverage % = achieved during 1999-2002 i.e. TSC before NGP

When the states are arranged in the descending order of the number of years they show concentrated effort at latrine construction, (descending order of column 18), the pattern that emerges in the net increase in sustained sanitation since TSC (column 19) is given in the preceding table and described below:

- The states show an overall pattern of descending order of net increase in sustained sanitation with the following exceptions. i.e. The 'net increase in sustained sanitation' increases (in column 19) seems to increase when the 'duration of concentrated effort increases' (in column 18) increases. There are following exceptions to this pattern.

- Even though Kerala shows two years of concentrated effort, with a lower (than Haryana) increase in column 18, the fact that majority (more than 74%) coverage among the sample households was already achieved before TSC – signifies the longest duration of effort (and hence the maximum sustained usage percentage in column 14)
- There is higher increase (84.8%) in column 18 for Rajasthan, as compared to (77.4%) for Haryana, despite Haryana having one more year of concentrated effort. This might be due to (1) Rajasthan shows higher increase in coverage before 2003 (launch of NGP) as shown in column number 20. (2) Also as a limitation of this study, it has to be mentioned that in order to comply with the sampling methodology decided for the study, almost all the NGP-GPs of the 2005-7 time-group in Rajasthan (which had very few NGP-GPs) - had to be included in the sample. This seems to have improved the overall findings of Rajasthan for this study.

This pattern seem to support the theory that longer the duration of concentrated work on sanitation (quantified here in column 18), higher are the results achieved in terms of net increase in sustained usage over a similar duration (after adjusting the cumulative coverage already achieved till the base year).

The duration is meant to be just be one of the indicators for the extent, to which

- social mobilisation processes/ IEC activities must have been undertaken,
- would have happened universally with adequate social inclusion (with SC/ ST/ Other marginalised groups recalling the activities done with/ for them), and
- if micro level group formations (such as street level group formation or habitation/ hamlet level group formations apart from youth group/ women group formations) would have been part of the process.

6.1.4 Sustainability of latrine usage and reasons for not using latrine

1. Sustainability assessed at Gram Panchayat level

The following table and the figure on the next page present the percentage of Gram Panchayats that fall in various categories of open defecation among households.

Table 6.9: Percentage of Gram Panchayats that fall in various categories of open defecation among households (including households without latrine)

Sample states	Percentage NGP-GPs in the open defecation category						
	0% households going for open defecation	1 to 20 % households going for open defecation	21 to 40 % households going for open defecation	41 to 60 % households going for open defecation	61 to 80 % households going for open defecation	81 to 90 % households going for open defecation	Total count of sample NGP-GPs
Kerala	64.6	35.4	0.0	0.0	0.0	0.0	48
Tripura	7.1	92.9	0.0	0.0	0.0	0.0	28
Rajasthan	0.0	97.2	2.8	0.0	0.0	0.0	36
Himachal Pradesh	7.1	85.7	7.1	0.0	0.0	0.0	28
Karnataka	0.0	77.8	16.7	5.6	0.0	0.0	36
Maharashtra	0.0	66.7	25.0	7.4	0.9	0.0	108
Haryana	0.0	61.1	27.8	8.3	2.8	0.0	36
West Bangal	2.1	56.3	29.2	6.3	6.3	0.0	48
Andhra Pradesh	0.0	16.7	51.7	28.3	3.3	0.0	60
Chhattisgarh	0.0	0.0	53.6	42.9	3.6	0.0	28
Uttar Pradesh	0.0	12.8	28.3	32.8	22.2	3.9	180
Bihar	0.0	0.0	0.0	21.4	67.9	10.7	28
State Total	5.4	42.8	23.6	16.6	10.1	1.5	664

Overall, more than 5% NGP-GPs were found to have sustained total open defecation free status (on the criteria of either the household respondents themselves reporting open defecation or the household not having any latrine).

- Kerala had 65% of its NGP-GPs in this category of total open defecation free.
- More than two fifths of NGP-GPs, i.e. 43% of sample GPs were found to have less than 20% households going for open defecation.
- Majority of GPs (ranging from 97% to 56% of GPs) in Tripura, Rajasthan, Himachal Pradesh, Karnataka, Maharashtra, Haryana and West Bengal belong to this category.

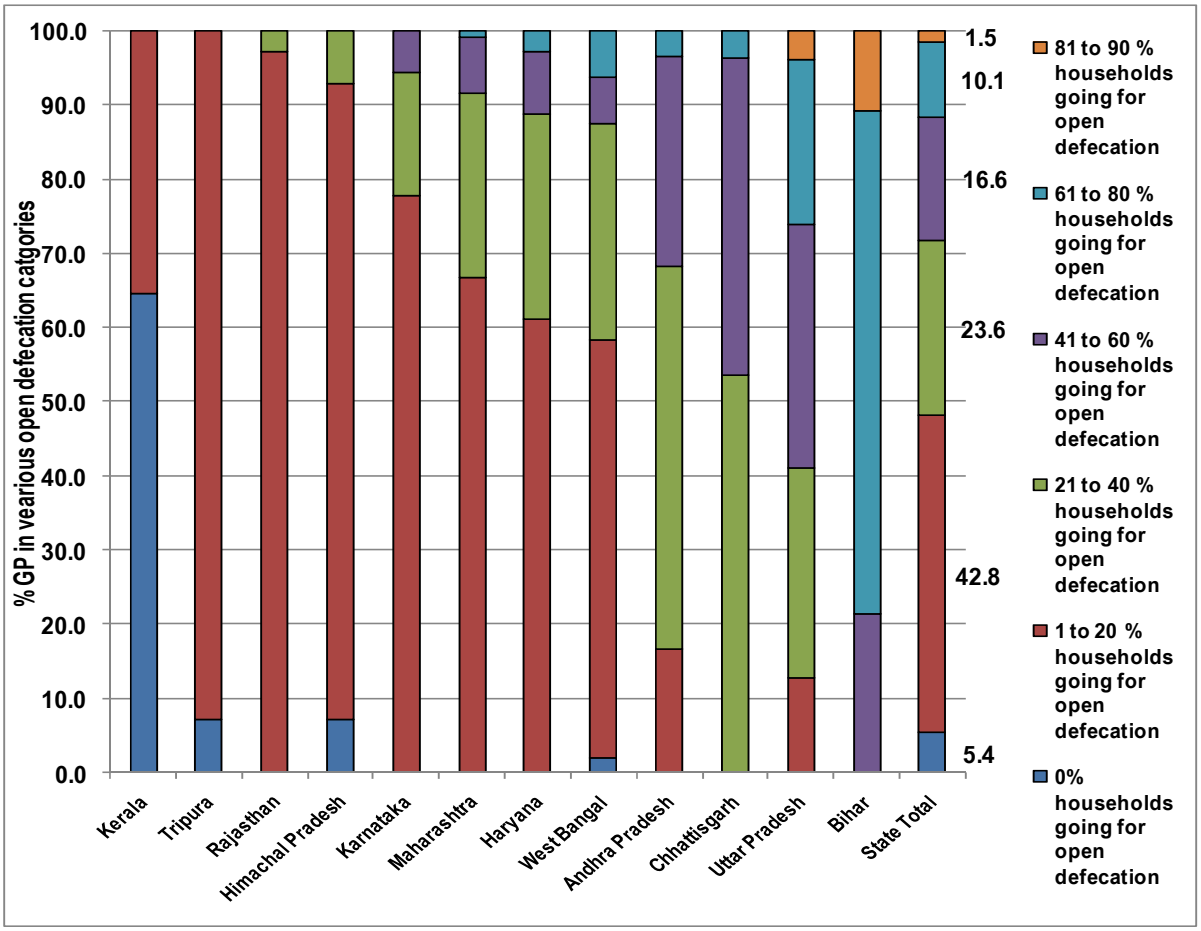
Just less than one fourth (24%) of sample GPs had 21% to 40% households going for open defecation.

- More than half of the GPs in Andhra Pradesh and Chhattisgarh fall in this category.
- 17% of sample GPs had 41% to 60% households going for open defecation.
- Around 43% of GPs of Chhattisgarh belong to this category.

10% of sample GPs had 61% to 80% households going for open defecation.

- Bihar had 68% of its sample GPs falling into this category.
- 2 % of sample GPs had 81% to 90% households going for open defecation.
- 11% of GPs of Bihar and 4% of GPs of Uttar Pradesh were found to have 81 to 90% households going for open defecation.

Fig 6.20: Gram Panchayats in various categories of open defecation among households (in percentage of NGP-GPs)

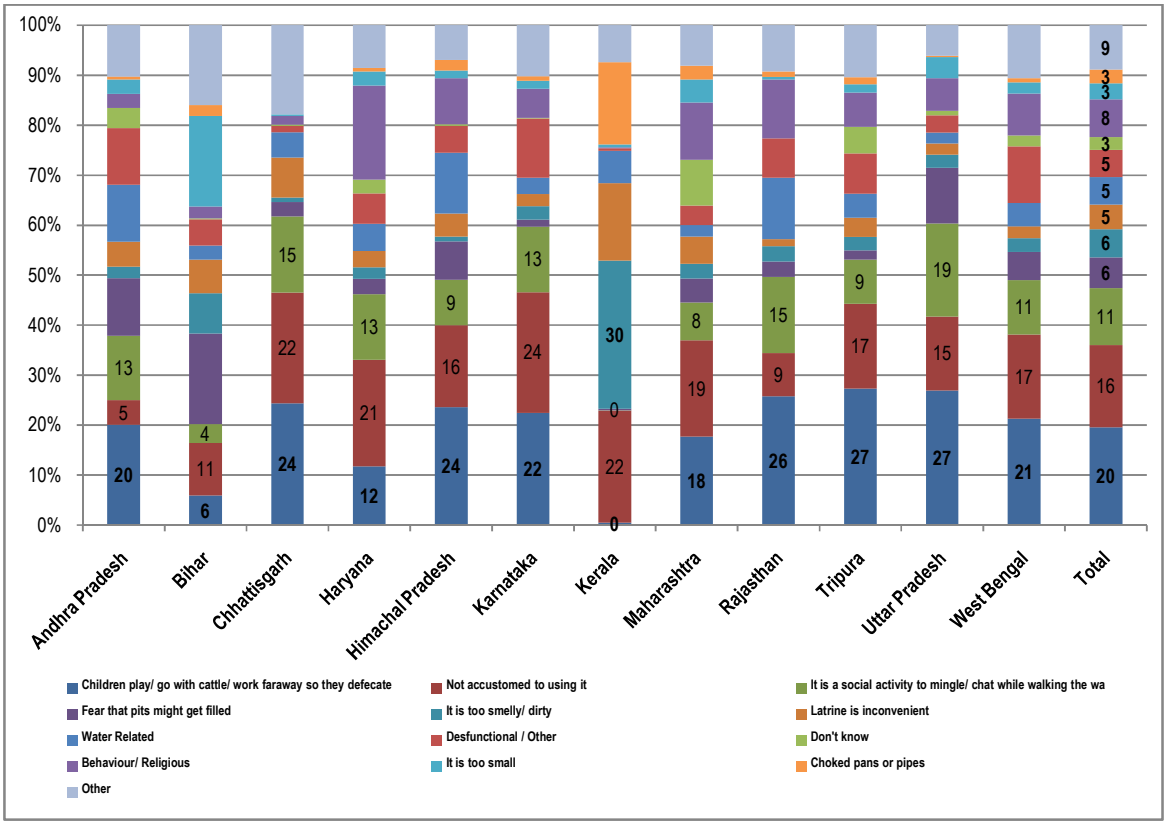


When household respondents reported the reasons behind some of their household members not using latrine regularly now-a-days, the following picture emerged:

- More than 23% reasons related to poor or unfinished installations. This included reported 'poor or unfinished installation' (21.8%), no privacy/ no or inadequate wall/ roof/ door (2.4%), cracked/ choked (0.8%), filled with debris and used as storage (0.6%), draining in open space (0.1%), locked (0.1), site getting water logged and site too far/ wrong site (0.2%)
- Around 23% reasons related to 'Not accustomed to using it'.
- Around 22% reasons related to 'Adults work faraway/ in the field or Children play/ go with cattle/ work faraway so they defecate there in the open'.
- Around 7% reasons were reported 'lack of behaviour change'. Water related reasons accounted for around 3% of reported reasons. This included 'no or not enough water', 'it is extra work-burden for the women/ children to fetch water' and 'because latrine is too smelly or dirty'.
- 'Fear that pit might get filled' and 'Pit/ septic tank was actually full' together accounted for around 1.4% of reasons.
- 'It is a social activity to mingle/ chat while walking the way to open defecation' accounted for another 1.4% reasons, while other reasons (including site destroyed by flood/ earthquake and religious/ cultural reasons) accounted for another 1.8% of reasons.

In is important to keep in mind that on observed criteria as well, overall, more than 61% households have been observed to have a latrine with a water facility or a container having actual water (running or stored respectively). More than 19% households were observed to either have no water facility or container in or around their latrine or no water found (running/ stored) in the facility or container that existed in or around the latrine (while the remaining 19% did not have latrine).

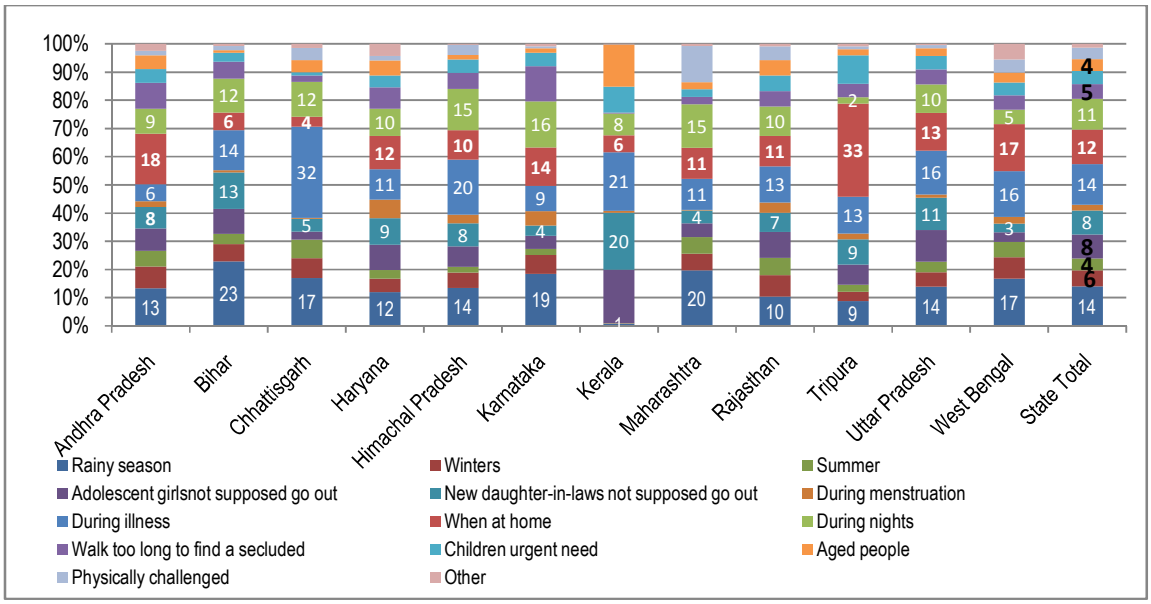
Fig 6.21: May not use latrine in some situation (in percentage)



When household respondents were asked about the possible reasons (in their opinion) for people at large not using the latrine regularly, the following picture emerged:

- Overall 20% of the reported situation (showing highest 27% in UP & Tripura and 26% in Rajasthan) is when 'children play/ go faraway so they defecate openly'
- 16% not accustomed to using it is the second major reported reason for non usage of latrine in some situation (24% in Karnataka and 22% in Chhattisgarh)
- Social activity to mingle/ chat while walking is 11% (19% in UP and 15% in Chhattisgarh and Rajasthan respectively)
- 6% of HHs 'fear that pits might get filled'(18% in Bihar and 11% in UP)
- 6% household respondents report that they may not use latrine because 'it's too smelly/ dirty' (30% in Kerala)
- 5% report 'latrine is inconvenient'
- 5% reported water related problem and dysfunctional each
- 8% says non usage is related to lack of behavioural change/ religious/ cultural reasons.

Fig 6.22: May use latrine in some situation - households' opinion (in percentage)

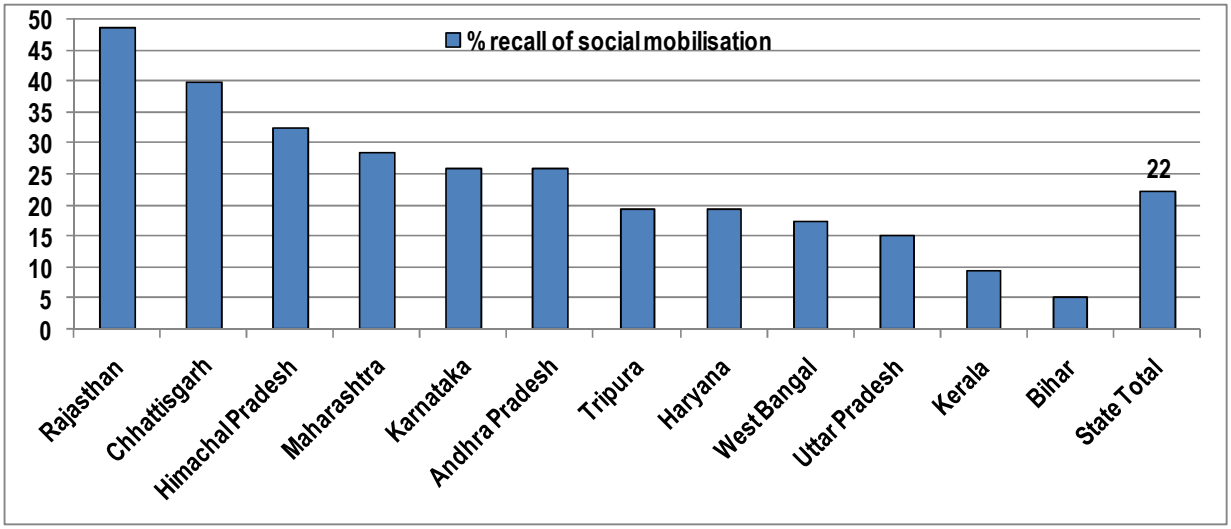


- Overall, season (rainy, winter and summer) is major situation when they may use latrines as per 24% of the HHs.
- The adolescent girls /new daughter in law not supposed to go out (16% of the respondents) is also another key reason for usage of latrines
- 14% use it during illness (32% in Chhattisgarh, 21% and 20% in Kerala and HP respectively)
- 12% use latrine when they are at home (33% in Tripura)
- 11% reported sing it in nights
- 5% use latrine because they have to walk too long to find a secluded point
- 5% reported children urgent need
- 4% reported aged people and physically challenged people each as the reason for usage

6.2 SOCIAL AND INSTITUTIONAL SUSTAINABILITY

6.2.1 Social Mobilisation Process and Activities

Fig 6.23: Percentage of responses that positively recalled any IEC activity done before or after NGP and recalled social mobilisation processes before NGP: given by household respondents



Household respondents were asked three questions –

- Recall, which of the following **eight types of IEC activities** were done **before NGP?**.

  The IEC activities included 1. Rallies & marches 2. Street plays 3. Political leaders & Govt officers speeches 4. Posters on walls/ wall paintings 5. Audiovisual shows 6. Audio campaigns 7. Incorporating sanitation issues in school curriculum 8. Distribution of leaflets & booklets

- Similarly recall, which of these types of activities were done **after NGP?** and

- **Recall, which of the following nine different types of social mobilisation processes** were done before NGP?

  The social mobilisation processes read out to the respondents included

  - PRI/ somebody contacted households individually
  - Discussions in Gram Sabha/ Sansad
  - Discussions in meetings of & mobilisation through SHG or women's group/ formation of such group if not existing already.
  - Discussions in meetings of & mobilisation through youth group/ formation of such group if not existing already
  - Work through street level group formations
  - Work through / formation of community or habitation level groups
  - Work through schools/ school teachers or Parent- Teacher Associations/ school sanitation committee/ Anganwadi worker
  - Work through PHC staff/ Health workers
  - Discussion through Village Water & Sanitation Committee (VWSC)/ formation of such a committee if it did not exist

Taking the possible responses given to these 25 subquestions as a total, positive recall percentage was calculated.
Overall, around 22% of the responses reflected positive recall.

A correlation was assessed at the level of household, to see whether there was any relation between the percentage positive recall reported by a household and the percentage of the members of that household going for open defecation (either because the household did not have a latrine or the share of household members reportedly going for open defecation regularly.
The analysis showed that there seemed to be a correlation between 'Social mobilisation process combined with IEC activities (% recall of specific activities before and after NGP and of processes before NGP - by all household respondents)' and 'Percent household members going for open defecation'. The correlation is negative and significant, r=-.510, p<.001."

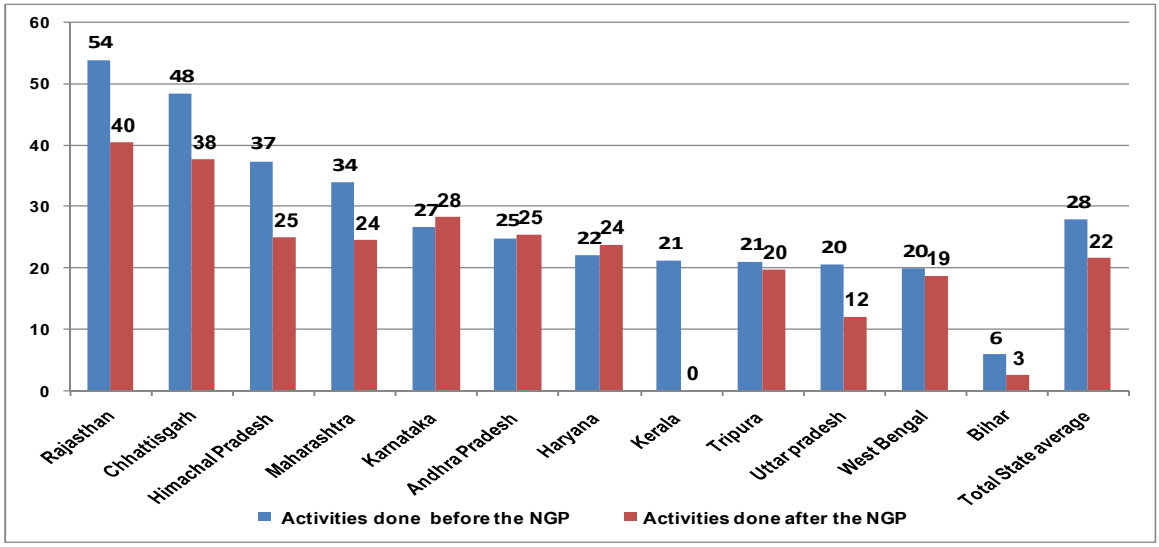
To elaborate, the correlation indicates that

- In case of households who have been exposed to (or recall)
    - more (higher number of) activities and/ or
    - longer duration of activities (done both before and after NGP) and/ or
    - micro-level social mobilisation processes (i.e. discussions, micro-level group formations, household visits etc.),
- Open defecation is lower.

Kerala and Chhattisgarh were not included in this analysis

- Most GPs in Kerala had already achieved relatively very high percentage of coverage and usage much before NGP, and the IEC activities and social mobilisation processes were not done (presumably because not needed).
- Chhattisgarh is an outlier in case of usage.

Fig 6.24: Total response given for activities done before and after NGP (in percentage)



Overall, around 28% of the responses reported by the sample households, show positive recall of any awareness generation activity done during the years preceding respective NGP years. When asked about similar activities after NGP, a decrease of about 23% was found on an average in the positive recall of awareness generation activities after NGP year, with only 22% of the total recall responses indicating positive recall.

Table 6.10: Average of recall responses for IEC activities done before and after (in percentage)

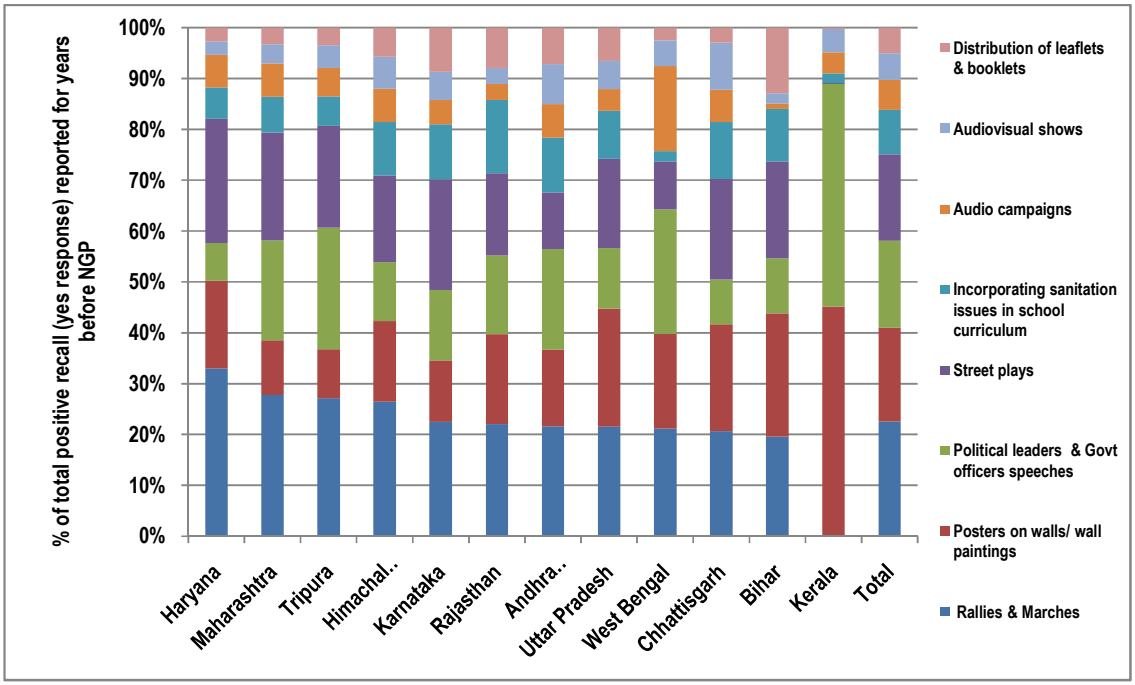
States	IEC Activities done before the NGP	IEC Activities done after the NGP	Average of IEC activities before and after NGP
Rajasthan	54	40	47
Chhattisgarh	48	38	43
Himachal Pradesh	37	25	31
Maharashtra	34	24	29
Karnataka	27	28	27
Andhra Pradesh	25	25	25
Haryana	22	24	23
Kerala	21	0	11
Tripura	21	20	20
Uttar Pradesh	20	12	16
West Bengal	20	19	19
Bihar	6	3	4
Total state average	28	22	39

Among twelve sample states, if the average positive recalls of awareness generation activities before and after NGP year is taken, then

- Rajasthan and Chhattisgarh have the highest (43-47%) positive recall of awareness generation activities out of the total responses reported by sample households,
- Himachal Pradesh, Maharashtra, Karnataka, Andhra Pradesh and Haryana report (23 to 31%) positive recall
- Tripura, West Bengal and Uttar Pradesh report (16 to 20%) positive recall
- Kerala has all the recall reported for only before NGP years

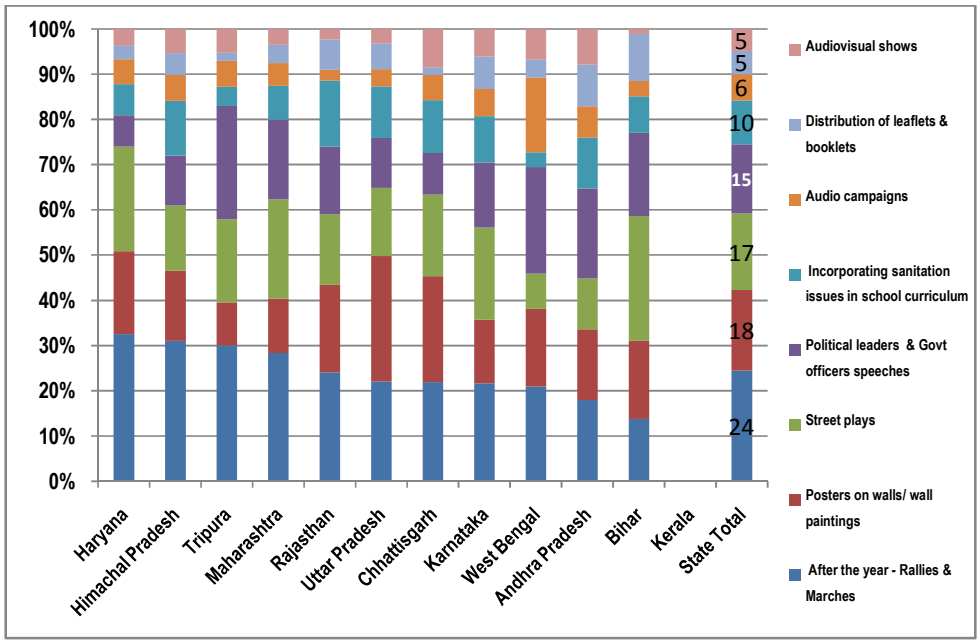
Bihar reports the lowest (4%) positive recall. The figures below describe the state-wise pattern of what activities dominated the positive recall of household respondents before and after NGP:

Fig 6.25: Activities undertaken for explaining about having latrine and usage before the NGP Year (in percentage)



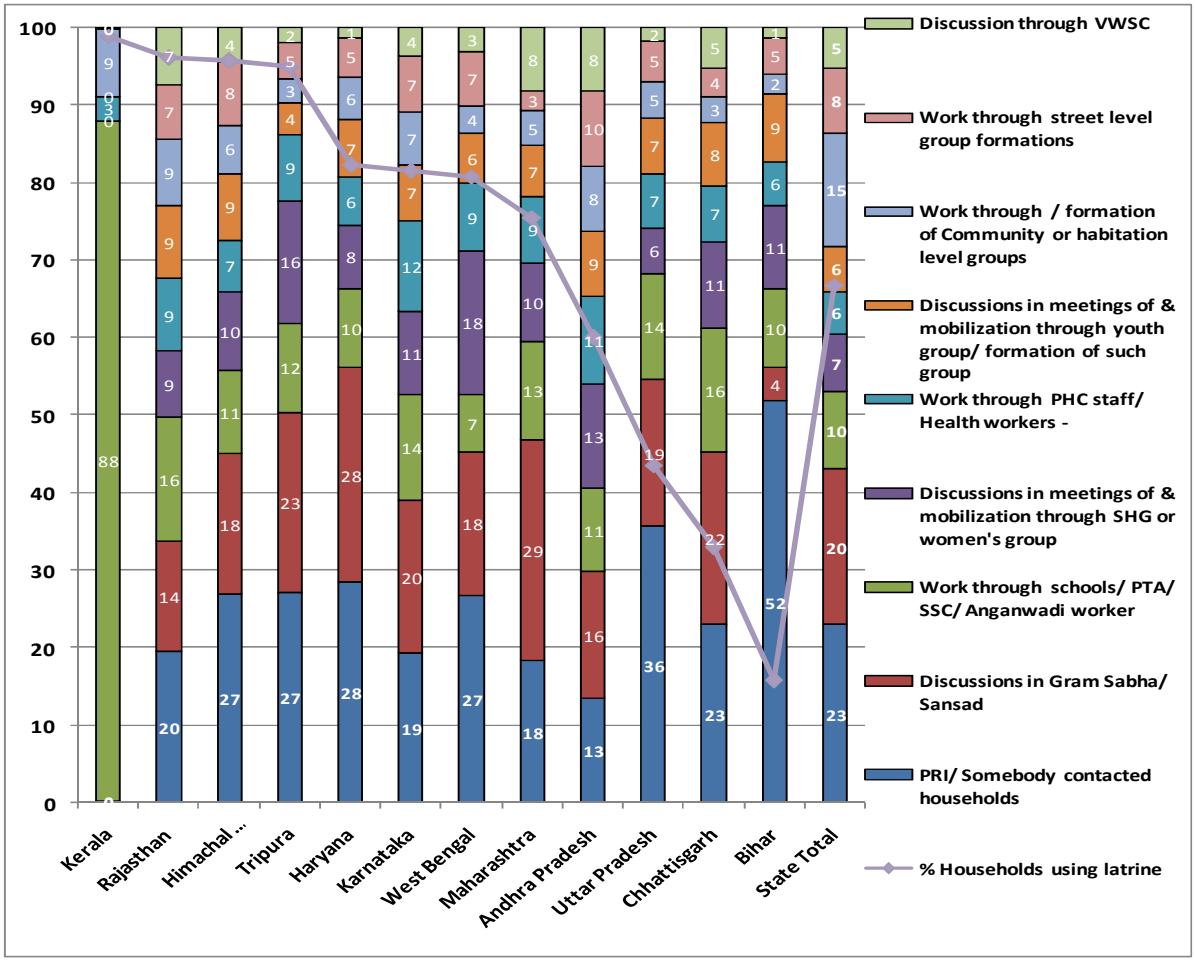
Overall, the household respondents recall that the main awareness generation activities that occurred, before the respective NGP year (any activitiy done in last ten years during TSC), include (in decreasing order) ralllies and marches (23% of the total recall responses), posters/ wall painting (18%), speechs by political leaders or govt. officials (17%), street-plays (17%) and incorporation of sanitation issue in school curriculum (9%). Activities recalled to a much lesser extent include audio campaigains (mainly in West Bengal), audio-visual shows (mainly in Chhattisgarh and Andhra Pradesh), and distribution of leaflets/ booklets (mainly in Bihar and Karnataka).

Fig 6.26: Activities done for explaining about latrine construction and usage after the NGP Year (in percentage)



Similar pattern is observed after NGP year as well. Overall, the household respondents recall that the main awareness generation activities that occurred, after the respective NGP year, include (in decreasing order) ralllies and marches (24% of the total recall responses), posters/ wall painting (17%), speechs by political leaders or govt. officials (15%), street-plays (16%) and incorporation of sanitation issue in school curriculum (9%). Activities recalled to a much lesser extent include audio campaigains (mainly in West Bengal), audio-visual shows (mainly in Chhattisgarh and Andhra Pradesh), and distribution of leaflets/ booklets (mainly in Bihar and Andhra Pradesh). In Kerala, the households have built the latrines much earlier compared to other states and report no recall of any awareness generation activity after their respective NGP year.

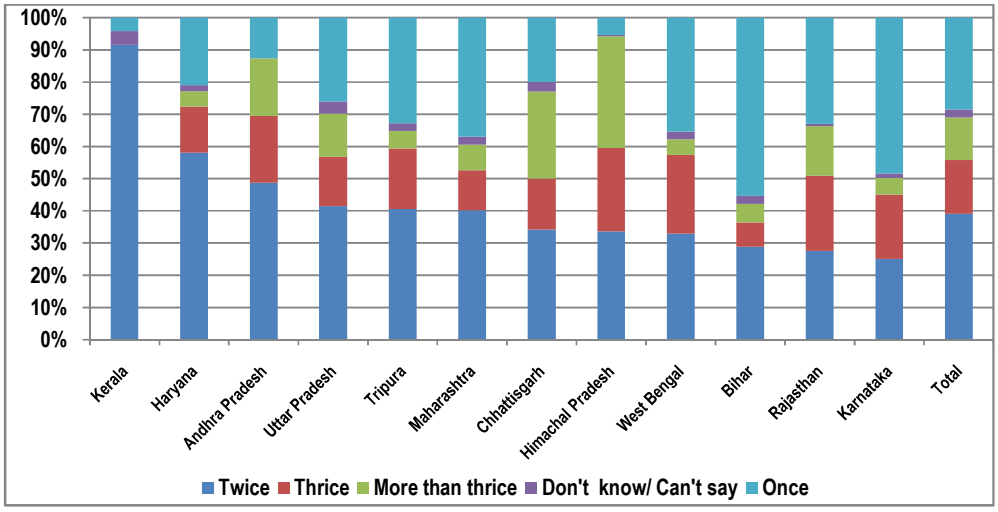
Fig 6.27: Social mobilisation processes adopted before the NGP Year (in percentage) and usage



The graph above shows the percentage of total recall of any awareness generation activity before and after NGP among sample households of the states. The figures below describe the state-wise pattern of what social mobilisation processes dominated the positive recall of household respondents before NGP.

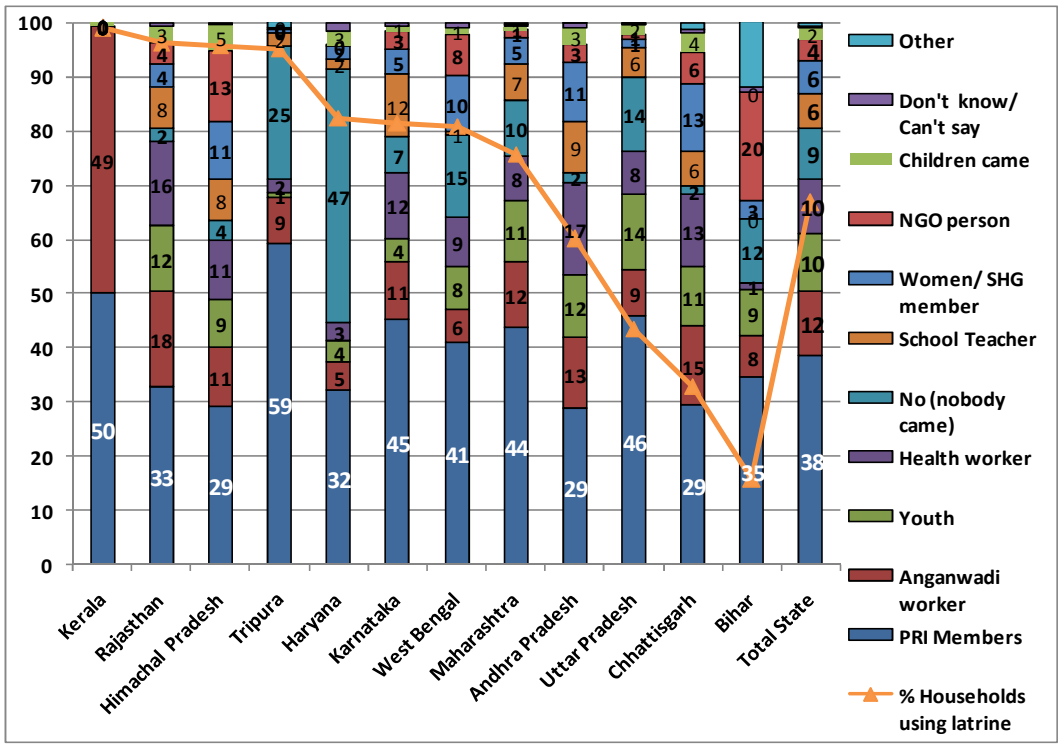
Overall, the main process adopted for social awareness or mobilisation recalled by household respondents was PRI contacted/ somebody contacted (23%), discussion in Gram Sabha is the second most frequent response reported at by 20%. It is followed by work through formation of community or habitation level group accounting for 14% and work through anganwadi worker/ school/ PTA amounting to another 10% of the total recall responses.

Fig 6.28: Frequency of visit by people/ institutional members to households before NGP for explaining about latrine (in percentage of households)



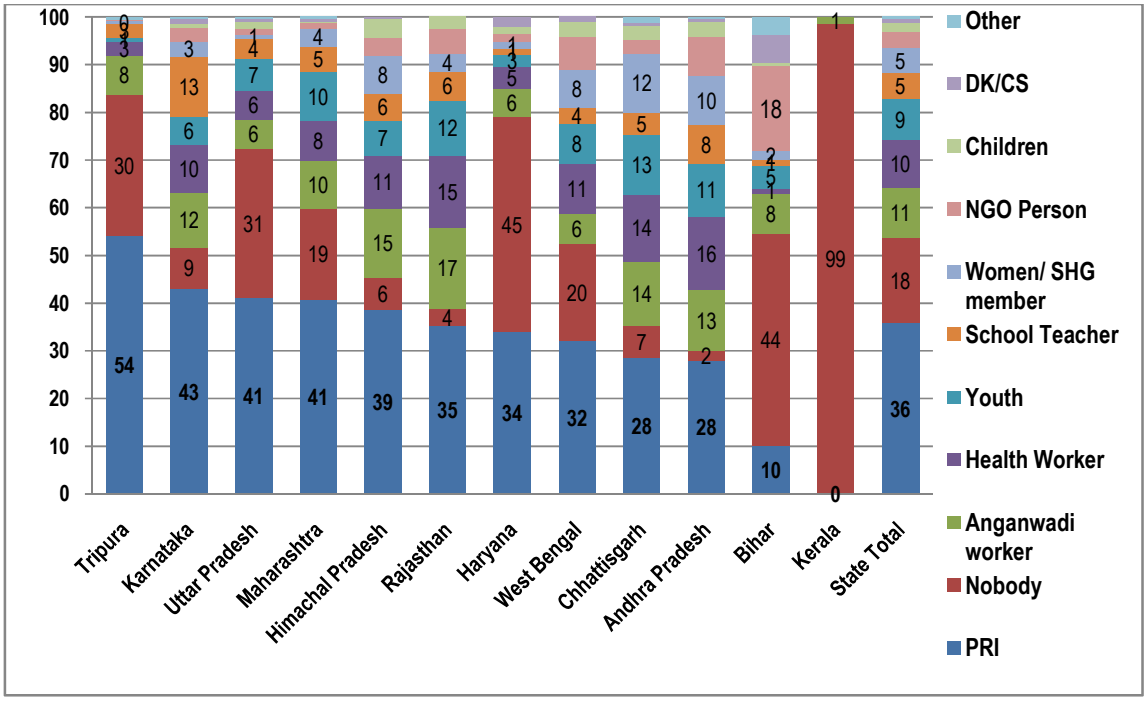
About 39% of respondents recalled people/ institutions visited twice before NGP for explain about latrine. This is followed by three visits recall by 16.6% and more that thrice by 13% sample households.

Fig 6.29: People and institutions visited households before construction of latrine (in percentage)



PRI members are recalled by the household respondents as the persons who led the social mobilisation process before latrine construction across all the states (recalled by 38% of the respondents). This is followed by anganwadi worker recalled as the leading person by 12% of household respondents, Youth and health workers (10% households), school teacher and women/ SHG members (9% households), CBO persons (4% households), and children and others are (2 % and 1% households respectively). Around 9% of households said that nobody came or visited their house to tell them about latrines to be constructed.

Fig 6.30: Who led the household visit after construction of latrine (in percentage)



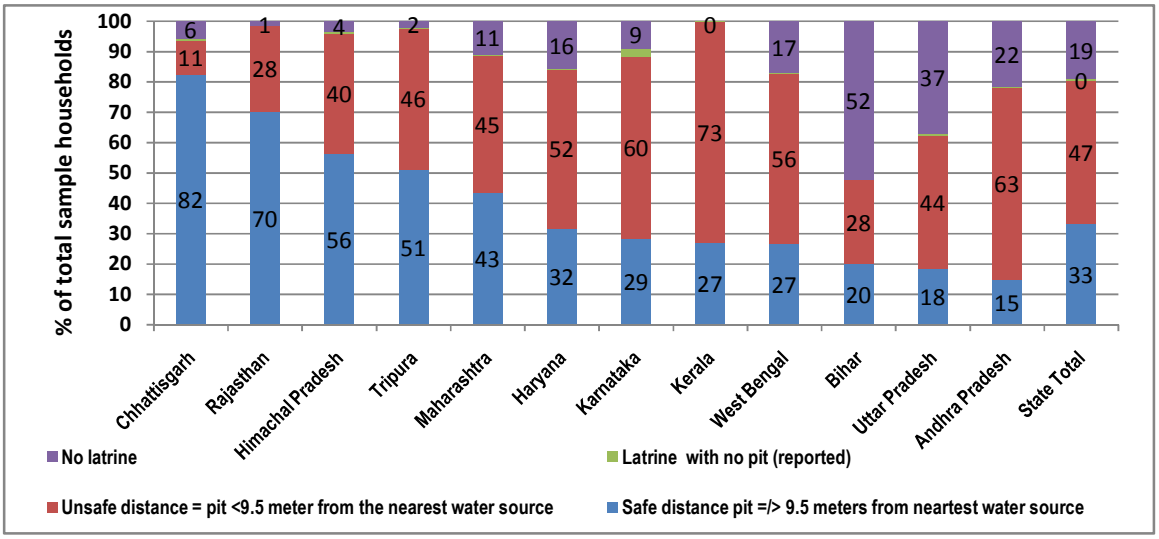
The PRI members are recalled as having played an important role even after construction of latrines. Around 36% households recall PRI members came after construction of toilets. This was followed by Anganwadi worker and recalled by 11% of households, Health workers (10% of households), Youth of villages (9% Households), School teachers and Women/SHG members by 5% households each. 3% households said that an NGO person came to visit and 2 % of households reveal that children came to explain.

18% household respondents report that nobody visited their house after construction of latrine (in their house or in the majority of the other houses) to explain about how to continue to use and maintain latrines.

6.3 FACTORS CRITICAL FOR BETTER SUSTAINABILITY OF NGP STATUS AND SUSTAINABILITY OF IMPACT

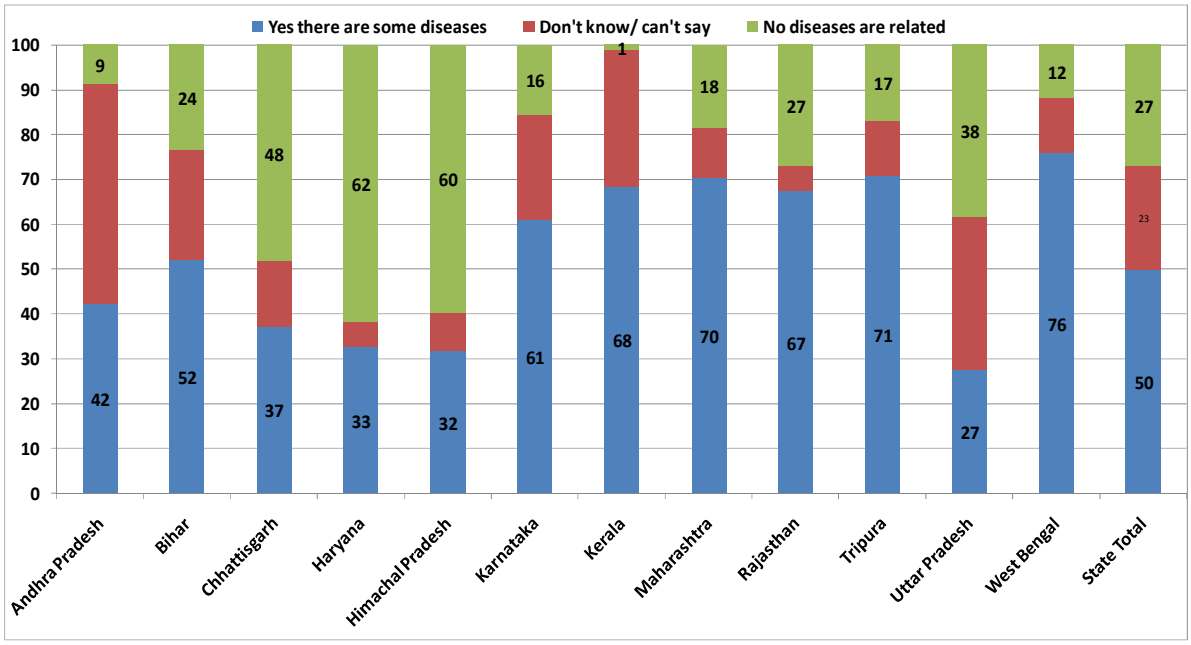
6.3.1 Contamination of water source because of IHHL location

Fig 6.31: IHHL safe latrine from risk of contaminating water source (in percentage)



Around 33.2% of the total sample household respondents have safe latrine pit (either 9.5 metre or more than 9.5 metre distance from nearest water source. 47.2% households have unsafe distance pit (less than 9.5 metre distance from nearest water source. Apart from that 19.1% households have no pit/ latrine.

Fig 6.32: Awareness about linkages between sanitation and water borne diseases (in percentage)



50% of the total respondents recalled that there are some diseases linked with sanitation (with highest 76% in West Bengal, 71% in Tripura and 70% in Maharashtra) and 27% recalled no diseases are related with sanitation (with 62% in Haryana and 60% in Himachal Pradesh). While 23% recalled they don't know about the linkages between water borne disease and sanitation (with significant response in AP 49% and 34% in UP).

6.3.2 Type of Toilets

Table 6.11: Type of toilets in IHHL (in percentage)

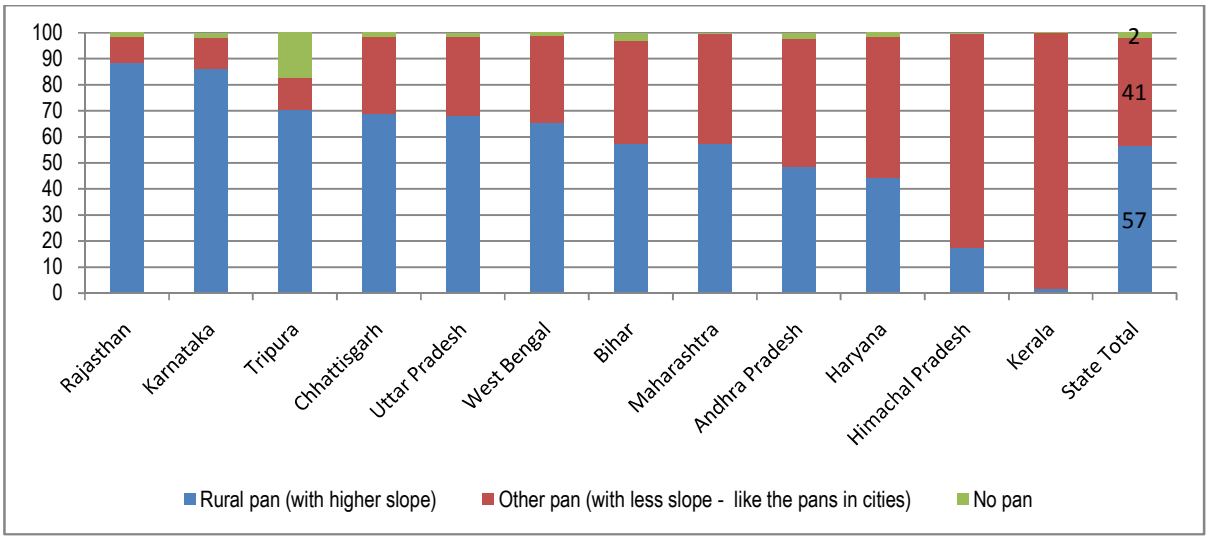
States	Total Single leach pit	Total double leach pits	Septic tank with one or two chambers	Other/ DK/CS	No latrine/ pit	Total sample
Kerala	73	21	3	3	0	720
Rajasthan	93	4	1	0	1	540
Tripura	92	5	1	0	2	420
Himachal Pradesh	75	15	5	0	4	420
Chhattisgarh	85	7	1	1	6	420
Maharashtra	52	26	10	1	11	1620
Karnataka	70	15	3	1	11	540
Haryana	29	40	15	0	16	540
West Bengal	54	23	4	1	17	720
Andhra Pradesh	59	8	10	1	22	900
Uttar Pradesh	46	11	4	0	38	2700
Bihar	36	8	4	0	52	420
Total	**58**	**16**	**6**	**1**	**20**	**9960**

Nearly 58% of the total sample household respondents had single leach pit latrines, found concentrated in Rajasthan and Tripura (93% and 92% respectively). 16% households had double (leach) pit latrines, found concentrated in Haryana (about 40%). 6% households had latrines with septic tanks, found distributed mainly among Haryana, Maharashtra and Andhra

Pradesh. Around 20% households reported either no pit or no latrine at all, found concentrated in Bihar (52%) and Uttar Pradesh with 38%.

6.3.3 Type of Pan Used

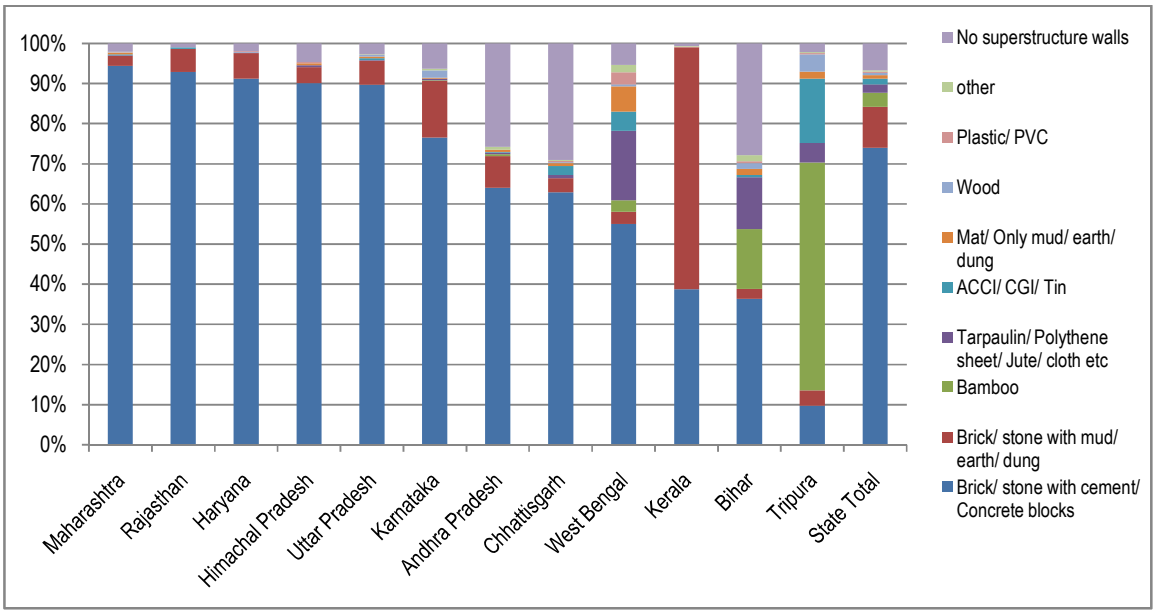
Fig 6.33: Type of pan used in IHHL (in percentage)



Around 57% of the individual household's toilets have rural pan i.e. with higher slop followed by other pan with less slope 41%. .

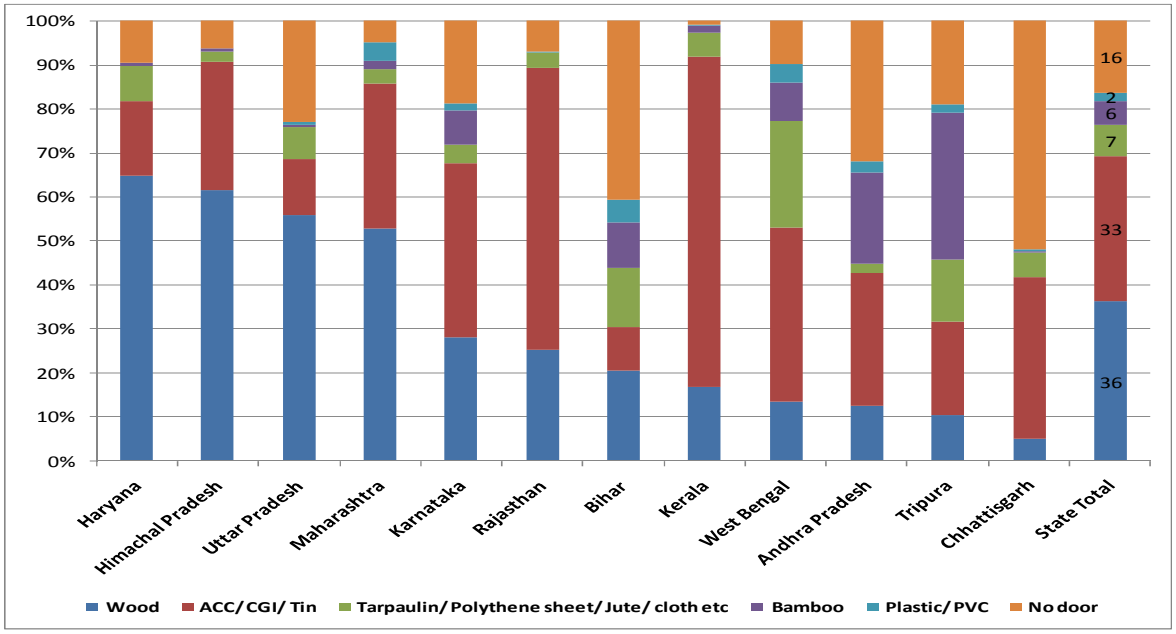
6.3.4 Material of the Superstructure Wall

Fig 6.34: Material used in superstructure wall in IHHL



Superstructures of around 74% of toilets have been made of Brick/ Stone /Concrete blocks. 10% households reported that the superstructure was made from Brick/ stone with mud/ earth/ dung. Similarly 9% toilets reported without superstructure (No Wall). In Tripura 56% households reported that they use bamboo in superstructure wall, where In Kerala 60% of the superstructure have been made from brick/ stone with mud/ Earth/ Dung.

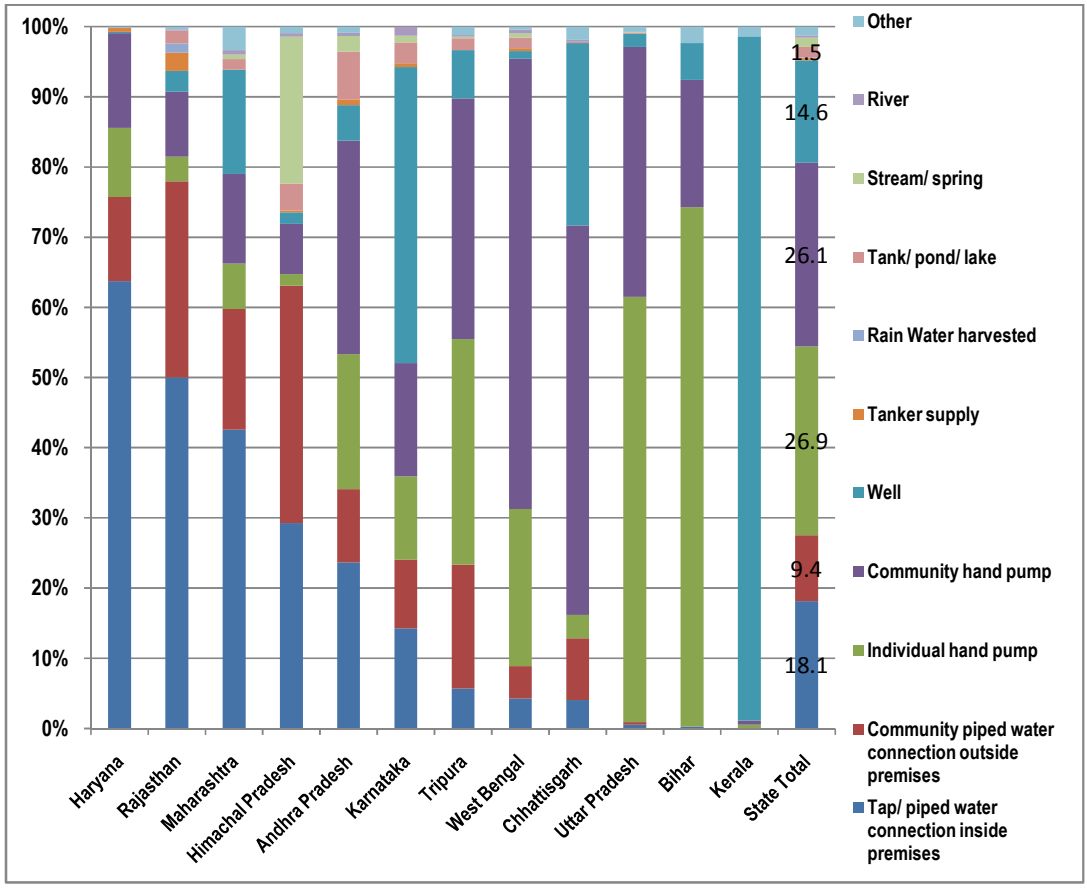
Fig 6.35: Material of door in IHHL (in percentage)



Around 36% toilets have been made of wooden door followed by ACC/ CGI/ Tin in 33% toilets. 7% had wall made up of Tarpaulin/ Polythene/ Jute or cloth. Use of Bamboo and Plastic/ PVC were also observed. About 17% toilets were without door.

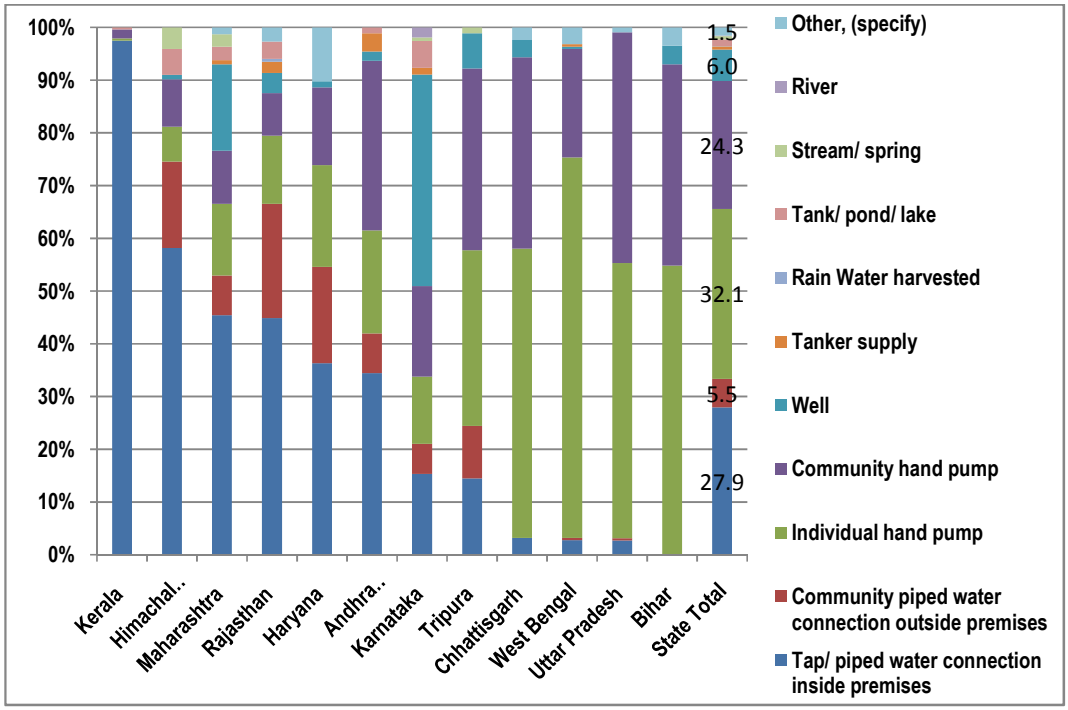
6.3.5 Availability of Water for Drinking and Non-Drinking Purpose

Fig 6.36: Households main source of water for drinking purpose (in percentage)



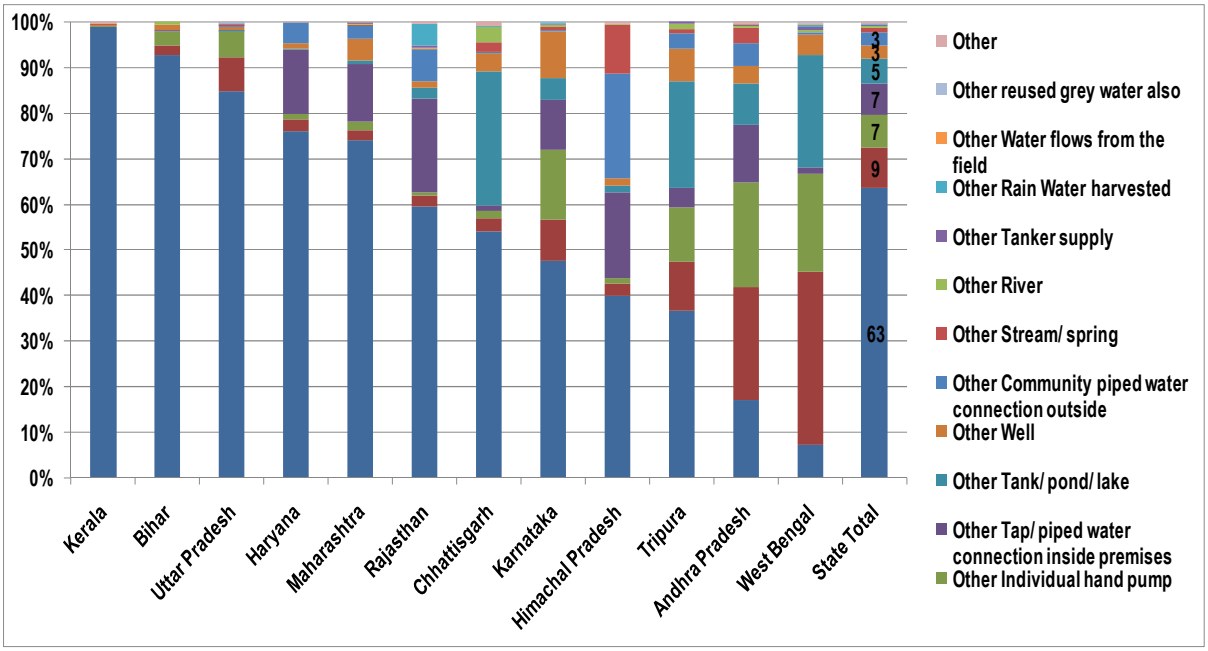
- Around 27% households have individual hand pumps as source of water for drinking and cooking purpose, followed by community hand pumps with 26% and tap/piped water connection inside premises (18%). Nearly 14% households' access to well while 9% to community piped water connection outside premises.
- Access to individual hand pumps as water for drinking and cooking purpose was observed highest in Bihar and Uttar Pradesh with 74% and 61% respectively. While community hand pumps are used maximum in West Bengal and Chhattisgarh with 64% and 56% respectively. In Himachal Pradesh 21% sample households bring water for drinking and cooking from stream/ spring.

Fig 6.37: Main source of water for drinking purpose in schools/ anganwadi (in percentage)



- Individual hand pumps (32%) has emerged as the major source of water for drinking and cooking purpose in schools/ anganwadis followed by tap/piped water connection inside by premises (28%) and community hand pumps (24%). The use of well was noticed to the extent of 6% in the overall sample.
- 72% schools/ anganwadis in West Bengal, 55% in Bihar and Chhattisgarh and 52% in Uttar Pradesh reported use of individual hand pumps as source of water for drinking and cooking purpose. Like wise use of community hand pumps was observed maximum in Uttar Pradesh with 44%, followed by Bihar (38%), Chhattisgarh (36%) and Tripura (34%). Tap water connection inside the premises was noticed highest in Kerala with 98% followed by Himachal Pradesh (58%)

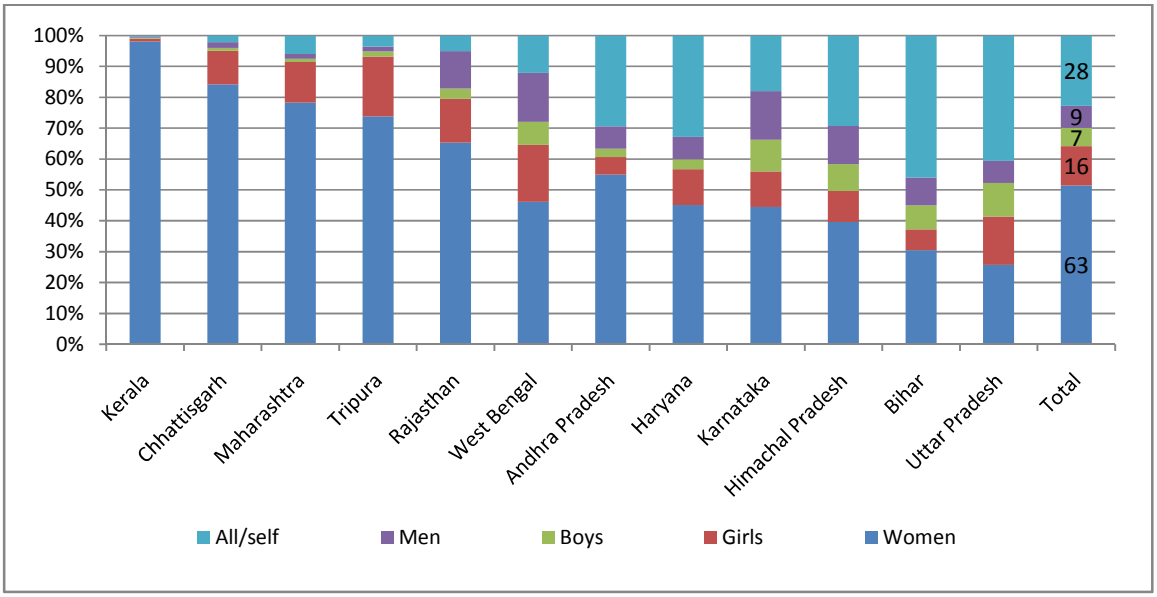
Fig 6.38: Households main source of water for non-drinking purpose (in percentage)



More than half (63.5%) of the overall household respondents bring the water for non drinking purpose from the same source as they bring water for drinking purpose, Kerala showing highest of 98.8% whereas West Bengal showing 7.1%.

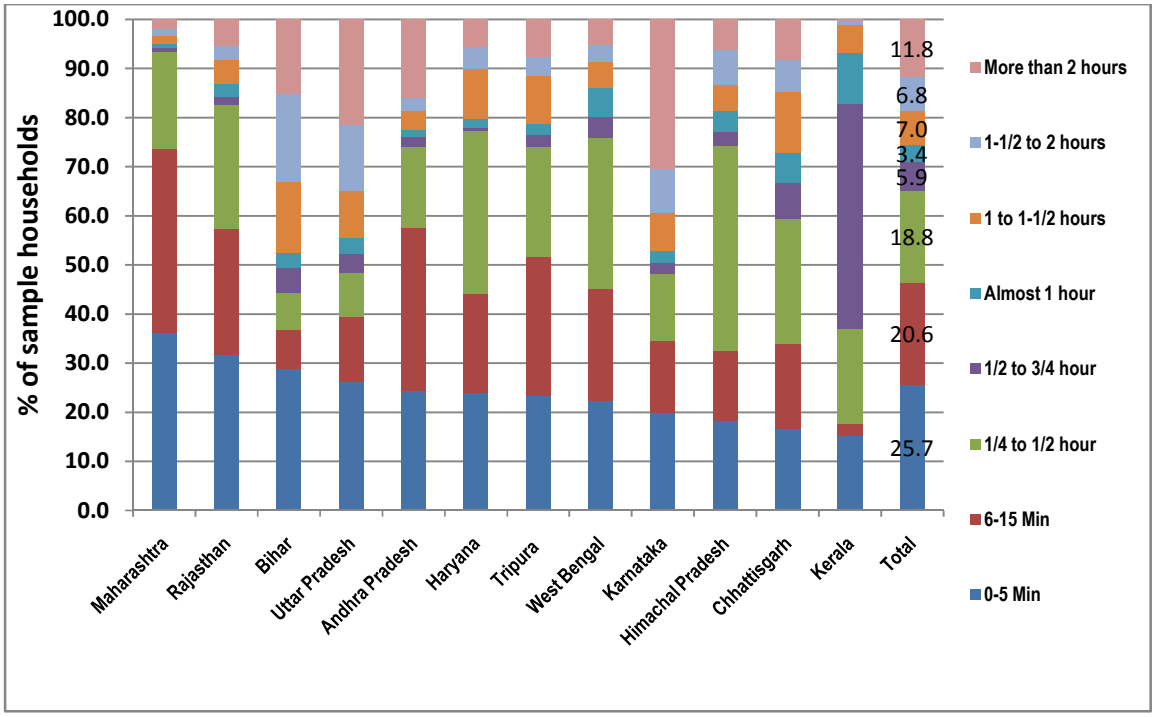
In West Bengal 38.1% of the sample respondents bring water for non drinking purpose from community hand pump other than they use for it drinking water purpose. Negligible percent of the sample households reuse grey water, use rain water which is harvested, use other water flows from the field, other tanker supply, other river or other stream/ spring for non drinking purpose.

Fig.6.39: Households members fetch water (in percentage)



Out of the total household sample covered in 12 states, in around 70% households women and children fetch water.

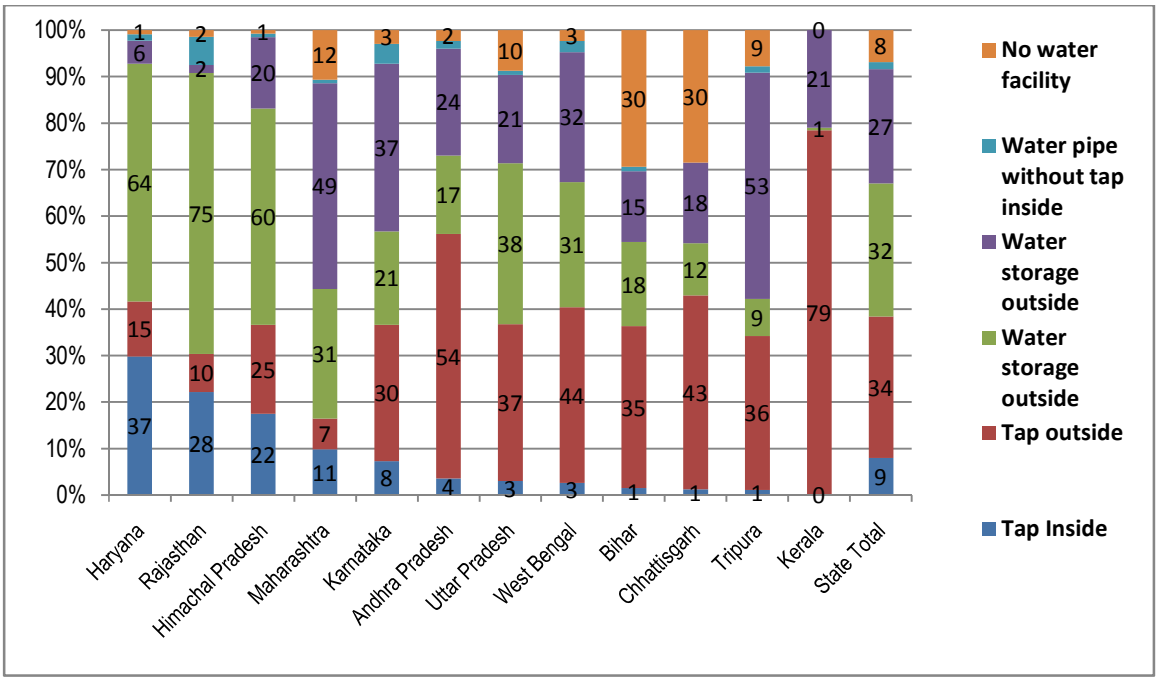
Fig 6.40: Time spent per day to fetch water (in percentage)



Almost half (45%) of the households take 0-15 minutes to fetch the water. Significant percent (11.8%) of the sample respondent takes more than two hours to fetch the water, where Karnataka and Uttar Pradesh shows that highest percent of 30.4% and 21.6% respectively. Around 35% households spend more than half hour per day on fetching water.

6.3.6 Water for IHHL

Fig 6.41: Households observed with water container / water facility (with or without water in it) in or around the latrine (in percentage)



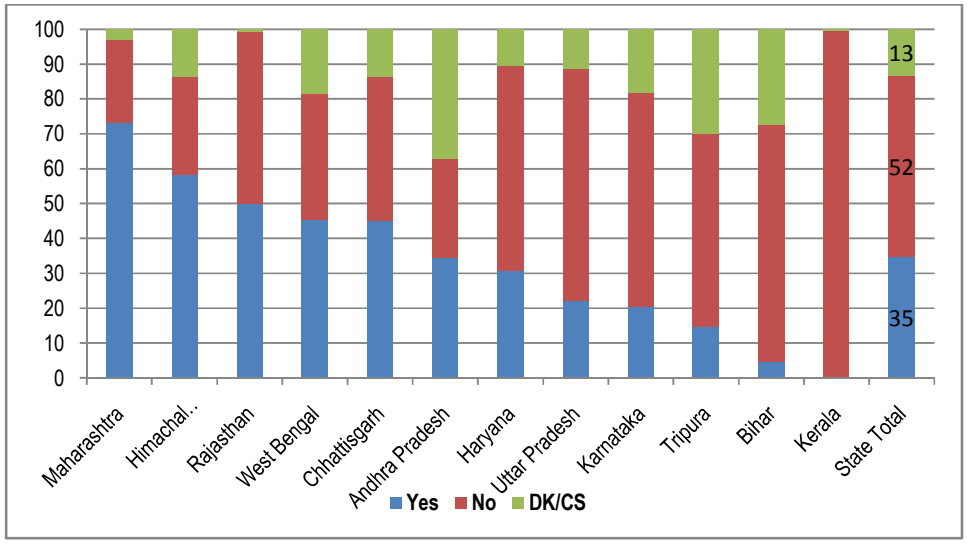
Tap water outside the toilet is the most common facility found in 34% households (with 79% in Kerala) followed by water storage inside the toilet and water storage outside the toilets respectively 32% and 27%.

Pipe water supply (inside the toilet) was found to be available in very limited cases and it was evident from the fact that only 9% (with 37% in Haryana) households had tap inside. It was also observed that 8% households neither had water container nor pipe water inside or outside the toilets (in Bihar and Chhattisgarh 30% toilets respectively).

Overall, more than 61% households have been observed to have a latrine with either a water facility or a container having actual water (running or stored respectively) More than 19% households were observed to either have no water facility or container in or around their latrine or no water found (running/ stored) in the facility or container that existed in or around the latrine.

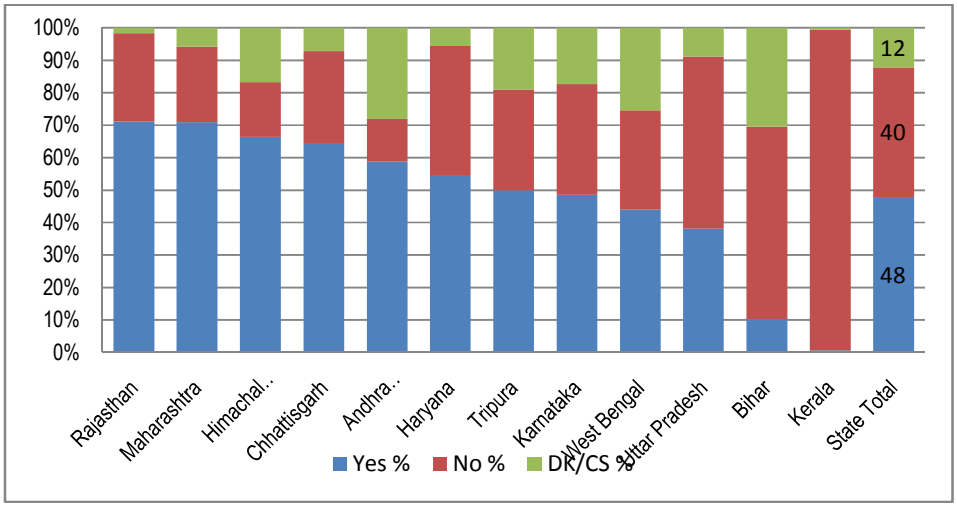
6.3.7 Action taken by NGP Gram panchayats, community and others to maintain ODF Status

Fig 6.42: Resolution passed by PRI to maintained ODF



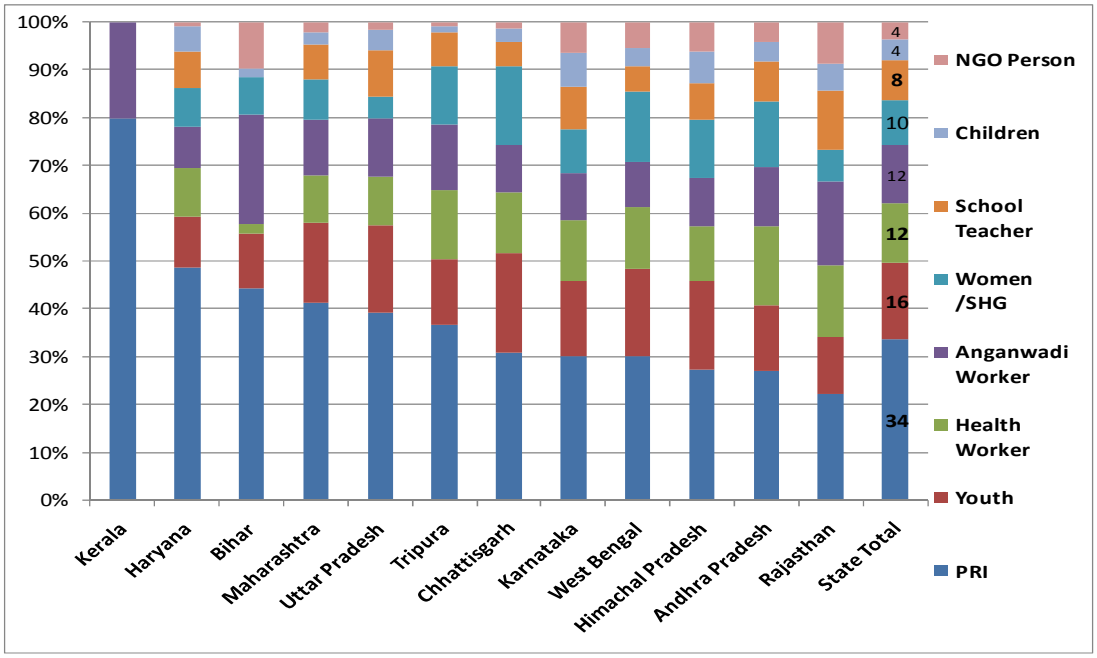
Regarding information about resolution passed describing penalty for open defecation to maintained ODF status, 52% of sample households stated that no resolution was passed by PRI, 35% of households recalled that resolutions was passed by PRI to maintain ODF status.

Fig 6.43: Monitoring responsibility taken up by group/ individuals (in percentage)



48% of sample households reveal that monitoring responsibility for maintaining the ODF status was taken up by a group/ individual. Around 40% sample households had contradictory response.

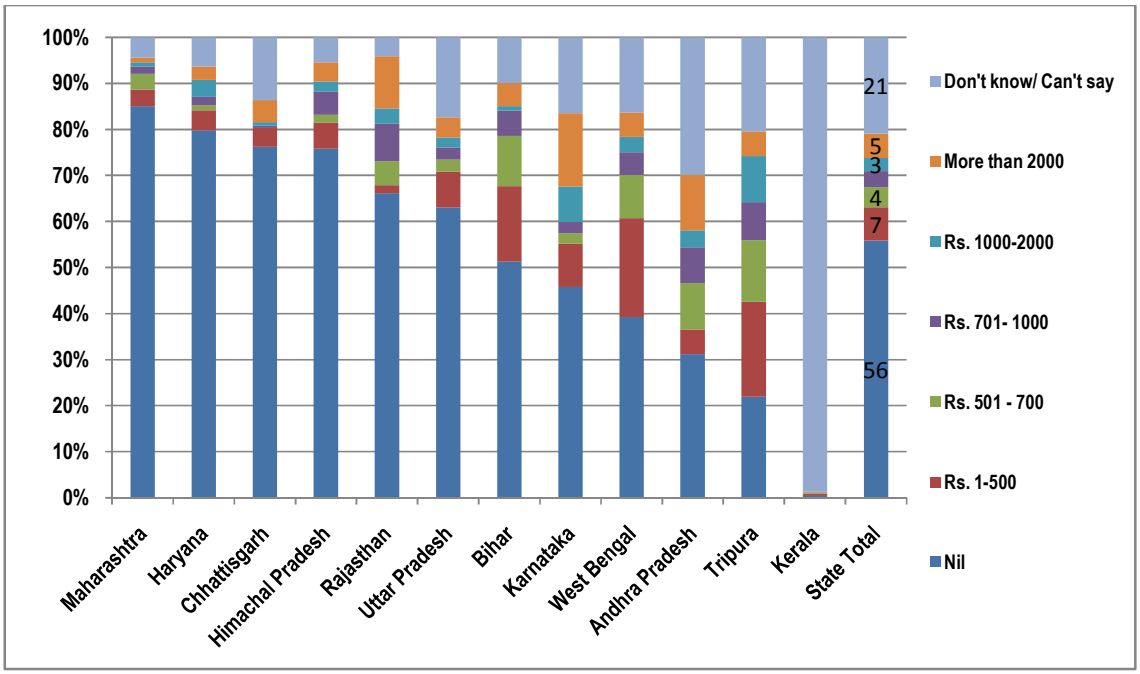
Fig 6.44: Information on the groups /individuals who had taken the monitoring responsibility (in percentage)



Around 33% (with 80% in Kerala) sample households reveal that PRI had taken the monitoring responsibility for maintaining ODF following by youth 16%, health worker and anganwadi worker 12% , women/ SHG , school teacher, children, CBOs with 10% , 8% and 4% respectively.

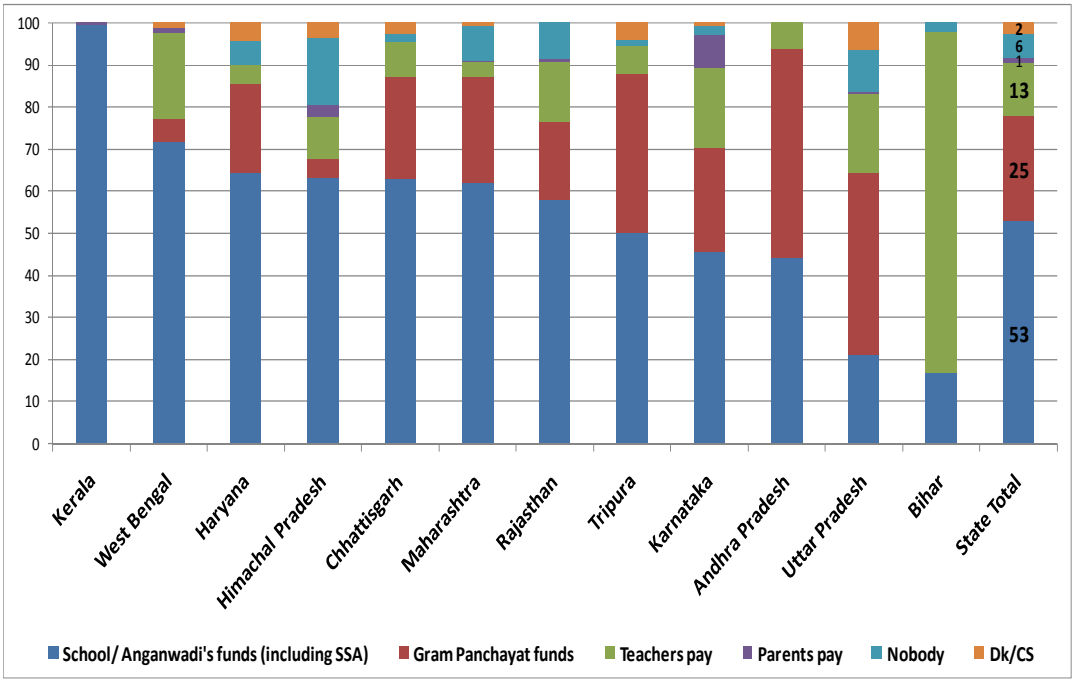
6.3.8 Operation and Maintenance for Upkeep of Community, School and Anganwadi Toilets

Fig 6.45: Total cost for repair IHHL from the time of construction (in percentage)



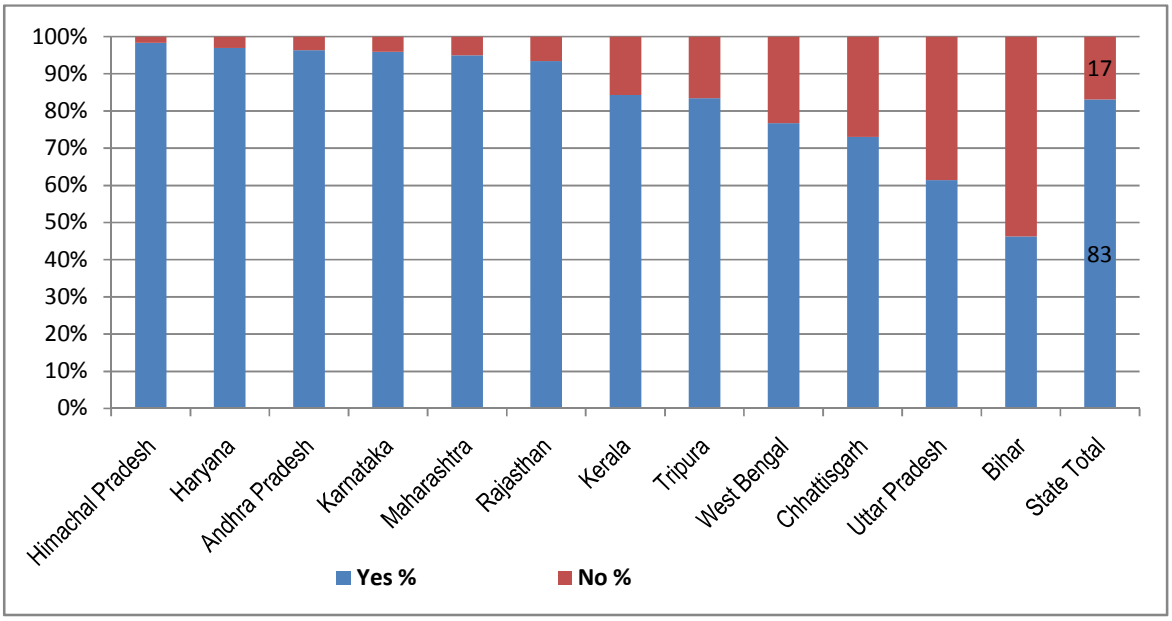
- 55% households reported that they did not have any need for repair their toilets from the time of construction
- 21% respondents shown ignorance about it.

Fig 6.46: Expense for repair of school /anganwadi toilets (in percentage)



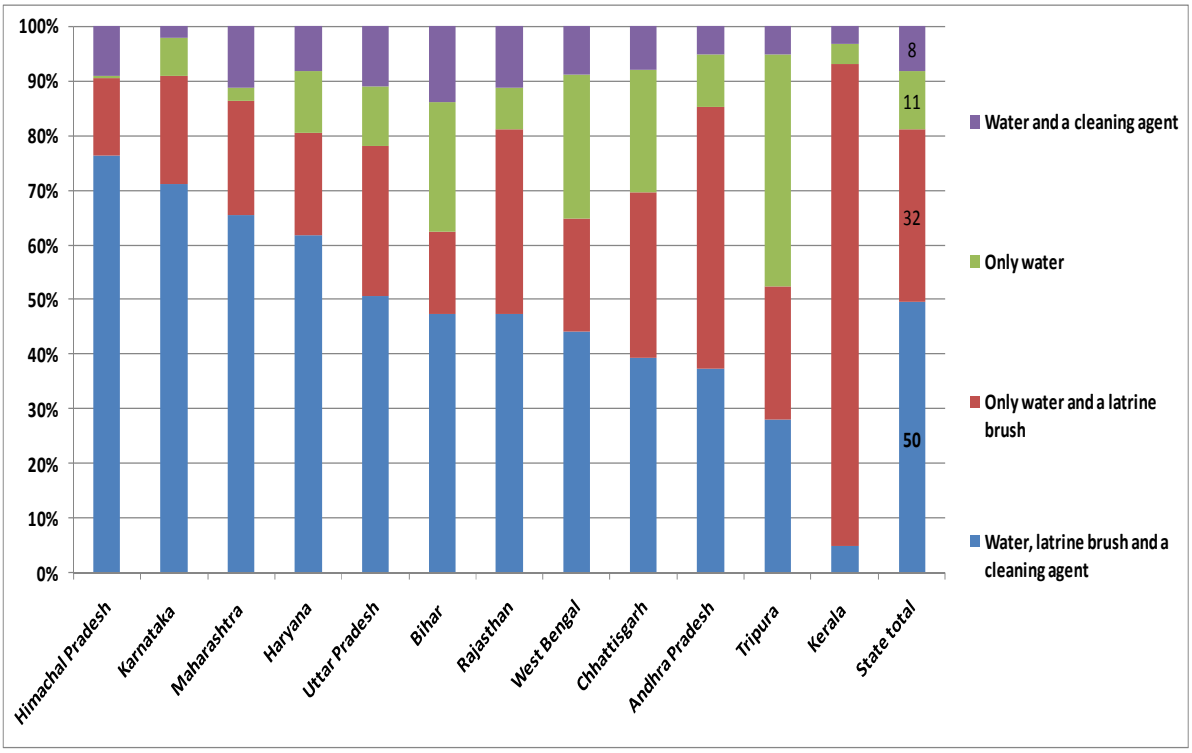
The school/ anganwadi funds including Sarv Siksha Abhiyan have been the main source of the repairing expenses according to 53% respondents (highest 100% in Kerala). Another 25% utilised Gram Panchayat fund.

Fig 6.47: Is the latrine cleaned regularly? (in percentage of households having latrine)



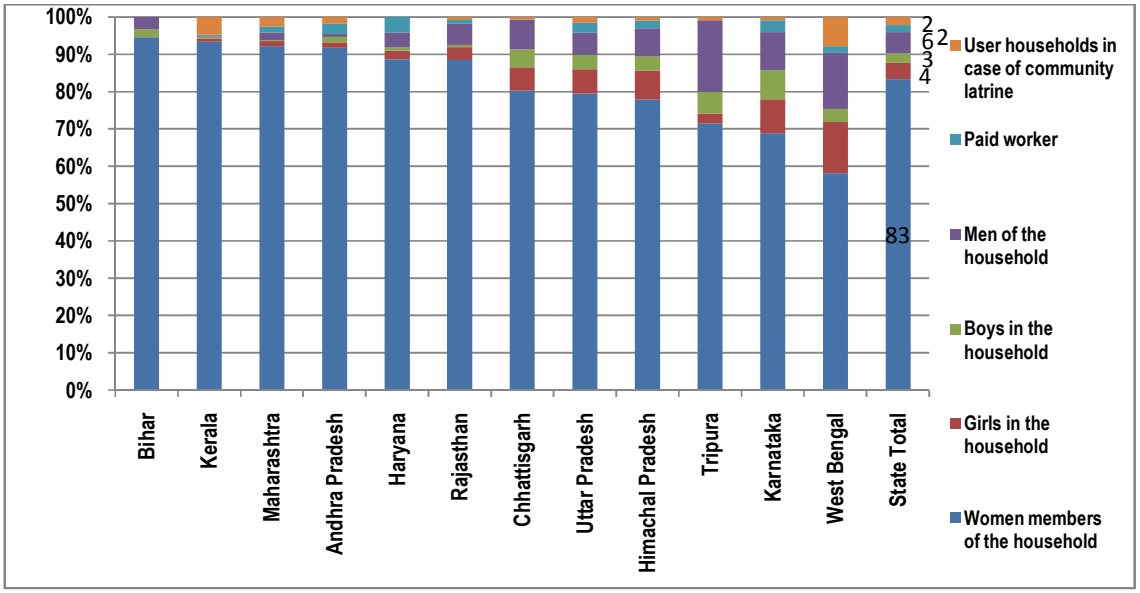
Among 12 states, 83% of Sample household reported that the toilets are being cleaned regularly, where 16% households reported no regular cleaning.

Fig 6.48: Material used for IHHL cleaning (in percentage)



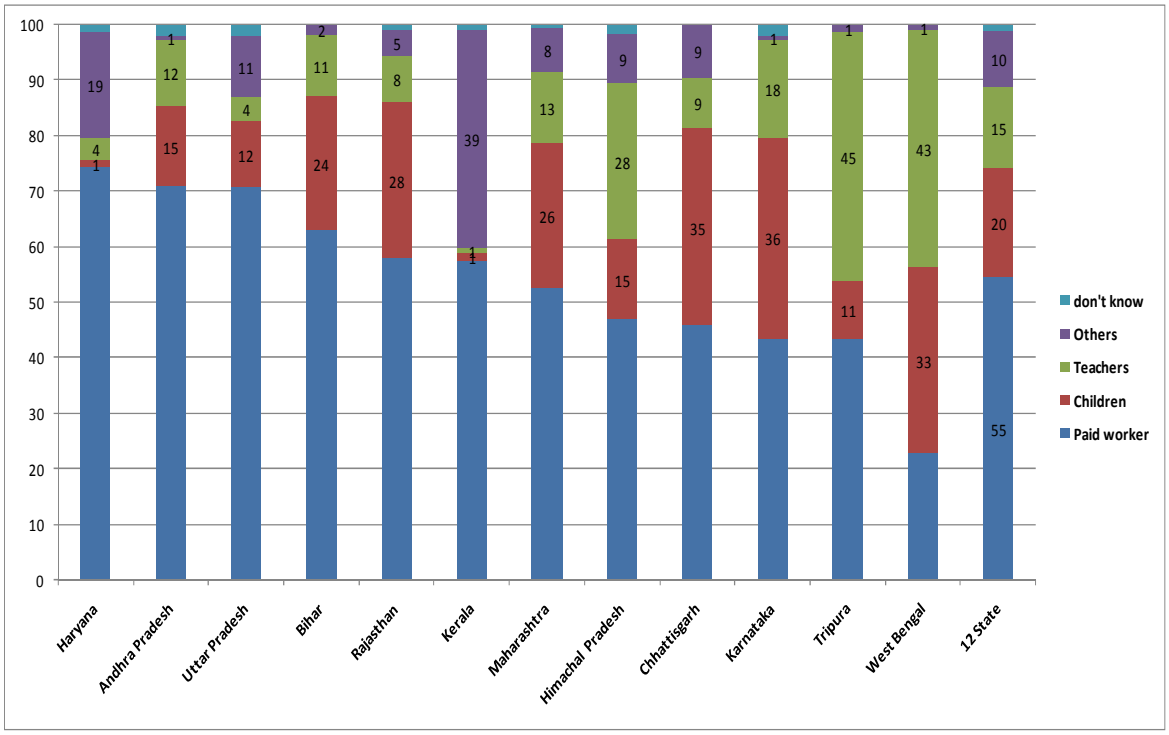
Overall nearly 50% HHs reported use of water, brush and a cleaning agent like Phenyl, acid, harpic etc (above 70% in Himachal Pradesh and Karnataka respectively). Approx. 31% households use only water and brush for cleaning toilet (87% in Kerala), 10% households reported that they use only water for toilets cleaning (highest 42 % in Tripura).

Fig 6.49: Person who cleans IHHL (in percentage)



The toilet cleaning in households were mainly done by females of the household (83%) followed by another 4% by girls, 3% by boys of households and in more than 5% cases male of the house clean the toilet. However, 3% of sample households get this task done by sweepers or paid worker.

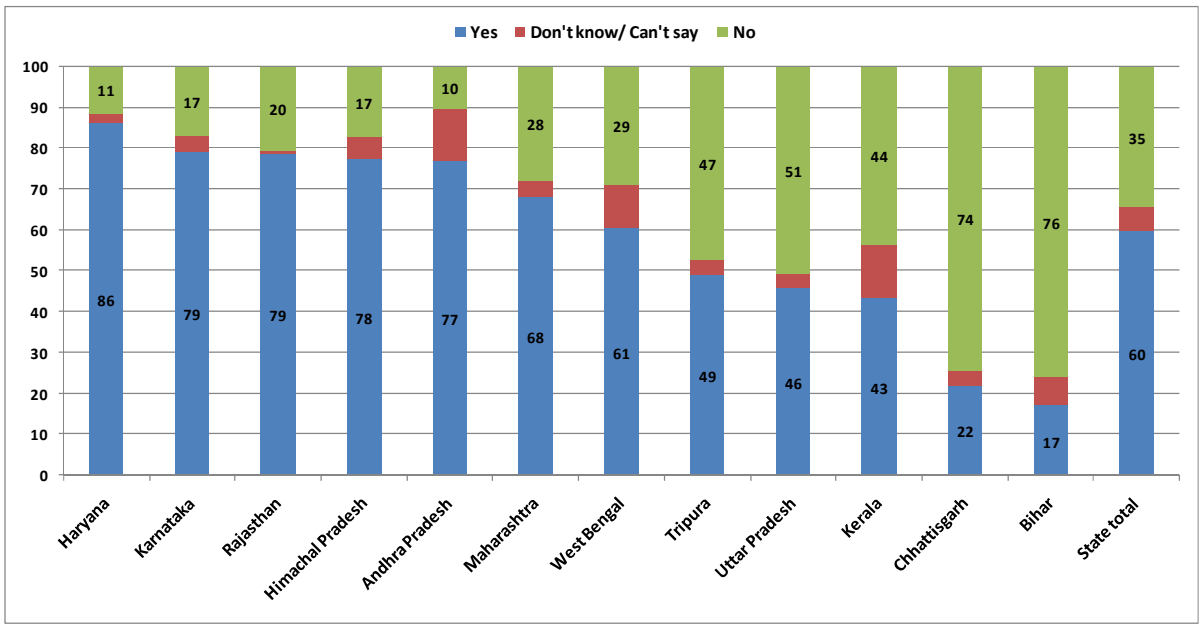
Fig 6.50: Person who cleans school and anganwadi toilet (in percentage)



Nearly 55% respondents reveal that the toilets of schools and anganwadi have been cleaned by paid workers. It is followed by children in 20% of school and anganwadi clean the toilets and teachers (in 15% of schools and anganwadi).

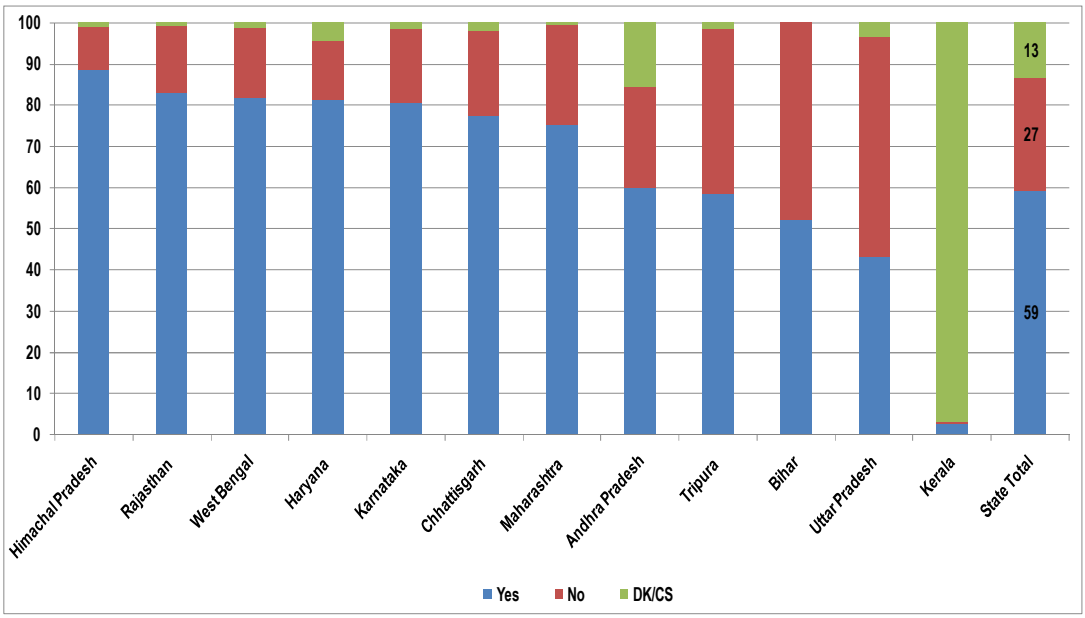
The payment for hiring the person for cleaning the toilets has been done through school and anganwadis funds (approx. 57%) and Gram panchayat funds (35%).

Fig 6.51: Availability of mason in IHHL (in percentage)



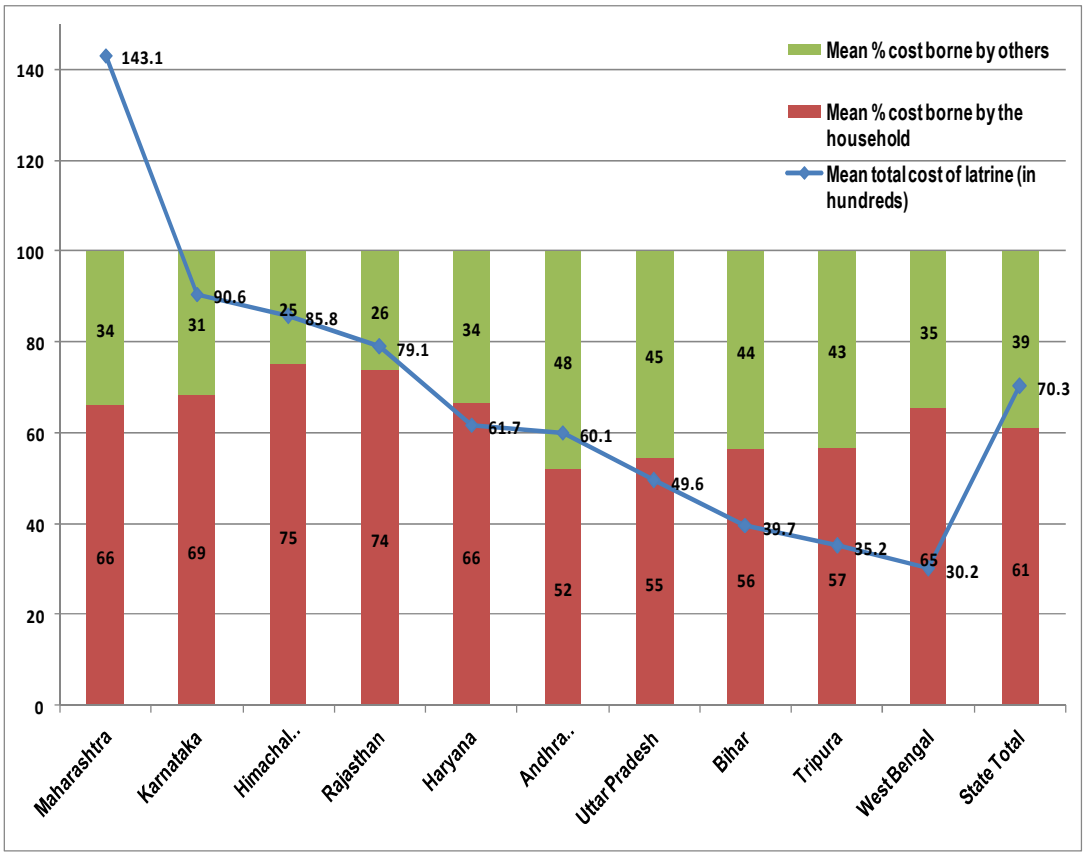
60% of the households reported availability of a mason for repairing of IHHL if required. Another 35% households reported no mason was available.

Fig 6.52: Availability of a mason for school and anganwadi (in percentage)



Approx. 59% reported that masons are available for the repairing of toilets in school and anganwadi. Another 27% schools and Anganwadi have no mason. Nearly 13% of sample schools and anganwadis (with 97% in Kerala) had no information about availability of a mason.

Fig 6.53: Total cost of IHHL (in hundreds) and percent share contributed by households (Based on only those household responses, where both contributions could be recalled in Rupee terms)



Overall, Rs. 7030/- is the mean cost of a latrine, with the highest in Maharashtra and lowest in West Bengal. The mean percent share contributed by the household amounts to 61% of the total cost of latrine.

The figures are based on less than 23% respondents (of households having IHHL) who could recall/ estimate the contributions of both the households' and outsiders' (given/ spent in terms of cash/ reimbursements or materials- estimated in terms of their cost in Rupee terms. The loans they may have taken from SHGs or other sources have been included in the households' contribution).

Chhattisgarh and Kerala both had very few respondents who could recall/ estimate both the contributions in Rupee terms.

Given in the next figure – are the mean cost of latrine and percent share contributions analysed among various socio-economic categories for the overall sample.

For economic indicators, these 23% respondents were analysed for their

- Ration card status (have/ do not have ration card)
- Ration card type (APL/ BPL/ Antyodaya)

And the two indicators that have emerged as better indicators of poverty among the sample of this study viz.:

- Type of house (*Pucca/ Semi-pucca/ Kuchha*)
- Primary occupation of the households (Agricultural labourer/ Daily wage labourer compared with the other major occupation viz. Farmer)

For social indicators, these 23% respondents were analysed for

- Belonging to SC/ ST/ Muslim/ Woman-headed household (compared to other than these)
- Belonging to SC/ ST/ OBC compared with others

Fig 6.54: Economic indicators and total cost of IHHL (in hundreds) and percent share borne by households

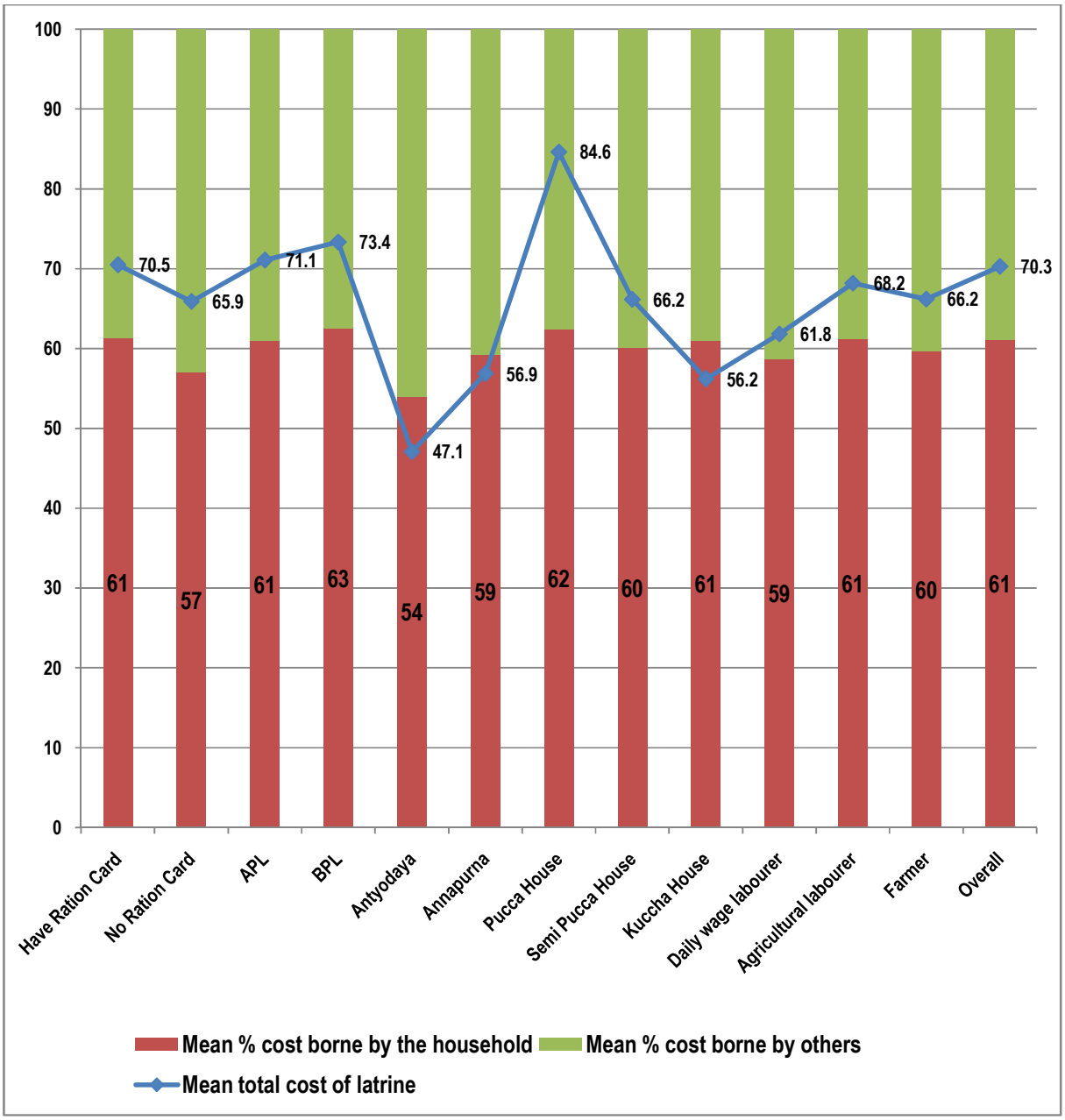
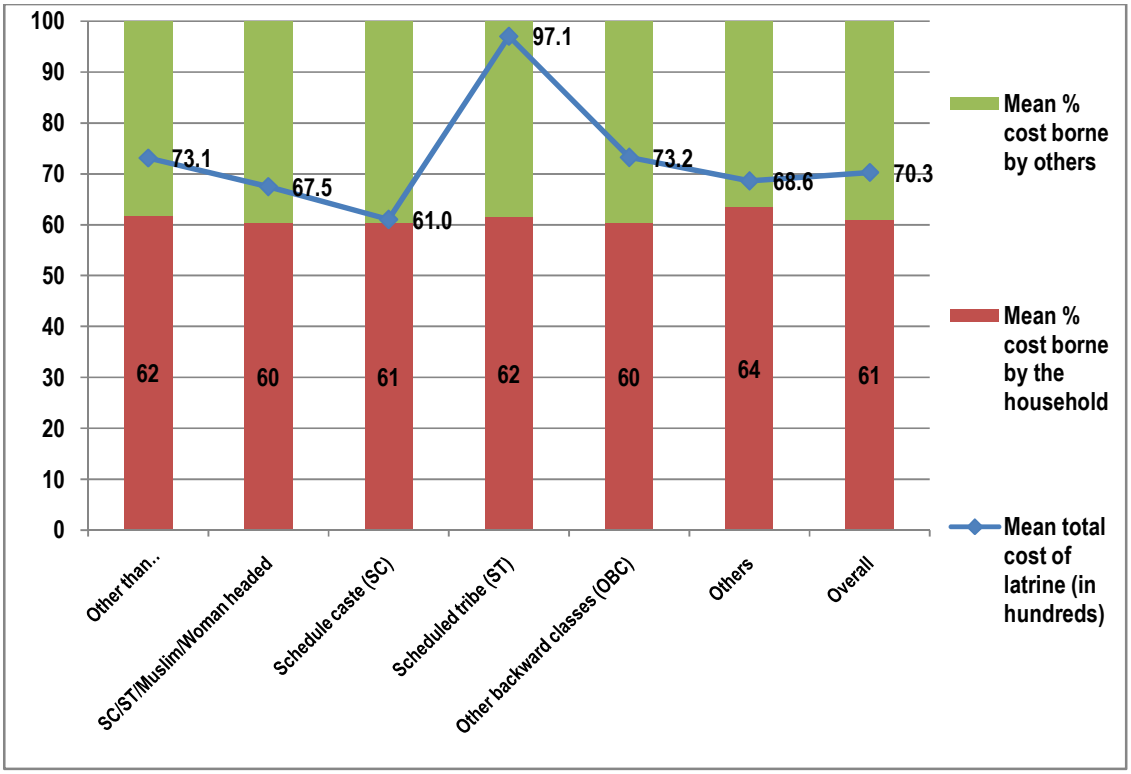


Fig 6.55: Social indicators and total cost of IHHL(in hundreds) and percent share borne by households



6.4 NGP AWARD MONEY UTILISATION

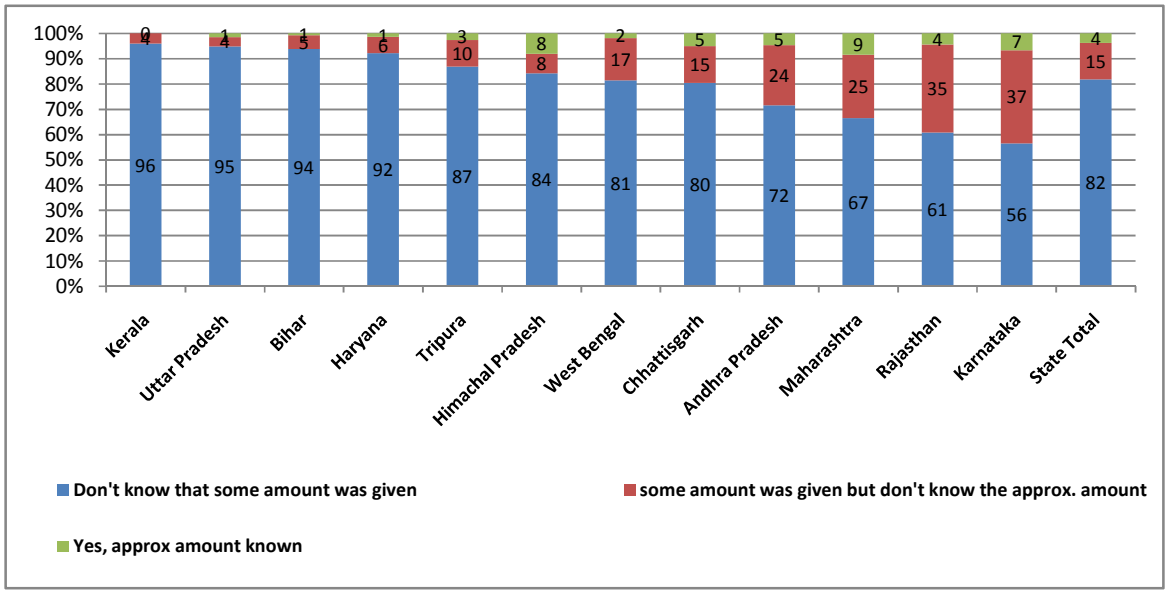
Table 6.12: Awareness about Nirmal Gram Puraskar given to Gram Panchayat (in percentage)

States	Know that NGP was awarded to the Panchayat	Don't know that NGP was awarded to the Panchayat	Can't say about NGP was awarded to the Panchayat or not
Rajasthan	**93**	**4**	**3**
Himachal Pradesh	**82**	10	8
Haryana	**77**	14	9
Maharashtra	**72**	16	12
Andhra Pradesh	**68**	20	12
Chhattisgarh	**63**	30	8
Uttar Pradesh	**61**	26	14
Tripura	**55**	33	12
Karnataka	**51**	39	10
Bihar	**35**	42	23
West Bengal	**32**	45	23
Kerala	**4**	1	95
12 State	**59**	23	19

- Nearly 59% households are aware about their gram panchayat received Nirmal Gram Puraskar awarded.
- The awareness is relatively higher in Rajasthan and Himachal Pradesh and relatively lower in Kerala.
- In Kerala, as described earlier, most of the latrines have been constructed even before TSC. Also, not much IEC activity was done in Kerala. This might be because both coverage and usage were relatively high even before preparing for NGP), hence it is plausible that majority of the household respondents do not recall hearing about NGP.

6.4.1 Awareness about Puraskar amount given to Gram Panchayat

Fig 6.56: Awareness about Puraskar amount given to GP (in percentage)



82% of HH respondents were not aware if any award money was given to the gram panchayat.

- Around 15% of households reported that some amount was given but they do not know the approximate amount.
- Only 4% of sample households were aware about approx amount given to the GP.

6.4.2 Utilisation of NGP award money

Fig 6.57: Utilisation of NGP amount (in percentage)

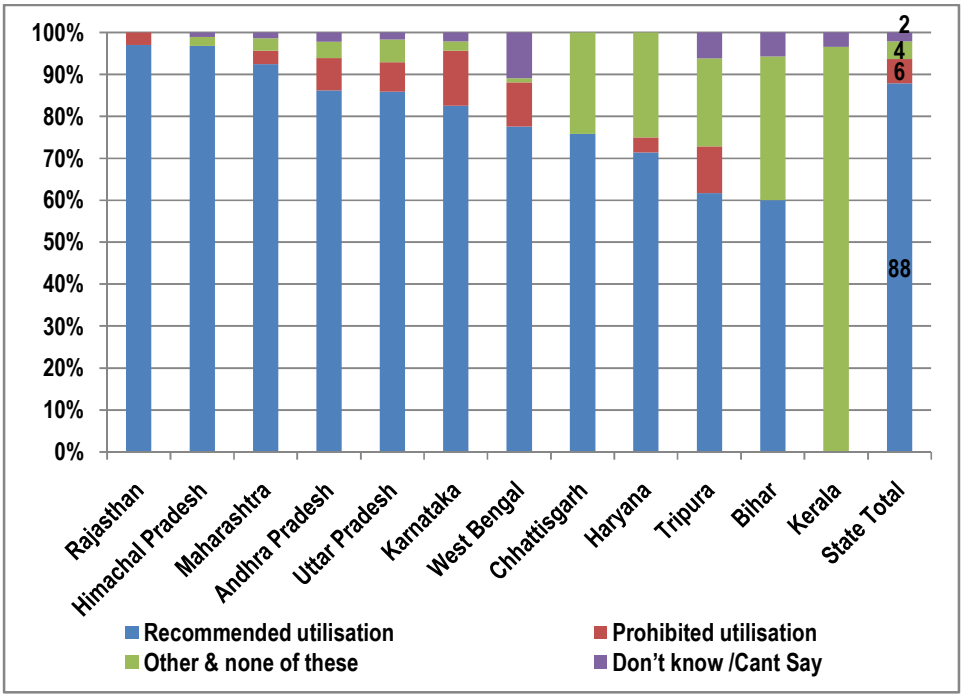


Table 6.13: NGP amount utilisation recommended and prohibited (in percentage)

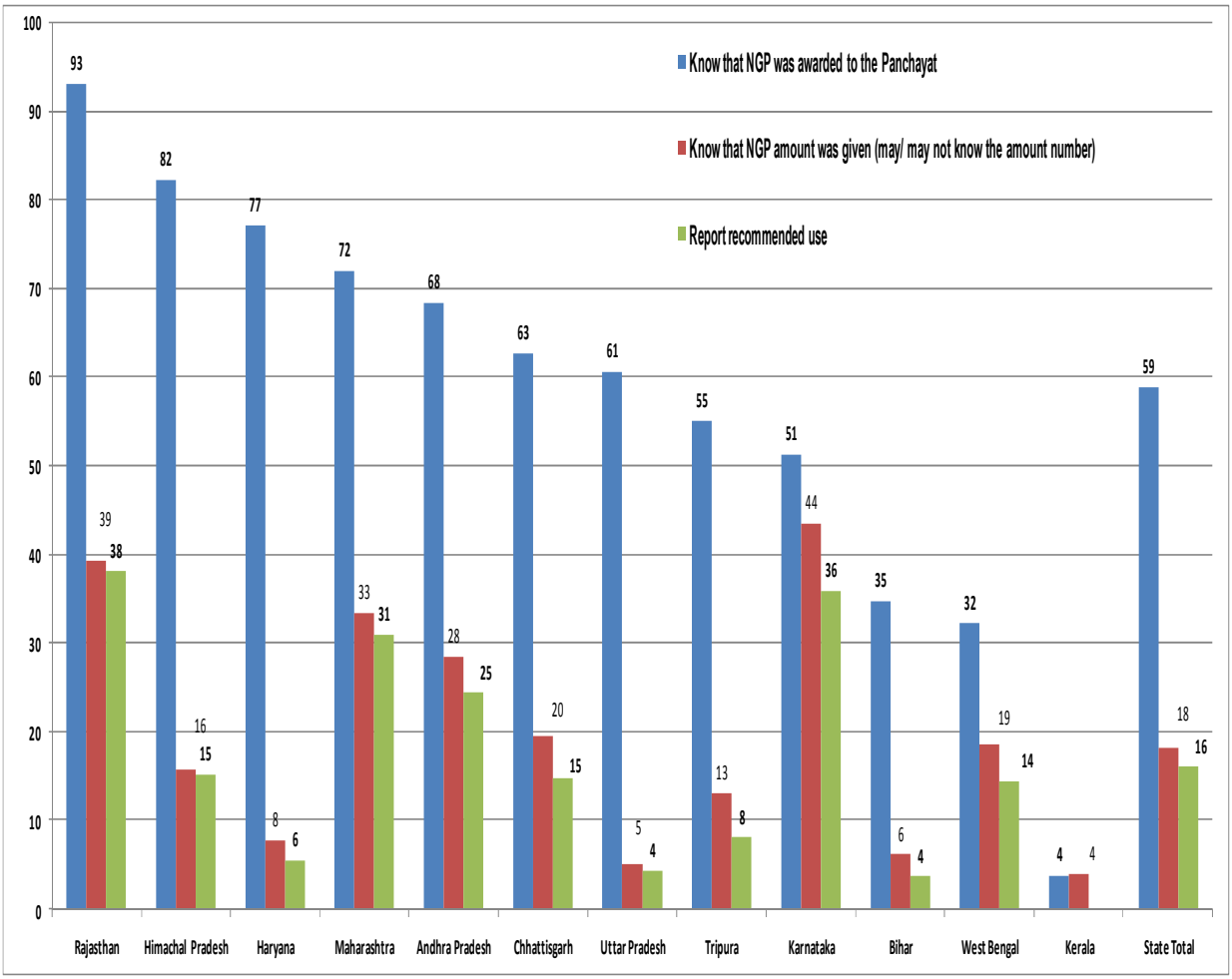
State	Recommended utilisation	Prohibited utilisation	Other and none of these	Don't know /Can't Say
Rajasthan	97	3	0	0
Himachal Pradesh	97	0	2	1
Maharashtra	92	3	3	1
Andhra Pradesh	86	8	4	2
Uttar Pradesh	86	7	5	2
Karnataka	83	13	2	2
West Bengal	78	10	1	11
Chhattisgarh	76	0	24	0
Haryana	71	4	25	0
Tripura	62	11	21	6
Bihar	60	0	34	6
Kerala	0	0	97	3
12 State Total	**88**	**6**	**4**	**2**

When these 19% households, which were aware that some award-amount was given, were asked about the activities on which this amount was utilised, around 88% of their responses confirmed that the NGP-award-amount was utilised as per the recommendations made in NGP Guidelines.

Table 6.14: NGP amount utilisation

As per NGP Guidelines	Utilisation Head
Recommended utilisation	Creation of community sanitation facilities at market places
	Purchase of land for Solid and Liquid waste management
	Ensuring maintenance of sanitary facilities
	Provision of Drinking Water and Sanitation and rain water harvesting
	Promotion of vermin-compost
	Promotion of Eco-san
	Promotion of latrines for specially abled/aged
	Promotion of biogas linked latrines in groups or for individual
	Production of sanitary napkins and construction of incinerator
	For creating individual facilities for SC/ST families where
	To set up monitoring mechanisms for sanitation
	Maintenance of cleanliness and promoting collection of user
	Remuneration to Pradhans who ARE actually working as facility
Prohibited utilisation	Remuneration to Pradhans who are NOT working as facilitators
	Creating permanent posts or salary liabilities
	Organisation of workshops, seminars, etc
	Organisation of Melas/ fairs
	Organisation of sports events, etc
	Purchase of vehicles, mobiles, computers, furniture etc

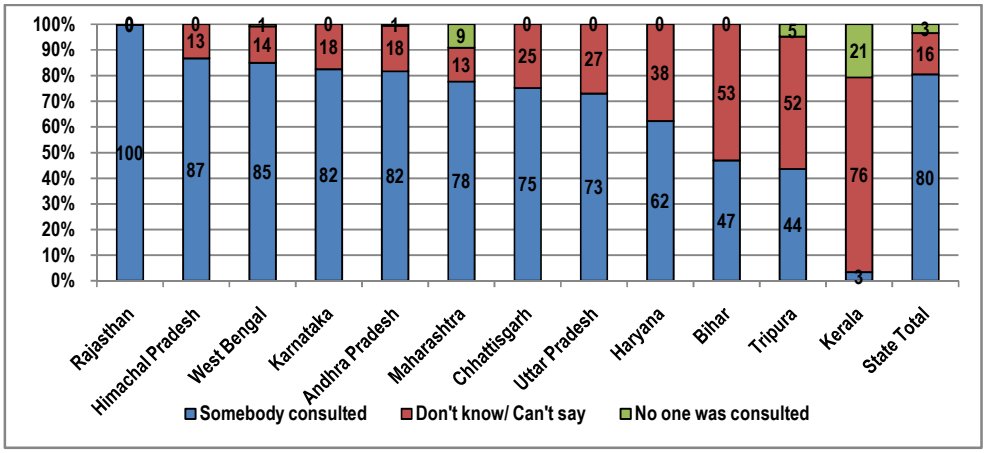
Fig 6.58: NGP award awareness and amount utilisation awareness (among households)



Thus, while 59% households were aware about their gram panchayat receiving Nirmal Gram Puraskar awarded, around 18% reported that some award-amount was given (they may did or did not know the approximate amount). When these 19% households, which were aware that some award-amount was given, were asked about the activities on which this amount was utilised, responses of around 16% households conformed to the recommended utilisation mentioned under NGP Guidelines.

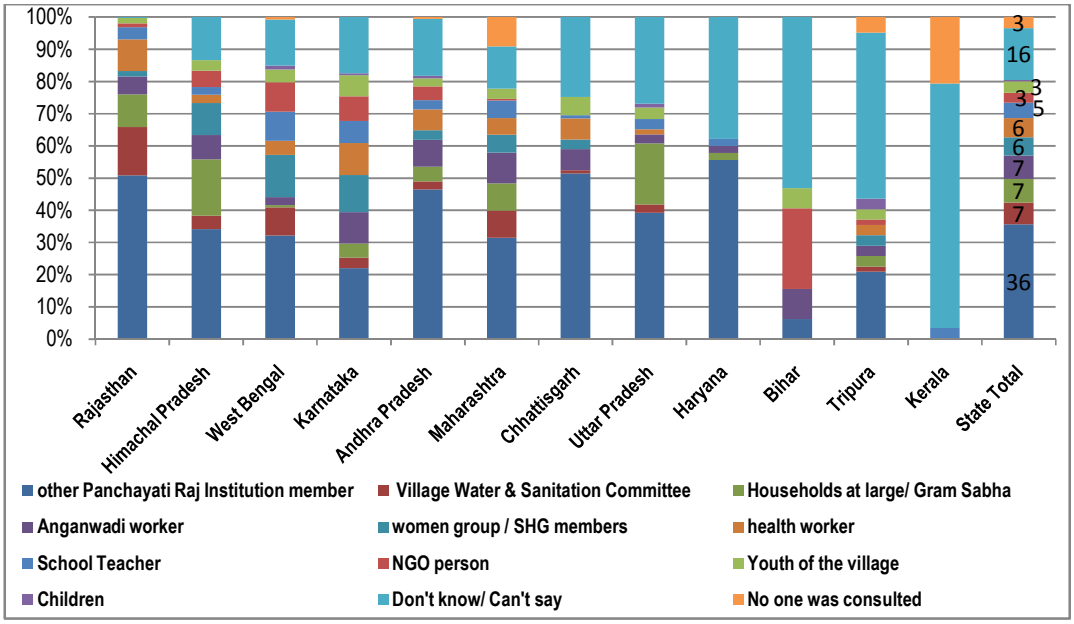
6.4.3 Consultation for utilisation of NGP award money

Fig 6.59: Consultation for utilisation of NGP award money (in percentage)



When these 19% households, which were aware that some award-amount was given, were asked about who was consulted during the decision making process that was undertaken for amount-utilisation, 80% of their responses (around 15% households) stated that somebody apart from Sarpanch/ Pradhan was consulted for NGP award money utilisation.

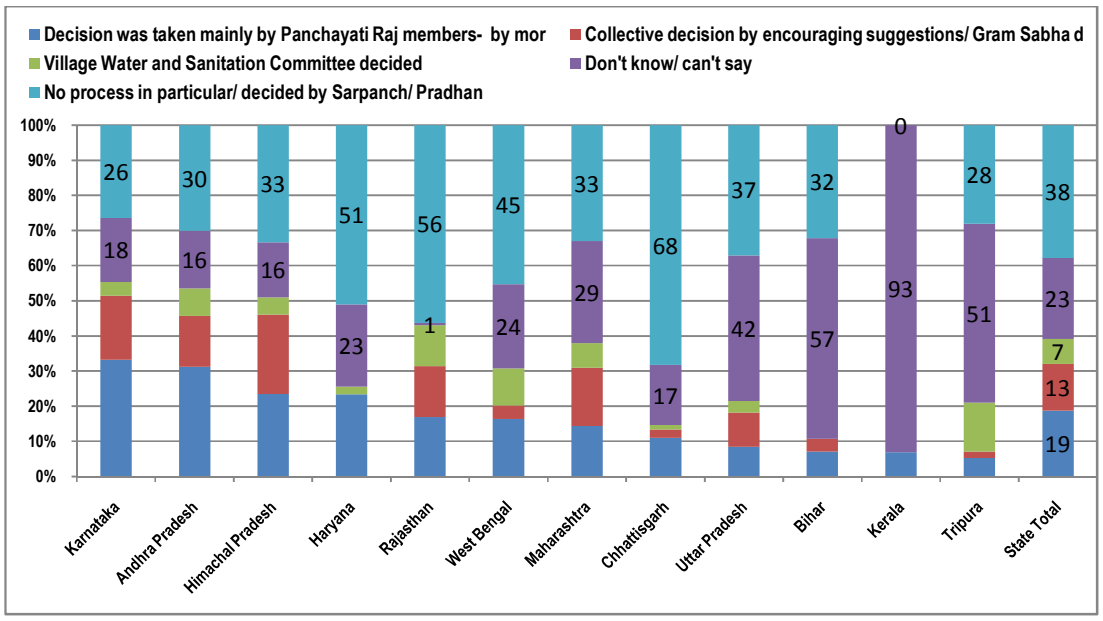
Fig 6.60: Consultation for utilisation of NGP award money – descriptive (in percentage)



The PRI members are recalled as having played an important role in consultation for deciding on how to use award money. Around 36% households recall PRI members consulted them. This was followed by Anganwadi worker, Gram Sabha and Village water Sanitation Committee recalled (7% each respondents). Health workers and women Group/ SHG members (6% of response each), school teachers 5% were also consulted.

6.4.4 Decision making process adopted for utilisation of award money

Fig 6.61: Decision making process for utilisation of award money (in percentage)



When these 19% households, which were aware that some award-amount was given, were asked about the kind of decision making process followed, 38% of their responses (around 7% households) reported that decision was taken mainly by the Sarpanch or no particular process was followed (highest in Chhattisgarh, lowest in Karnataka). 19% of their responses (around 4%households) reported that PRI member/s had been involved apart from the Sarpanch in taking the decision (with highest in Karnataka and lowest in Tripura) followed by collective decision/ Gram Sabha (13% responses) and VWSC (7% responses).

Table 6.15: Process adopted for decision making for NGP Award money utilisation

State	Decision was taken mainly by PRI members	Collective decision/ Gram Sabha	VWSC	Don't know/ can't say	No process decided by Sarpanch	Total
Karnataka	33	18	4	18	26	235
Andhra Pradesh	31	14	8	16	30	269
Himachal Pradesh	24	23	5	16	33	102
Haryana	23	0	2	23	51	47
Rajasthan	17	14	12	1	56	325
West Bengal	16	4	11	24	45	159
Maharashtra	14	17	7	29	33	666
Chhattisgarh	11	2	1	17	68	82
Uttar Pradesh	8	10	3	42	37	154
Bihar	7	4	0	57	32	28
Kerala	7	0	0	93	0	29
Tripura	5	2	14	51	28	57
Total	**19**	**13**	**7**	**23**	**38**	**2153**

WEST TRIPURA, WATER TANK MADE FROM AWARD MONEY

HIMACHAL PRADESH, NAUNI, COMMUNITY LATRINES CONSTRUCTED FROM AWARD MONEY

CHAPTER 7

Evidence Based Recommendations & Suggestions from Stakeholders

CHAPTER 7: EVIDENCE BASED RECOMMENDATIONS & SUGGESTIONS FROM STAKEHOLDERS

This chapter would have three focus areas.

7.1. Feedback from stakeholders about NGP: including whether NGP should be continued

7.2. Need of measures for strengthening the impact and sustainability of NGP status of Panchayats and

7.3. Recommendations including suggestions from stakeholders

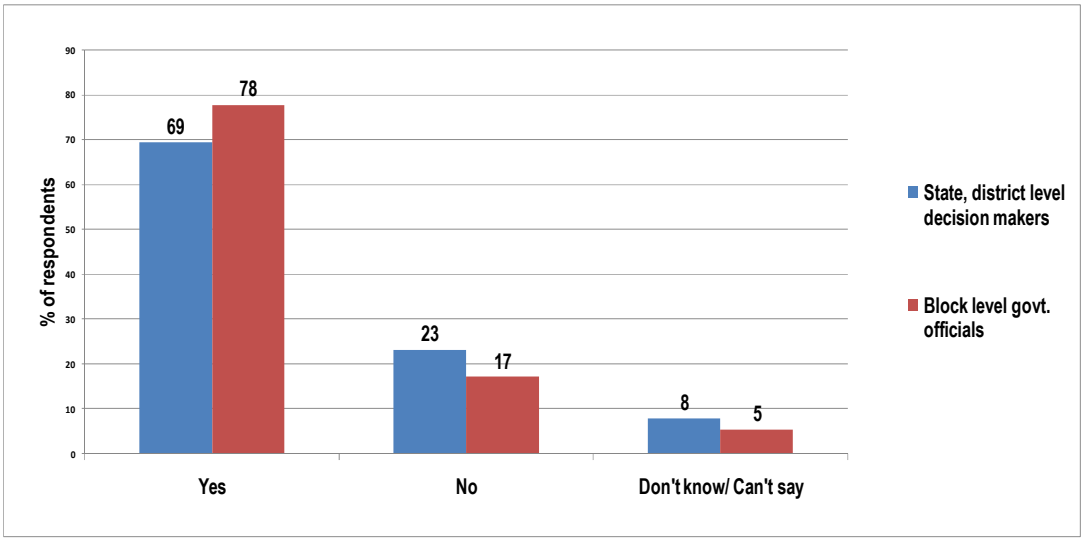
7.1 FEEDBACK FROM STAKEHOLDERS AND WHETHER NGP SHOULD BE CONTINUED

The quantitative data of the responses received from different stakeholders about success of NGP in its various objectives and continuation of NGP scheme is summarised below:

1. Achievement of stated objectives of NGP

The data shows that a majority of stakeholders rate NGP to have succeeded overall.

Fig 7.1: Successful overall in achieving all its objectives? (in percentage)



In the case of its main objective of adding vigour to TSC, they rate it to have succeeded either to 'a great extent' or to 'a reasonable extent'. On each of the four specific objectives given in the table below, NGP's performance is also rated well by the stakeholders.

No.	Objectives of NGP as per Guidelines
1	Brought the topic of sanitation to the forefront of social and political development discourse in rural areas
2	Develop open defecation free and clean villages which will act as models for others to emulate
3	Incentive to PRIs to sustain the initiatives taken by them to eliminate the practice of open defecation from their respective geographical area by way of full sanitation coverage
4	Increased social mobilisation in TSC implementation, by recognising the catalytic role played by organisations in attaining universal sanitation coverage
Main	Has had impact on the pace of progress of TSC

Fig 7.2: State/District Govt. officials' rating of NGP: on achievement of its four objectives and impact on TSC (in percentage)

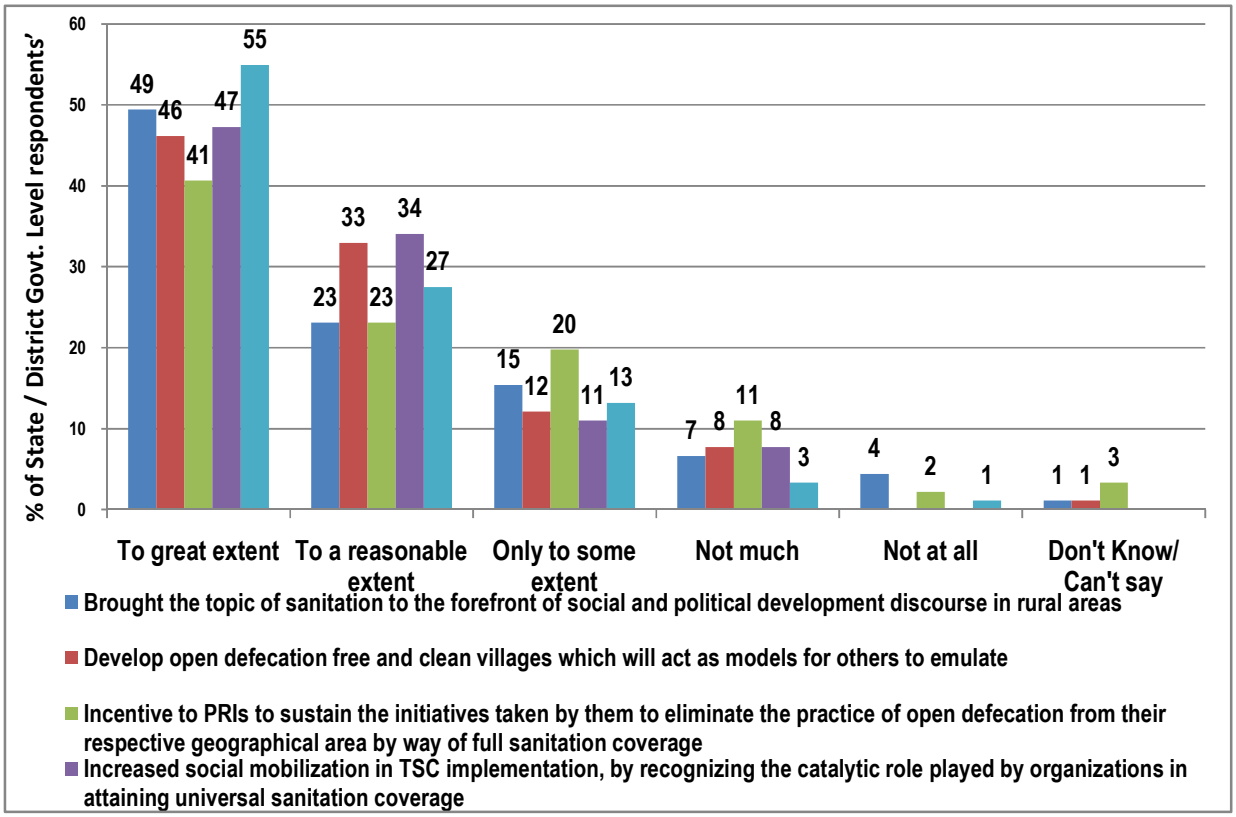
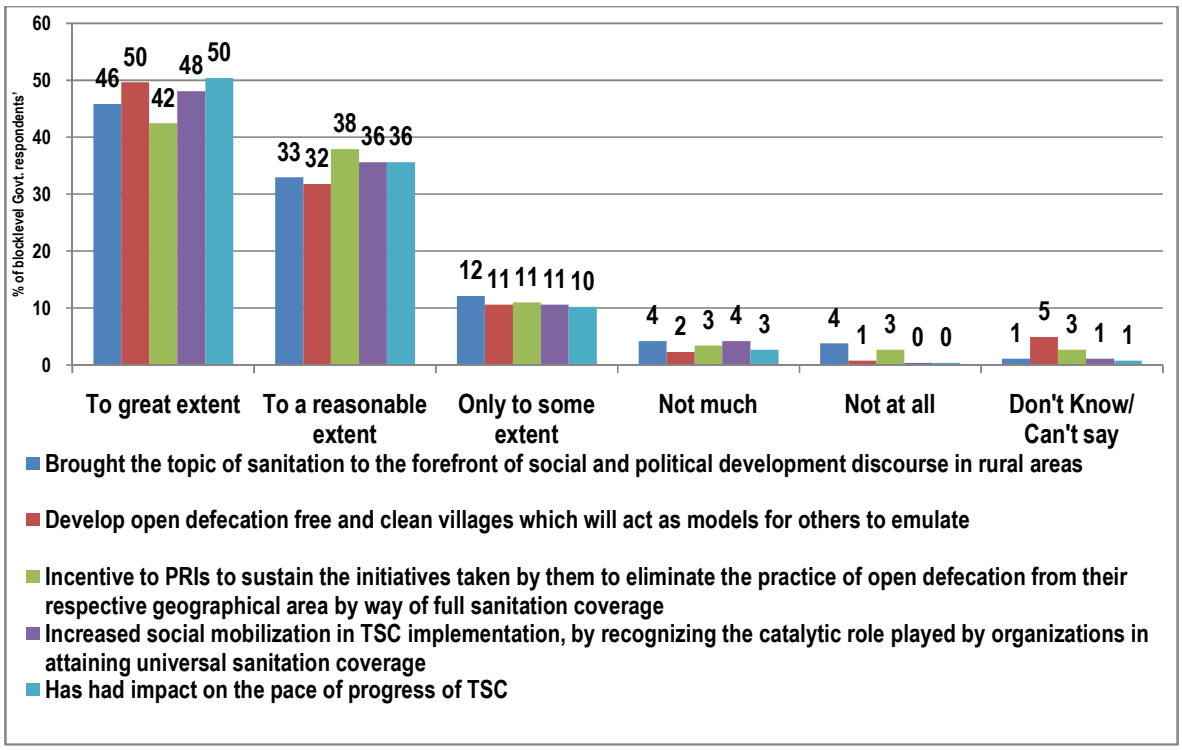


Fig 7.3: Block Govt. officials' rating of NGP: on achievement of objectives (in percentage)



2. Continuation of NGP

Fig 7.4: Response of Govt. Officials on continuation of NGP (in percentage)

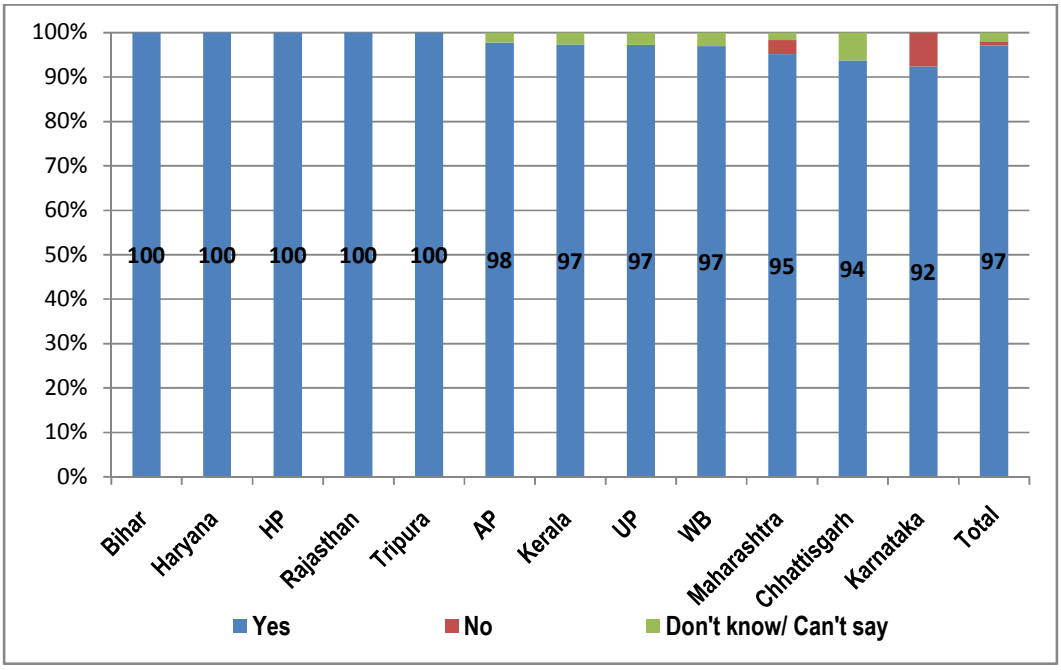
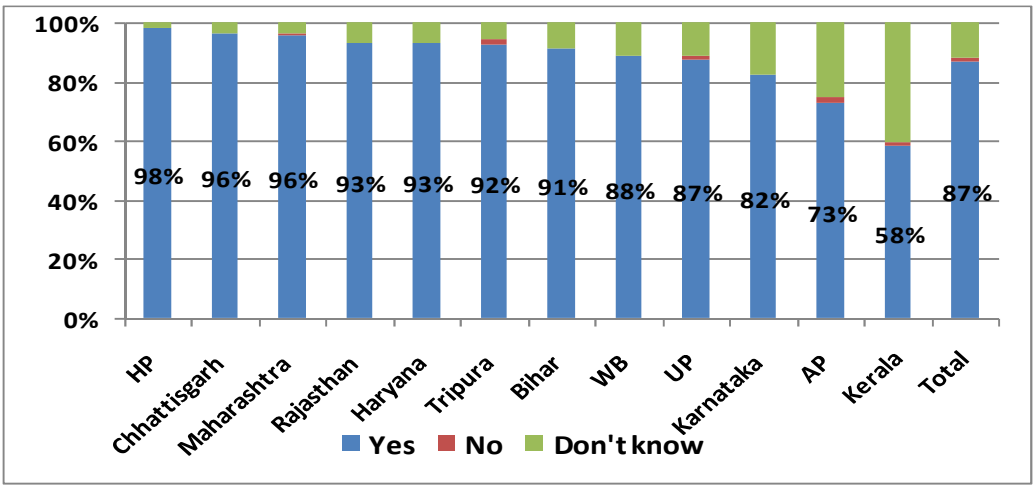


Fig 7.5: Response of PRI members on continuation of NGP (in percentage)



Hence, the message from the data is clear enough to continue NGP, as it is definitely fulfilling the objectives for which it was launched.

Almost all the stakeholders i.e. concerned officials, PRI members, village/habitation level groups and health workers/ staff in all sample states were of the view that NGP should continue. Many officials stated that NGP should continue till the time every panchayat gets this award. Some gave the credit of spreading sanitation related awareness among community mainly to NGP. ("The sanitation message in villages has gone only through NGP not by TSC. TSC is covering only the target construction of latrines, but NGP is actually motivating them to use and maintain them. Sanitation has come to the forefront just because of NGP. It has developed feeling of competition among panchayats to achieve better sanitation". "The pride and honour associated with receiving an award from the President of India is a reason in itself for the PRIs to take a personal interest in covering all households and schools with sanitation facilities under TSC"). Some opined that though NGP should continue beyond TSC, but modifications in criteria are required and those Gram Panchayats who are maintaining & sustaining the Nirmal status during post NGP should be re-awarded.

Some other reasons reported for continuation include the following:

- Motivating factors for people that their Gram panchayats will get awards
- A healthy competition led to change in behaviour pattern, participation of the whole village, awareness about sanitation and other related activities
- Diseases have decreased due to NGP
- Unsafe garbage disposal is coming under control.
- Social status gets better
- Helped in overall development of villages

Almost all opinions converged on the idea that NGP is very effective in 'filling the last gaps'. With NGP, PRIs are becoming more responsible, as they are coming forward to solve the people's problems, which were not happening earlier.

However, there were very few instances where few PRI members, health workers and officials have stated that NGP should not be continued anymore. Following reasons very reported in support of discontinuation of the scheme:

- Misuse of the award money
- Slipping back to open defecation after receiving the award and "there is no 'cleaning' of the village that is happening".

7.2 NEED OF MEASURES FOR STRENGTHENING THE IMPACT AND SUSTAINABILITY

Sustainability of NGP status, when analysed from social-institutional, technical-financial and environmental/ impact sustainability angles, presents the following scenario:

1. Social-Institutional sustainability

The qualitative data reveals that despite having a positive impact on TSC, the implementation of the process of NGP application is changing into a target-driven mode. Government officials are mainly the ones, at least in some states, who decide which Panchayat should apply/ be encouraged (sometimes coerced) to apply for NGP in a given year. This process may involve considerations such as - which Panchayat has already achieved a larger percentage of sanitation coverage, which Sarpanch/ PRI/ Panchayat Secretary is 'more active', which Panchayat has less number of households (small Panchayat) and other such 'ease of achievement factors'.

Initial NGP awardees had the benefit of enough time to prepare during TSC, CRSP and long years of IEC and construction activities under various water and sanitation schemes, housing (with latrine) schemes in some states (more pronounced in Kerala), various welfare schemes and other state-specific award schemes, such as Sant Gadge Baba Swachchhata Abhiyan (SGBSA) in Maharashtra.

Later, as the better performing Panchayats are found to have been already awarded, it is becoming increasingly difficult for the decision makers to identify, and hence 'encourage' to apply, the Panchayats that can strive to achieve the ideal/ myth of 100% coverage and usage without having the benefit of long years of preparation/ better performance in many other schemes. These Panchayats will not have all the 'ease of achievement' factors described above and would present a scenario where many difficult aspects need to be resolved before the eligibility criteria of NGP could truly be fulfilled.

These difficulties, increasing year by year, coupled with the NGP targets that the states/ districts may keep getting, are making it increasingly difficult for the NGP process to be implemented in its true spirit.

The main message that majority of the stakeholders seem to communicate is that more time is needed for preparing, and it is the process which needs to be focused on, rather than the achievement. A panchayat that has, after starting from scratch, put in remarkable efforts in demand driven mode, and achieved a remarkable improvement (but not the ideal) over its base year, needs to be as much acknowledged (if not more) - for its efforts and process - as (or than) would a panchayat that has achieved a better coverage percentage with or without following the demand driven mode. This also reflects in the frustration that some PRI members and government officials convey, on one hand, at the scrutiny and verification process under NGP, that according to them, focused on 'strict inspection/ examination' (with an attitude that almost offended and disheartened even the well-meaning Panchayat members) in a particular year/ span, while acknowledging, on the other hand, that during some years, the verification teams had a better understanding of 'the spirit' and 'process orientation' of a demand driven/ campaign approach, which is supposed to be the crux of TSC.

Some examples from better performing Panchayats reveal that systemic factors (such as specific policies and schemes other than TSC/ NGP) that focused on collective action, campaign mode, people's planning and were tailored to benefit the poorer households in a comprehensive manner (such as housing schemes and water supply schemes) had made the task under TSC (and hence NGP) much easier to achieve.

A special mention needs to be made of the comprehensive planning that could be made by the panchayats under the People's Planning Campaign for ninth plan (1996) in Kerala, which allowed Panchayats to set sanitation as a high priority (along with water), much before NGP. The policy allowed Panchayats to set their own agenda while providing substantial funds for the same. Another example is of the collective action that some villages took under various state specific award schemes, such as Sant Gadge Baba Swachchhata Abhiyan in Maharashtra, have been etched more deeply in the collective memories of the people there. In villages, where groups of women and youth worked together preparing for the final 'event duration' and when almost all the villagers performed the award-winning team work together during the specified duration (days after October 2nd), the people attribute even their NGP award to the spirit of teamwork that was engraved even before NGP scheme was announced. In such cases, although the Panchayat Secretary or other village level functionaries may also have provided the crucial initiative, the teamwork and the results are owned by the large number of women directly involved in the effort along with other villagers (specifically, their male counterparts). In other well-performing Panchayats, specific long-duration efforts put in by other stakeholders, (such as an NGO in Rajasthan), have led to sanitation becoming a priority among the villagers, with the necessary boost of Sarpanch's cooperation (with which the incentive amount so crucial for the poorer households was provided through the Sarpanch) being attributable to NGP application process.

What also needs to be mentioned, in the same breath, is that, even among these 'well performing' Panchayats - the visits to - or the focus group discussions when held in – the poorer/ poorest-of-the-poor localities/ hamlets (which generally were also the SC/ST or minority dominated localities), revealed the plethora of challenges that glare so squarely at anyone who does not want to turn a blind eye. The level - of achievement of NGP eligibility criteria found in these hamlets - as compared to the well-endowed hamlets of the same Panchayat - seemed to reversed itself for worse, even while the Panchayats had enough funds to 'spare' for the minimum works that could start addressing the sanitation needs of the poorest of the poor of that hamlet.

Poverty combined with neglect by the Sarpanch/ Panchayat members has emerged as the single-most largest combination-factor from the quantitative data as well, reported to be responsible for not constructing an individual household latrine.

Water was a bigger concern felt by these poorer hamlets than sanitation. The main requirement that was mentioned by the villagers there - related first to better water supply (preferably piped water as was found in other parts of the same Panchayats or at least adequate number of functional handpumps if the ground water was not contaminated/ turned scarce/ foul in summers), followed by better roads and then sanitation and electricity. The poorer households were typically short of enough land-space for latrine construction. The quantitative data also reveals that 'not enough land' is the second highest factor for not constructing individual household latrine. The few Community Sanitary Complexes if constructed among/ for these hamlets were, as felt by the hamlet-dwellers, either very inadequate in numbers (although definitely used if functional, both reportedly

and when observed for other evidence of usage like cleanliness, not choked etc.) or very far from their houses (and hence the part of the hamlet situated far away was reported to have not been using the same).

2. Technical-Financial sustainability

The other issues that hindered the latrine construction among the poorest of the poor households related mainly to technical factors, which further aggravated the financial factors. The geo-hydrological profile of the poorer hamlets, as derived from the technical factors that the households (and other stakeholders) reported during qualitative interactions (mainly FGDs and in-depth interviews) indicated that these poorer (and not-having latrine) households were generally found in low-lying areas. So much so that in one hamlet, the FGD participants (who did not have latrine) reported having 'water seeping into the floor and lower parts of walls of their houses, making it difficult to even sleep well on the floor during the rainy days'. In other hamlet of another state, quarrels were observed on the street among households for letting the grey water from some houses drain into other houses. These problems were aggravated by factors (as mentioned during the FGD), such as '(because) the PRIs work on taking the *kuchha* roads high and the rain-water or grey water drains into the low-lying poorer houses nearby, who do not have funds to bring the level of their houses 'higher than the adjoining *kuchha* road''.

Other geo-hydrological technical challenges (aggravating financial challenges) that were mentioned for the houses that do not have latrine, related to high cost of pit or septic tank construction in the rocky/ hilly/ highly porous terrain, high cost of suitable material for lining the pit, high labour/ mason cost.

The 'fear of the pits getting filled' either when shallow pits were dug, or when the houses 'felt that only 3-4-feet deep pits were too shallow for a family with many members; combined with questions such as 'not sure about –once when the pit will get filled' – 'what needs to be done', 'how' it needs to be done, and 'by whom' - have all contributed to all the village-level stakeholders, in general, indicating preference for deep pits (sometimes houses going for 20-25-30-feet deep pits, some houses taking the subsidy and spending it all on just digging a deep pit and then let it lie as it is without constructing the latrine any further, as they wait to arrange for more funds, (as even the SHG/other loan might have got used up), waiting for future saving when they may resume latrine construction.

Latrine construction, as indicated in the qualitative data, is taken as a major event, just below in status (or as major as) a room construction for any house (be it a kuchha or a semi pucca house). This is justified by the time, energy and percentage of resources (though seemingly meagre for others, are substantial portion of the resources of a poor/ poorest of the poor households), and associated risks/ opportunity costs viz. risking loss of income, hunger, illness and injury (by having the labour time spent on constructing one's latrine). This is especially true because a majority, as shown from the quantitative data, have to depend on renting their physical labour for their primary occupation, being daily wage earner or agricultural labourer. Hence there is a covert/ overt inclination/ preference for a deep pit, and preferably a septic tank (among those who can afford it) along with the social 'status' attached to a septic tank or a deep pit latrine.

There is a social status attached to having a latrine itself (found in majority of states where latrine coverage is not poor), which sometimes, along with need for privacy, has led to construction of mainly superstructure of a latrine, without even digging a pit for collection. (In quantitative data: reportedly 0.4% of the NGP-GP households did not have pits in their latrine, but on observation, more than 10 % of NGP-GP households had their latrines draining 'Out into the open: behind/ around the latrine'. In qualitative data: during FGD, participants confirmed these findings as well).

Thus, latrine construction, being seen as a 'major and important' (if not lifetime) event, the households, seem to convey that when 'we have to put in our time, energy and resources, we either try to make it as good a latrine as we can afford to make it,' albeit with a preference for a deep pit/ septic tank, so that 'we do not have to bother about constructing it again or can upgrade it with minimum efforts' or 'our generations can use the latrine' with underlying thought of 'do not have to know about what/how to do once the pit is filled completely'.

Another technical challenge is the safe distance between the latrine pits and the nearest water source. As it is, when the houses have shortage of land, finding a safe distance land (as a thumb-rule: 10 meters away from the nearest water source, otherwise- varying with the porosity of the soil, soil type, slope of the land and other geo-hydrological factors) to construct latrine would make 100% coverage a dream for most panchayats. Most of the households, as it is, are not informed/ unaware of the safe distance specifications. The same might be true of other stakeholders as well, at least at the village level (if not at block/ district levels). The observation data shows that more than half of the latrines already constructed would fall into 'unsafe for water contamination' and hence considered 'dysfunctional' category, if this rule of thumb of 10 meters is applied.

Financial woes abound for the poorer households, most of whom do want to have a latrine and are found using it regularly, when some of them have been provided with either access to a community sanitary complex or a house with latrine provided under the various housing schemes (such as those in Kerala).

The suggestion for increasing the 'incentive' for latrine construction reverberates at every stakeholder level- right from households to state level coordinators. The quantitative and FGD data also support the claims about why the incentive needs to increase. State-wise cost of living, cost of material, cost of skilled and unskilled labour, transport cost etc. vary and a general average amount does not serve the purpose of facilitating the most marginalised. 'Low-cost latrine' does not either 'enthuse households a great deal to undertake 'a once in a lifetime' event of a latrine construction, or when pushed in a target driven mode, lead to non-completion of superstructure and usage. Although, once built, household members, as required by seasonal/ night-time, illness compulsions and especially the women, do use it as much as they can (if not 'regularly' in the strictest sense). Panchayats where enough time was spent on the phase of facilitating fund arrangement for latrine construction have also found the time and effort worth the results. The BPL-APL criteria seems very inadequate (if not presenting a reverse situation in some states) for targeting the latrine-incentive delivery to the actually poorer households. In many states, many households do not have ration cards, while many of those who have ration cards do not have BPL cards (and instead have APL cards) despite being poor (if not poorer than those having BPL card as seemed during the FGDs). Some states have tried using various criteria/ systems for other welfare schemes (for housing, income certification etc).

Another important factor leading to non-regular usage of household latrine is the fact of not having a latrine at a easily reachable distance from their place of work, be it for the adults who go out for labour at daily-wage sites or agricultural fields as agricultural labourers or being farmers themselves, or the children who far to work/play or study (if their school/ anganwadi does not provide access to use a latrine). The words 'One cannot return home, just for using a latrine, if one is far away working in field or at a work-site' seem to sum the situation, while posing a challenge. Some states (such as Kerala) do acknowledge the need to have accessible sanitation facilities at work-sites, especially those sites under MGNREGA.

3. Environmental/ Impact sustainability

The sustainability of health-impacts (if any) attributable to latrine construction, is a big question-mark by itself due to the following technical aspects.

- Not maintaining the 'safe' distance (horizontal, surface distance) between latrine pit and the nearest water source, not taken care of (due to unavailability of space or total ignorance or sheer negligence) and
- No surety of whether the base of the pit was made safe enough by - one, lining it adequately - and two, by digging it only up to a 'safe' depth, so as to prevent contamination of the water table of the nearest water-source;

The questions 'What is wrong if I defecate in open (albeit covering it like a cat does,) in the jungle, from where I bring leaf-manure/ humus for my fields- so far as I ensure that my place for defecation is too far away from the streams/ ponds/ wells/ water source of any habitation and it is not contaminating water sources? Is it not better than bringing the latrine pit home, where I am not sure whose drinking water source it might be contaminating?' mandate an elaborate, considered and technically sound response (especially if leach-pit - low-cost models are continued to be given more weightage as compared to eco-san or other

technically and environmentally sound models, which, rationalised/ increased incentive amount - may/ may not cost more than the low-cost models).

The qualitative data also revealed that households seemed to notice a reduction in frequency of water-borne illnesses more with timing of other developments such as piped water supply coming to their village/ hamlet or better/ private health facilities becoming available than with the timing of construction of majority of the latrines in the village (with the poorer hamlets not having, till date, access to any latrine for significant proportion of their households).

Ensuring adequate and sustainable potable water supply (first for drinking and then for other purposes including latrine) has been unequivocally suggested by the stakeholders as a major challenge facing sustainability. Whereas, solid and liquid waste management is admittedly the weakest link and the stakeholders - at all levels admit that more work, clearer technical and operational guidelines, options and plans are required urgently.

7.3 RECOMMENDATIONS

6. Enabling environment and sustainability: socio-institutional, technical-financial and environment/ impact sustainability

VIII. **Complementary Programmes:** Learning needs to be gathered from a systematic study of the schemes that converged/ facilitated/ complemented TSC and/or NGP in various states. How did they lead to different extents of sustainability status? And, how can such schemes be adapted/ scaled for other states. This would suggest the kind of policy environment that might lead to strengthened impact and sustainability.

IX. **Decentralisation of power and funds, bottom-up micro-planning:** More powers and funds for comprehensive and bottom-up micro-planning should be provided to Panchayats (making sanitation a part of the comprehensive micro-planning for the Panchayat).

- ✓ ***Supportive finding from the study***: This study of twelve states throws up some examples of some policy environments that seemed to enable sustainability at a prima facie level. For example housing schemes in some states, especially the ones having bottom-up planning approach, with adequate power and fund- decentralization at lower levels or ones with better targeting of marginalized groups - contributed to a large extent in achieving near - 100% coverage among the poorer (or the 'last mile') households. Whereas, IEC activities under drinking water schemes and other activities or the time –plan under other state-specific award schemes in some states contributed to both better construction and usage. Long-standing work of some NGOs and SHGs in some states became the background, in which the final push to the PRIs to take interest and achieve a better coverage was given by the NGP application process while the SHGs/ NGOs continued to strive for better usage. Such learning and proactive/ positive discrimination policies and schemes (meant for the welfare of the marginalised in a particular state) need to be incorporated at the national/ other states - policy level to address the 'last mile' challenges that seem inevitable if 100% coverage is to be even thought of. [Some of the schemes which were glanced through during this study were People's Plan Campaign (by which more than one third of the state development budget was devolved down to local self-governments where local people could determine and implement their own development priorities) and Malinya Mukta Keralam Action Plan in Kerala, Sant Gadge Baba Swachchhata Abhiyan in Maharashtra, Maharishi Valmiki Sampoorn Swachata Puraskar in Himachal Pradesh, State Incentive Scheme on Sanitation in Haryana, Shubhram in Andhra Pradesh and Nairmalya in Karnataka among others.]

X. **School sanitation adequacy indicators:** It is noteworthy that the specific indicator of adequacy of school sanitation facilities i.e. the ratio of latrine to students and urinal to students has been **removed** in 2010 NGP Guidelines. This removal needs to reconsidered and the ratio (given in 2003 NGP Guidelines) may be revised for much higher number of latrine and urinals per student.

2003 Guidelines	2010 Guidelines
Adequacy: Toilets and urinals should be available separately for boys and girls in adequate proportion, one urinal for every 20 to 40 and one lavatory for every 80-120 boys/ (sic) enrolled in the school.	**Adequacy:** Adequate toilets and urinals should be available separately for boys and girls.

✓ ***Supportive findings of the study*:** There is a large variation in that ratio among various states, hence some standardising guideline would pave the way. Further, the actual access allowed to students for using the latrine turns out to be much lower. This issue indicates the need for a deeper investigation.

XI. Geo-hydrological problems, health-impact sustainability and Eco-san:

Stakeholders' recommendations

➢ Awareness about and exposure to various technical solutions should be provided to the PRIs for the different area-specific problems that are encountered. Capacity building of staff through training on new technologies, technical solutions to the problems currently faced, alternative models to address the lack of impact, and exposure visits - should be organised. Technical sensitisation at the district level needs to be a regular phenomenon under the programme.

✓ ***Supportive findings of the study*:** The findings of this study also suggest that majority of the current latrines do not seem to adhere to the safe distance criteria for preventing water contamination. The sustainability of health-impacts being attributable to latrine construction, are challenged by the findings that

- 'Safe' distance (horizontal, surface distance) between latrine pit and the nearest water source is generally not maintained (due to unavailability of space or total ignorance or sheer negligence) and
- Safety of the base of the pit is also not certain. It is not known whether a latrine's base was made safely enough by - one, lining it adequately - and two, by digging it only up to a 'safe' depth, so as to prevent contamination of the water table of the nearest water-source (in fact many households seemed to prefer deeper pits – deeper the better- while being unaware/ ignorant of the possibility of water source contamination due to proximity of the base to the water table level in the surroundings).

In this regard Eco-san, needs to be revisited for mainstreaming, generally for maintaining safety in terms of water contamination, as Eco-san will fulfil the 'safe for water contamination' criteria with the pit converted into an above-the-ground level structure/ box. It will be useful especially for the marginalised sections and areas with geo-hydrological technical difficulties. This might be essential for better sustainability of health related impacts.

✓ Qualitative data from the study also revealed that the stereotype image - of challenges associated with behaviour change for using an Eco-san latrine - needs to be reconsidered, as people admit to already having the habit of 'shifting' for cleaning, while defecating in the open.)

XII. Increase in incentive amount

Stakeholders' recommendations

➢ There should be a substantial increase in the incentive amount for latrine construction. The increase in incentive amount needs to be calculated on the basis of state-specific costs and needs of technically challenging situations.

➢ Low-cost models do not enthuse people and generally tend to become the 'unfinished or poor installations'. Various stakeholders, including most of the government officials, suggested an increase in the incentive amount for latrine construction, ranging from 5000 to more than 9000 (with some giving explicit details of the material cost, labour cost, transportation cost varying widely for various contexts). Some suggested that the incentive for poorer families should be, at the least, doubled. Requirement of full subsidy and complete handholding was also mentioned, especially for the 'last mile' cases for 100% coverage, which face multiple difficulties in terms of geographical, technical, social and financial factors.

- ✓ ***Supportive findings of the study*:** The qualitative data also supports that without compromising on the demand creation and IEC activities, full subsidy for poorest of the poor households (not based on just BPL criteria) needs to be considered. Poorest of the poor households are found generally in the low-lying areas of a Panchayat prone to water logging, difficult terrain and other geo-hydrological factors that make a leach-pit latrine construction not the best option (creating further ground for consideration of Eco-san option at least for these households).
- ✓ The finding of the study on cost of latrine construction, although based on only 23% of the households, does indicate that the current cost of a latrine seems to be much higher than the presumed cost, and while the households, generally do bear a larger proportion of the cost, the limited responses of a poorest of the poor household may not be able to bear the larger share.

XIII. Synchronisation of water and sanitation schemes, implementation by a single agency

Stakeholders' recommendations

- ➢ The government level stakeholders (block, district and state officials) did come up with the suggestion that TSC and schemes related to water supply should be **implemented by a single government agency/ department**, if that is not already the case in a state.
- ➢ Water was also reported by the stakeholders as a critical factor for achieving and sustaining NGP status. Installation of adequate numbers of hand pumps, repair of dysfunctional hand pumps/ piped water supply, construction of water tanks, check dam/ bund, promoting rain water harvesting etc. was mandated by the stakeholders to alleviate water scarcity. It was clearly suggested that at least a certain minimum amount of water supply should be ensured throughout the year. Water purification kits/ systems were also demanded for. More and more use of surface water (if less contaminated in comparison to ground water), more of water harvesting structures and activities related to recharging of water sources were mentioned as a requirement. Stakeholders at panchayat level were of the view that the government should do necessary arrangements for water purification at the source and water testing at regular intervals. Many of the FGD participants opined that piped water supply along with water purification systems (water purifier devices) facilitated at household levels would be the only effective solution for preventing water-borne diseases.

- ✓ ***Supportive findings of the study*:** As found in the FGDs, water seemed a higher priority for households than latrine. The need for a more equitable distribution of water was clearly articulated, as currently, the poor and marginalised sections tend to suffer more with water scarcity, due to distributional inequity.
- ✓ Interactions at government level also made it clear that the choice of "which Panchayat should be 'encouraged' to apply for NGP?" was also guided by "where has the water related scheme been successfully implemented?" In-fact at many levels, better sustenance of NGP status was attributed, in a large measure, to the very successful IEC activities done/ being done under water related schemes.
- ✓ What needs to be considered and investigated further is the hypotheses that 'it would be more cost-efficient and effective if the IEC activities of water and sanitation are combined, need assessment is done jointly and service deliveries of both the schemes are synchronised'. At panchayat level, the benefits are likely to be most visible in terms of increased interest of households in sanitation issues as they get combined with water.

XIV. Solid and Liquid Waste Management: Composting technology promotion (why incinerators?)

Stakeholders' recommendations

- ➢ The government level stakeholders suggested that GoI should lay down a detailed technical and operational guideline for SLWM and at least 20% fund of TSC should be used on SLWM.
- ➢ Awareness and capacity building regarding various composting technologies should be arranged.
- ➢ Construction of pucca drains and roads with required slope, construction of underground drainages, soak pits/ trenches can help in prevention of water logging. Cleaning of drains regularly by paid personnel is to be arranged.

Advocating 'incinerators' for 'safe' disposal of sanitary pads in schools needs to be revisited, as it not only antagonistic to 'safe' disposal message given about the practice of 'burning' other solid waste, being harmful to environment, but also seems to strengthen the long-standing traditional taboo attached with menstruation (by burning 'such impure' things instantly, without waiting, whereas the other solid waste can wait for safe/ unsafe disposal).

Further, doing this in an institution like school, which is mandated to be a vehicle for challenging/ reforming such taboos, seems to turn a blind eye to the insult it might be adding for the menstruating adolescent girls, striving to complete their studies, to the injury already being done to all by not having a comprehensive arrangement for safe disposal of all solid waste.

Hence awareness and capacity building regarding various composting technologies for safe disposal of sanitary pads (other than incinerators), which would be similar at both household level and school level - should be considered and arranged.

7. Eligibility criteria of NGP

The criteria for a Panchayat becoming eligible for applying for NGP need to be modified in a way that the criteria themselves might pave the way for better sustainability of ODF status and its impacts.

This is also necessary for preventing NGP from slipping further away from the 'demand driven' mode of TSC and into 'target driven' (target of creating a certain number of NGP-GPs every year) mode than it already is perceived to have.
Based on the various findings of the study, following are the specific recommendations:

IV. Inclusion of process parameters (of campaign/ demand driven approach in true sense, which might have the potential to cover the 'last mile' for 100% sanitation coverage at panchayat level). One of the process parameters, and hence recommended eligibility criteria, would be –

iv. Taking the time: Time spent on the process - since the initiation of TSC in that Panchayat to the application of NGP. A time requirement needs to be incorporated under NGP eligibility criteria. It would stipulate a minimum amount of time that should be spent on each of the following.

- Initial IEC phase before latrine construction (with annual IEC to be continued for longer period)
- Trying out various technical options for specific problems of individual households, with tangible evidence of various options being communicated adequately, exposure visits and capacity building undertaken if required.
- Arranging the funds for constructing latrines, with the construction phase lasting over a considerable period of time
- Making the ODF status sustainable (habit formation).

v. Going the last mile: Another example of process indicator worth consideration could be that some incentive/ weightage may also be considered for the kind of process, which might ensure that the proverbial 'last mile' households are not neglected and the myriad of problems faced by the most marginalised households (social, economical, hydro-geological...) are looked into and a specific solution created for them if needed. A GP that would have such examples of specific problem solving done for the most marginalised, through the process indicator suggested here or through any other similar process, might deserve special incentives, even before it might become fully eligible for applying for NGP.

One example of such a process could be one, in which weightage is given for the process, in which construction (or incentive distribution to any household) is taken up only after every household in the village decides to construct a latrine (and the water availability for the household is ensured adequately through the synchronised delivery of water and sanitation schemes).

Another example could be giving weightage to cases where eco-san latrine is chosen for the low-lying areas of the Panchayat (where generally the most marginalised reside), and financial support for choice is shared/ contributed to/ arranged for in such a way that the economically weaker sections do not find it unfeasible to opt for the technical option appropriate for the hydro-geological condition of their household.

vi. **Reaching the unreached**: The extent of social mobilization and inclusion: Formation of micro-level groups (at street level, hamlet levels) and inclusion of economically and socially marginalized (households without ration cards, households practicing wage labour – as daily wage labourers or agricultural labourers - as their primary occupation, households having *Kuchha* or *semi-pucca* type of house, with perceived neglect due to their status of SC/ ST/ minorities, woman-headed households, living in interior areas/ fringes/ low-lying areas, difficult terrain of the panchayat) can have weightage for considering the application.

Inclusion (of socio-economically marginalized) needs to be proved not only in terms of just

- their exposure to IEC activities and inclusion in micro-level group formations,
- but also in terms of specific efforts taken to address their specific technical problems faced due to their difficult terrain/ low lying colony or other such factors most likely to be found among the marginalized households. The technical solutions (of latrine construction) offered to them.
- the financial support extended/ arranged especially for them, keeping in mind not just the cost of the specific technical solution, but also the financial status of those particular households.

V. **Inclusion, capacity building of stakeholders and IEC**: PRIs, SHGs and other micro-level groups should be facilitated and empowered to spearhead the awareness campaign, house visits and other IEC activities. Capacity building of these groups and PRIs must be strengthened and appropriate trainings should be designed for different tiers.
Mechanisms should be developed to ensure effective and functional VWSCs.
Intensive IEC activities and a focus on proper operation & long-term-maintenance of toilets would reduce the lack of awareness about things that need to be done if latrine pits get filled. In the opinion of various stakeholders, awareness regarding water and sanitation related practices done in general and on specific times such as just before the onset of rainy season, would go a long way.

VI. **Proving the outcome:** As an important outcome of NGP is supposed to be impact on health, through safe drinking water i.e. non-contamination of water by faecal matter, it would be essential to include this aspect in the eligibility criteria for being 'Nirmal'. It could also become an indicator for the sustained status on NGP over long years. The eligibility may be considered to be proven in terms of water samples being tested for quality. This could be by triangulating data from various levels. These could include

- The results - of the regular testing of water samples incorporated under various water related schemes - might become part of the online MIS system for TSC.
- Verification process of NGP may include water testing done at the time of application, after one year of application/ or at regular intervals as might be deemed fit.

8. Application procedure and verification process

III. **Application process:** The application process needs to be modified

- To ensure participation of and support from wide variety of stakeholders and
- To ensure that adequate time is provided for and spent on preparation (and not done 'while the application is under process at various levels after submission' as found in most of the not-so-well-performing states).

The GP can first register online that it intends to apply for NGP after 2/3/4 years as might be the case. The various stages described below need to be updated online in order to keep track (for verification) of the various processes undertaken and due time being spent on them. Following steps need to be ensured before the application is made:

- Participatory planning of water and sanitation works needs to be undertaken at hamlet level, village level, sub-panchayat level and panchayat level, as a mandatory condition.
- Social audit of/ public hearing covering aspects like fund allocation for latrine construction and other works, utilisation of planned funds and progress of work needs to be mandated.
- Planning of how the NGP amount would be spent if awarded also needs to be done before application is prepared.

The application needs to be accompanied by proofs of these along with copies of the plans (which also have to be duly updated in an online system, if feasible). Applications should be sent only after fulfilling all the conditions laid by the government and after making 100% toilets in the Panchayat. Once the PRIs complete the whole preparation, only then should they apply for the award (instead of submitting application while the preparation/ construction is still on).
The stakeholders at panchayat level also suggested that Gram Pradhan/ Sarpanch should share the information with villagers before and during the application for NGP award. Members of the Panchayat should organise meetings to develop, plan and strategise the development of the village.

IV. **Verification process**: Verification needs to be made in a way that is not just more transparent, acceptable, considerate of the efforts and focusing on process indicators, but also in a way that is perceived by the stakeholders to be so. Verification and scrutiny methods need to be modified by taking suggestions from stakeholders and learning from other state-specific award schemes (such as those mentioned in 1.4) that have a good reputation (appear to do justice) and acceptance among stakeholders, especially the villagers. Only the competent agencies with credibility among the stakeholders need to be employed for verification. The agencies should have sound experience in water & sanitation sector and be thoroughly oriented/ acquainted with TSC/ NGP. Some officials clearly mentioned that responsibility for verification of NGP award should be vested with state officials since monitoring teams appointed from different regions do not/ may not have adequate idea of local scenario. Some suggested inclusion of eminent members of society/ women, journalists to be involved in verification, in a manner similar to some of the state-specific-award schemes. Verification needs to include the outcome criteria of safe drinking water- measured by testing water samples of the GP at regular interval of before NGP and after it, for verification of sustenance of NGP status outcome.

9. Puraskar amount, its disbursement and utilisation - Financial Provisions

- NGP award, instead of being given to a single individual like the Sarpanch, needs to become broad-based in acknowledging and encouraging the contributions made by other individuals/ groups and institutions at the hamlet/ village/ sub-panchayat/ panchayat levels. It may also include Women's groups/ SHGs, youth groups/ other village institutions that may have worked to sustain NGP status
- Amount of the award may be linked to funds required for making the sanitation status better, especially the solid and liquid waste management needs of the panchayat planned before the application.
- Stakeholders also suggested that only the memento to be given in an award ceremony, while the cheque should be given in Gram Sabha. PRIs should organise meetings to develop, plan and strategise the utilization of NGP amount for development of the panchayat. Some suggested that utilisation of the NGP amount should be supervised by government officials.

10. Beyond NGP

- A staggered achievement scale (and hence a staggered award system) may be designed to acknowledge the efforts of past 'poor performers' in bringing about the incremental change over their base years. For the 'overachievers' setting the

higher level goals by design. This would counter the lack of enthusiasm attributed to "once the 'ultimate' award is achieved, no more work would fetch any further acknowledgement/ recognition".

- The Gram Panchayats, who are close to achieving the final ODF status, may be given some recognition with some awards to enhance their morale. A grading system may be developed for various aspects of 'Nirmal" (like GPs who are close to achieving the ODF or who achieved completely achieved it, or have best management in disposal of solid & liquid waste etc.) and based upon grading, the GPs should be recognised with a reward/ award.
- There should be provision to give awards for different levels of achieving the 'Nirmal' status. One example cited by stakeholders included: first an award for reaching ODF status, then an award on reaching ODF + safe SLWM status, which would include SLWM and other indicators from Human Development Index, followed by an award on becoming a model village with forestation, electrification and so on.

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