

# Assessment Study of Impact and Sustainability of Nirmal Gram Puraskar

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**Abstract:** 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.

**Keywords:** Global Development, Posing Grave Health Challenges, Exacerbating Socio-Economic, Gender Differences, Thwarting process of inclusive Growth and Development, Lack of Proper Sanitation Facilities

## I. INTRODUCTION

**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.

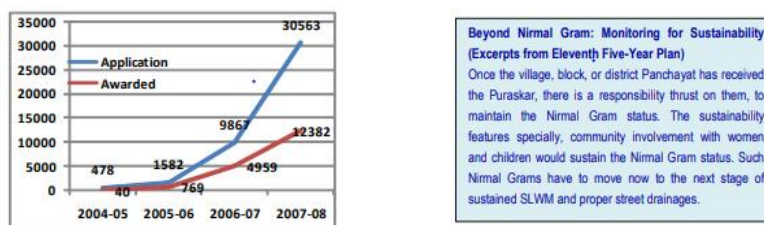


Fig 1: NGP Awardees: the increasing trend

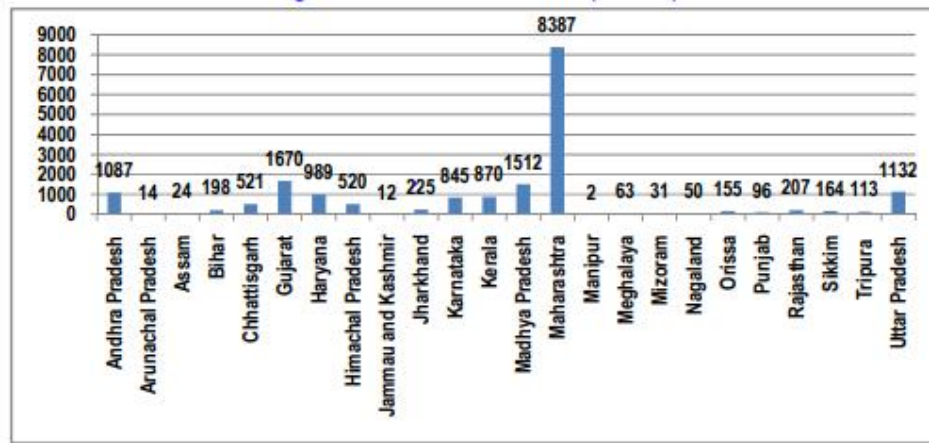


Fig 2: State wise NGP awardees (in count)

## II. THE STUDY, FOCUS ISSUES AND METHODOLOGY

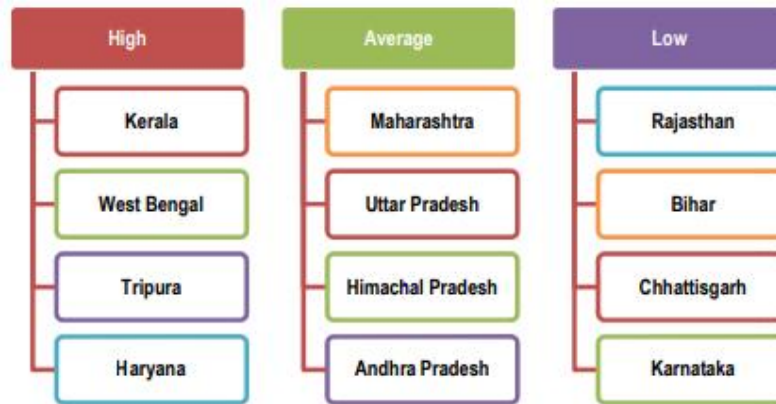
The Department of Drinking Water and Sanitation, Ministry of Rural Development envisaged a comprehensive 'Assessment Study of Impact and Sustainability of Nirmal Gram Puraskar' in the country. The main purpose of the study was to assess the impact of NGP on the pace of progress of sanitation availability 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)
  - Status of Coverage, Durability and Functionality
  - Status of Usage and 'Nirmal' status (ODF and Resolution, Garbage Disposal & Drainage Systems)
2. Impact and Hygiene Factor
  - Impact on Health, Education, Economics, Gender and Social Inclusion (seen in light of status of usage & 'Nirmal' criteria, status of water scarcity and source)
  - Relation of Impact with Status of Hygiene Practices (Hand Washing, Drinking Water)
3. Sustainability of NGP Status
  - Critical Factors for Achieving NGP Status
  - 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
  - Factors Critical for Better Sustainability of NGP Status and Sustainability of Impact
  - NGP Award Money Utilisation
4. Measures and Modifications for Sustained NGP Status
  - Measures Needed to Strengthen the Impact and Sustainability
  - 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 together were taken for study. A list of districts where NGP common districts' for each state. Approx. 32% of the common districts i.e. 56 districts (ou selected through Probability Proportional to Size (PPS) methodology keeping numbers of NGP seven NGP-GPs were selected from each time 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 GPs are likely to be relatively high performing across the states as compared to 2008 NGP numbers were found for the 2005-07 time groups 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 proportionate representation to SC/ST/Others in the per 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 to be responded to - preferably by a female of the household. For 3600 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. interviews, observation checklist for the Panchayat area and Community Sanitary Complex (CSC 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 Thus, the total sample of 30,238 respondents 2005-2008 period (332 GPs from NGP-2008 and 332 from 2005 High Kerala West Bengal Tripura Haryana Sustainability of NGP Methodology and Sampling Framework The study was undertaken in twelve states, which were categorised (as per the TOR) by their performance under the TSC age 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 GPS were selected from each time-point in each district, through PPS with population as the size variable. 393 blocks GPs. 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 GPs are likely to be relatively high performing across the states as compared to 2008 NGP-GPs. And as comparatively fewer 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 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 preferably by a female of the household. assessment, information and data was collected from all stakeholders. An observation checklist was included in the les for households and school and anganwadis. Primary data was collected also through in interviews, observation checklist for the Panchayat area and Community Sanitary Complex (CSC - if any) and Focus Group s, the finalised tools were translated in six languages (Hindi, Telugu, Kannada, Marathi, 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 2008 and 332 from 2005-07). Average Maharashtra Uttar Pradesh Himachal Pradesh Andhra Pradesh Low Rajasthan Bihar Chhattisgarh Karnataka by iii The study was undertaken in twelve states, which were categorised (as per the TOR) by their performance under the TSC age and low performing. However, no priority was assigned to any state based on its categorisation d those of years 2005, 2006 and 2007 GPs were available for both time points was identified as 'list of total common districts) were GPs as the size variable. Six to as the size variable. 393 blocks GPs in the 2007+ time group was very less, five districts had to be selected instead of three GPs from each time point.

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

**Table 1:** Overall summary of total sample size

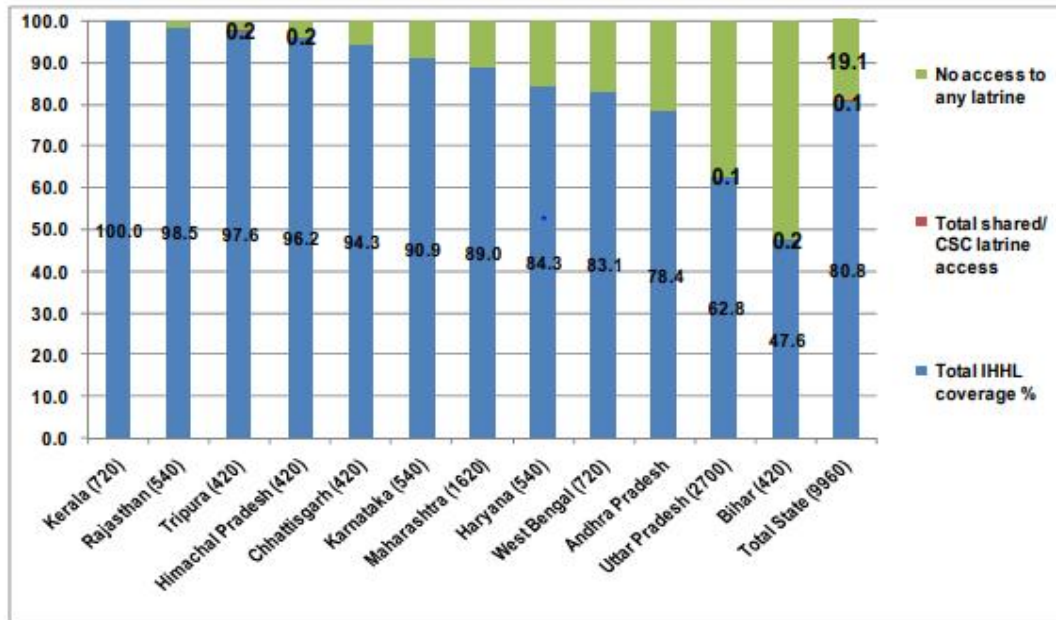
### III. PROFILE OF SAMPLE HOUSEHOLDS AND INSTITUTIONS

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.



#### IV. CURRENT STATUS OF NGP CRITERIA

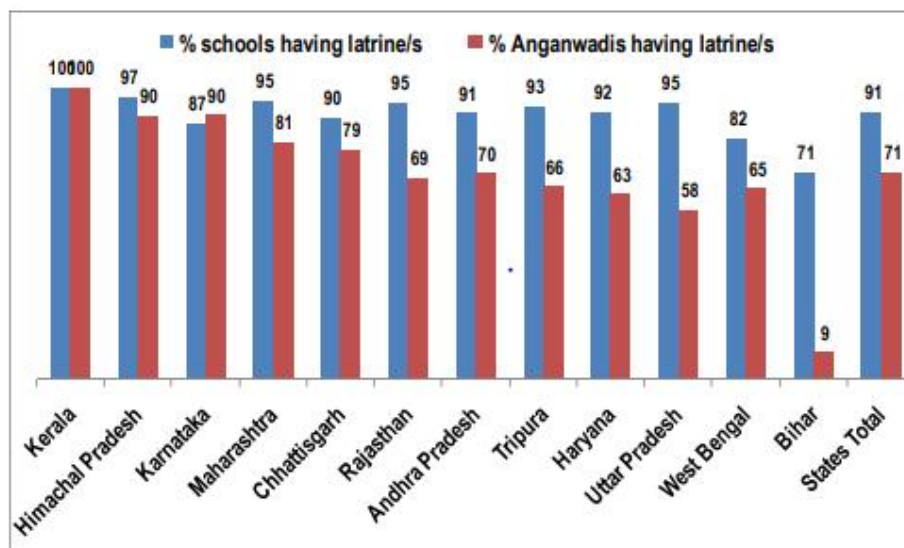
##### 4.1 Coverage of sanitation facilities (Households having latrine)



**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.

### **V. 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).

### **VI. SOLID AND LIQUID WASTE MANAGEMENT (SLWM)**

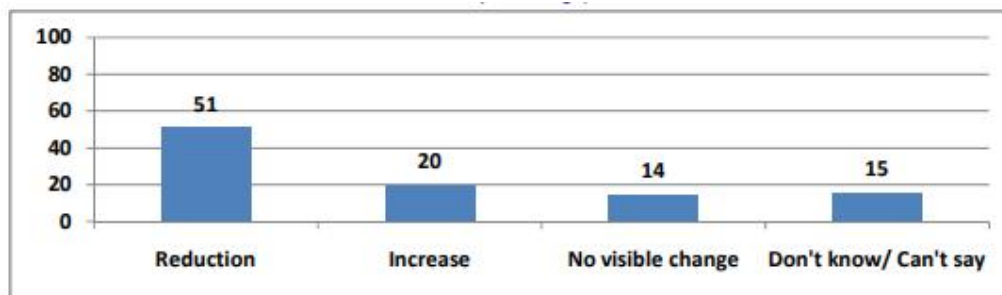
Around 56% households practice safe disposal methods for disposal of solid waste. 36% sample households reported availability of garbage collectors in their Panchayats. Safe disposal is defined as combination of i. Keeping garbage with the cow-dung/ other manure in the open and then use it in the field 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.

### **VII. 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. 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.

### **VIII. IMPACT**

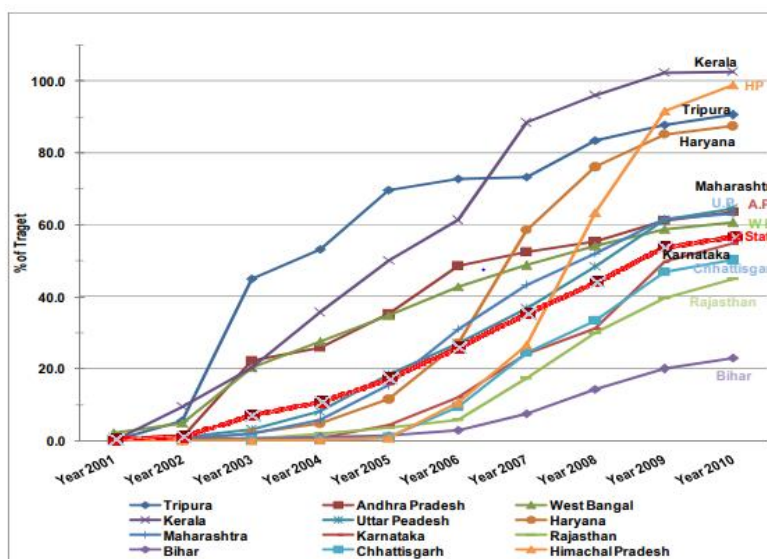
Incidence of diarrhoea (more than three loose stools during any 24 hours in last two weeks) among household- members - was reported to be 'nil' by around 92% of the households. Reduction, after latrine construction, in the average annual number of days the children of the household suffered with diarrhoea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



**Fig 5:** Households reported change in the number of days the children suffered with diarrhoea in a year (in percentage) 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).

## IX. 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. 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).



**Fig 6:** 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

## **X. CONCLUSION**

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. 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.

## **REFERENCES**

- [1]. Feeling the pulse – A study of the total sanitation campaign in five states – November 2008
- [2]. Mid Term evaluation of total sanitation campaign (TSC) programme – Agriculture finance cooperation ltd – March 2005
- [3]. Deep wells and Prudence: Towards pragmatic action for addressing groundwater overexploitation in India, World Bank, March 2010
- [4]. Progress on sanitation and drinking- water - UNICEF 2010 update
- [5]. India's sanitation for all: How to make it happen – Asian Development Bank 2009
- [6]. Glass 2010 – UN-water global annual assessment of sanitation and drinking water
- [7]. Clearing the waters – A focus on water quality solutions UNEP 2010
- [8]. District level household and facility survey 2007 – 2008
- [9]. Lake Victoria water and sanitation initiative UN-HABITAT, September 2008
- [10]. The national sanitation programme in Lesotho: WSP, August 2002
- [11]. National urban sanitation policy – Rating of cities 2010 towards city wide sanitation, November 2008
- [12]. Greater access to cell phones than toilets in India UNU – INWEH
- [13]. The challenge of financing sanitation for meeting the millennium development goals WSP, April 2004
- [14]. Financing on site – Sanitation for the poor – A six country comparative review and Analysis, January 2010
- [15]. Solution exchange for the decentralization community – NGP experiences, July 2007
- [16]. Joint monitoring programme for water supply and sanitation-TUVALU, WHO/UNICEF, July 2008
- [17]. Sustaining the sanitation revolution – India country paper sacosan III, November 2008
- [17]. Sanitation in India – How to take the bull by horns!, November 2007
- [18]. Solid and Liquid waste management in rural areas – A technical report UNICEF 2006
- [19]. Strategic communication for total sanitation campaign, DDWS
- [20]. WATSAN Indicators – USAID, June 1999
- [21]. Presentation on Total Sanitation Campaign by Mr Arun Kumar Misra, Secretary, Department of Drinking Water & Sanitation, Ministry of Rural Development, Government of India State Ministers Conference, Oct 28, 2010



[22]. NGP 2003 Guidelines

[23]. NGP 2010 Guidelines