Grassroots Research and Advocacy Movement

An SVYM Initiative

Evaluation of Nirmal Gram Puraskar awarded Grama Panchayaths in Karnataka

Evaluation Report

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Abbreviations

DDWS	Department of Drinking Water Supply
DWSM	District Water and Sanitation Mission
FGD	Focus Group Discussion
GoI	Government of India
GoK	Government of Karnataka
GP	Gram Panchayath
HH	Household
IEC	Information Education and Communication
IHHL	Individual Household Latrines
NBA	Nirmal Bharath Abhiyan
NGP	Nirmal Gram Puraskar
ODF	Open Defecation Free
PRIs	Panchayath Raj Institutions
RDPR	Rural Development and Panchayath Raj
SLWM	Solid and Liquid Waste Management
SWSM	State Water and Sanitation Mission
TP	Taluk Panchayath
TSC	Total Sanitation Campaign
VWSC	Village Water and Sanitation Committee
ZP	Zilla Panchayath

Executive Summary

The Government of India (GoI) initiated the incentive scheme named Nirmal Gram Puraskar (NGP) in 2003, to recognize the efforts of Gram Panchayaths (GPs) that are fully sanitized and open defecation free. Since 2007, 1069 GPs (close to 19%) have been awarded NGP in the state. These GPs were restricted largely to coastal and Malnad districts, which have better social and economic indicators in comparison to other districts of the state.

In this context, NBA, Dept. of RDPR, GoK, commissioned an evaluation to understand the features of the NGP awarded GPs within the state, their current status of sanitation and the critical successes and failures of these GPs in order to strengthen the sanitation related initiatives of the NBA. Grassroots Research And Advocacy Movement (GRAAM), a public policy research and advocacy organization [1] conducted this evaluation.

A mixture of qualitative and quantitative methods has been adopted in this study. Surveys were conducted to understand status of sanitation and utilization among households and schools and Anganwadis. Perspectives of GP members and personnel were captured using Focus Group Discussions (FGDs) at the GP level. The field evaluation was carried out in 107 GPs of the state, spanning 27 districts and 74 taluks. The major findings of the study are listed below.

On an average, the sampled NGP GPs perform better than the non-NGP GPs in the state on the issue of IHHLs. There is an average increase of more than 30% in the number of households having toilets in the selected GPs between 2007 and 2012-13. Utilization rates of households having IHHLs was found to be higher than expected (about 95%). Large regional disparities exist in the performance of the sampled GPs. Status of coverage of IHHLs in the Gulbarga and Belgaum divisions in general is much poorer in comparison to those in Mysore and Bangalore divisions. SC/ST households are significantly behind others in all the geographical divisions of the state.

Whilst most schools visited had toilets in them, utilization of toilets and provision of water for these facilities needs improvement. Anganwadis lag behind schools significantly in provision of toilet facilities. The Anganwadis visited in the Gulbarga division sufferer substantially due to the non-availability of water in their premises.

Majority of GPs (48%) have spent their funds according to the guidelines of NGP. However, there are considerable number of GPs (18%) that have spent the NGP award funds against the guidelines of NGP. Some examples include purchase of tractors, felicitation functions, one-time cleaning of drainages etc. In a majority of GPs, interest

[1] GRAAM is an initiative of Swami Vivekananda Youth Movement, working towards advocating policy change based on empirical evidence and research carried out with grassroots perspectives that works towards advocating policy change based on empirical evidence and grassroots perspectives

to continue the prioritization of sanitation activities exists, although without Government intervention, sanitation activities cannot be sustained. GPs are fully dependent on government for (a) providing leadership, guidance and innovation on introducing and internalizing sanitation related behavior changes and (b) financial assistance for creation of sanitation infrastructure. In GPs where IHHL coverage was poor, the GP members recognized the following bottlenecks: Shortage of funds, availability of space, water resources and lack of people's participation as challenges in implementing sanitation activities effectively.

Logistic regression was carried out to understand linkages between socio-economic characteristics of households and sanitation outcomes (measured as presence of IHHL). This analysis yielded statistically significant results. The results reiterate that regional disparities social, economic and educational levels play a significant role in determining the odds of a households having IHHLs. Further, this analysis provided evidence to link awareness levels of households and their sanitation and cleanliness behavior to the presence of IHHLs.

The evaluation report also documented the field impressions of the study team, that links qualitative aspects related to governance to sanitation outcomes. Specifically, it documented the limitations at the GP level in understanding and addressing sustainability issues and the impact of frequent change of focus at the district level on implementation of sanitation activities at the GP level. Based on these analysis and impressions, recommendations were made. Key recommendations are listed below.

1. Prioritization of poorly performing districts (specifically in the Belgaum and Gulbarga divisions) in implementation strategies and special focus to improve the IHHL coverage status of SC/ST households.
2. Focus on creation and utilization of safe sanitation facilities and stressing on safe sanitation practices in all schools and Anganwadis of the state.
3. Strategies for increasing awareness levels and sustaining sanitation practices should take long term systemic approaches involving communitization and involvement of multiple stakeholders in sanitation activities, rather than targeting on individual components alone, by single implementation agencies.
4. Stricter screening of the application processes (including penalization of false claims and recommendations) for the awards and creating social accountability mechanisms to compliment the application verification process through public discussions like Grama Sabhas, wherein the visiting team has the time and space to fully understand the progress made by the GP on multiple fronts related to sanitation.

1. Introduction

1.1 Background

The Government of India (GoI) initiated the incentive scheme named Nirmal Gram Puraskar (NGP) in 2003, to recognize the efforts of Gram Panchayaths (GPs) that are fully sanitized and open defecation free. This scheme is hoped to add rigour and fillip to Total Sanitation Campaign (TSC) and provide incentive for Panchayath Raj Institutions (PRIs) to achieve the objectives of TSC. TSC is a comprehensive programme to ensure sanitation facilities in rural areas with the broader goal to eradicate the practice of open defecation.

Till 2012, NGP was awarded by the Ministry of Drinking Water and Sanitation and now with the establishment of Nirmal Bharath Abhiyan (NBA), replacing TSC, the selection of GPs is taken up by the individual states themselves; through committees setup at the state level (including representatives from NBA, PRIs, departments of education, health, women and child development).

1.2 Objectives of NGP

1. To promote safe sanitation and clean environment as a way of life in rural India
2. To incentivize PRIs to make villages Open Defecation Free (ODF) and to adopt Solid and Liquid Waste Management (SLWM)
3. To sustain the initiative of clean environment
4. To encourage organizations to play a catalytic role in social mobilization in the implementation of NBA.

1.3 Eligibility criterion for NGP awards

1. The GP has adopted a resolution to ban open defecation within its entire area, inclusive of all habitations and villages.
2. All habitations within the GP have access to water for drinking and sanitation purposes. Thus all households have access to and utilize Individual Household Latrines (IHHLs).
3. The GP has achieved the objectives for all components as approved in the District Project and entered it in the Management Information System (MIS) of the Ministry of Drinking Water and Sanitation.

In Karnataka, the implementation of TSC began in 2005 and NGP awards have been given in Karnataka since 2007-08. So far, 1067 GPs have received this award throughout the state. The figure below shows the achievement of Karnataka in different years of implementation of TSC. Further, 6 taluks have been awarded NGP at the taluk level. Dakshina Kannada is the only district in Karnataka to have been awarded NGP at the district level.

1.4 Selection procedures and fund flow of NGP award

In this section, the process of selection of GPs for NGPs and the flow of funds are described. The procedure has changed after the formulation of NBA. Both these procedures are listed below.

1.4.1 Selection procedures for NGP award and fund flow before formulation of NBA[2]

The GPs are required to submit applications in the prescribed formats to the Chief Executive Officer of the Zilla Panchayath (ZP). After verification of the facts mentioned in the application, if the ZP is satisfied with the progress of the GP, the ZP forwards the application to the State Government with a certificate recommending the GP for the award. Applications are then be verified by the state government through inter-district committees. The Secretary in-charge of rural sanitation of the State uploads the suitable applications on the NGP online system. The application in original duly signed by all, endorsed by the block/district officials along with a copy of the resolution to ban open defecation and the State checklist duly signed by the Secretary in-charge of rural sanitation of the State should also be submitted to Department of Drinking Water and Supply (DDWS), GoI in hardcopy. This information is verified through independent agencies of repute. 30% of the qualifying GPs will be cross-verified by teams from other states. The findings of the independent agencies will be provided to the State Level Scrutiny Committee (SLSC) for its review and recommendation. Applications of the successful GPs, together with recommendation from SLSCs and the findings are further reviewed by a national NGP selection committee. GPs successful in these stringent reviews will be awarded the NGP and the list of PRIs finally qualifying for the award shall be displayed on the NGP website.

After the selection of the GPs for NGP, the total incentive amount for the GPs is transferred to the respective state's TSC accounts. Incentive amounts are transferred to the respective GPs' bank accounts in two instalments. The first instalment is released immediately after the GP is awarded NGP. The second instalment's release is contingent on the successful sustainability of the ODF status and other NGP eligibility status by the GP, after 6 months of the selection of the GP for the award. This is ensured by random verifications carried out by the state government.

[2] Based on "Nirmal Gram Puraskar Guidelines", 2010, by DDWS, Ministry of Rural Development, GoI.

1.4.2 Selection procedures for NGP award and fund flow after the formulation of NBA[3]

The new guidelines for procedures to be followed for awarding NGPs to GPs were drawn in 2012, with the formulation of NBA. At the district level, the District Water and Sanitation Missions (DWSMs) were given the responsibility to call for applications from GPs, verify the status of these GPs and forward the list of eligible GPs to the state government. In turn, the state government are expected to draft generic guidelines for inter-district survey teams to verify the applications of GPs. The recommendations received from these teams are placed before the state level NGP selection committee. At least 25% random verifications of the recommended GPs have to be carried out by the ministry of Drinking Water Supply through independent agencies, and 5% of the GPs have to be verified by the ministry itself. The final list of qualified GPs will be uploaded on the NGP website and displayed on the State's website within 7 days of declaration of award.

After the selection of the GPs for NGP, GoI's share of the incentive amount (80%) for the GPs is transferred to the respective state's State Water and Sanitation Mission (SWSM) accounts. Incentive amounts are transferred to the respective district's DWSM. GPs' bank accounts in two instalments. The first instalment of 25% is released immediately after the GP is awarded NGP. The second instalment (75%) is kept as a fixed deposit for a period of 2 years in the name of the GP. The interest is derived by the GP and can be used for sustainability of NGP status. The final release of the fixed deposit amount is contingent on the certificate provided by the district of the successful sustainability of the ODF status and other NGP eligibility status by the GP.

1.5 NGP award money usage guidelines

The NGP award money can be utilized for improving and maintaining sanitation facilities in the GP. Among the various uses, the award money can be utilized for important works and expenditures like

- Ensuring maintenance of community sanitation facilities
- Creation of additional public sanitation facilities
- Creation of Solid and liquid waste management facilities
- Promotion of vermin-composting, eco-friendly sanitation facilities, innovative means for sanitation promotion and promotion of toilets for differently-abled persons

[3] Based on "Nirmal Gram Puraskar Guidelines", 2012, by NBA, Ministry of Drinking Water and Sanitation, GoI.

The award money cannot be used for expenditures on

- Organization of seminars, workshops, melas, sports events
- Purchase of vehicles, mobiles, furniture, computers etc.

1.6Need for the evaluation

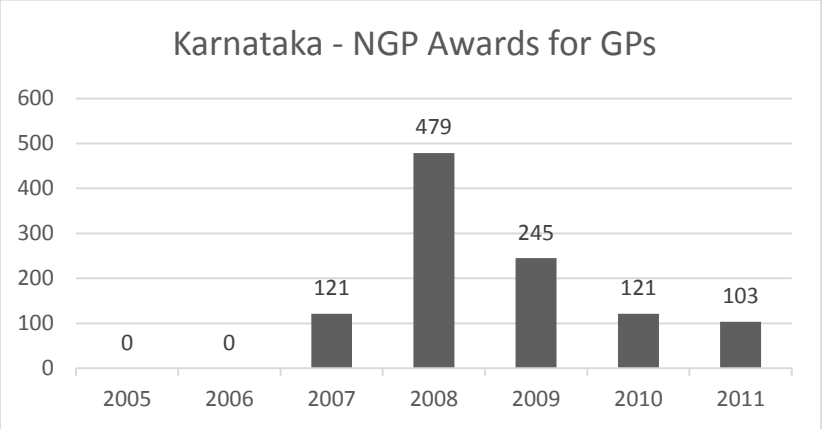

Figure 1. Progress of NGP awards for GPs in Karnataka

Since 2007, 1069 GPs (close to 19%) have been awarded NGP in the state. At the end of 2011, in terms of absolute number of GPs winning the award, Karnataka stands in the 9th place in the entire nation. In this ranking list, Karnataka is preceded by its neighbouring states Maharashtra (1st), Tamil Nadu (2nd) and Andhra Pradesh (6th). In terms of percentage of GPs within the state that have won NGP awards, Karnataka stands in the 9th place as well, and the states of Kerala, Maharashtra and Tamil Nadu outperform Karnataka.

Table 1. Comparison of top ten states in winning NGP

State	% Of GPs Having Won NGP(2011)
Kerala	100%
Sikkim	93%
Maharashtra	34%
West Bengal	33%
Himachal Pradesh	31%
Haryana	26%
Tripura	22%
Tamil Nadu	19%
Karnataka	19%
Gujarat	16%

Source: http://www.nirmalgrampuraskar.nic.in

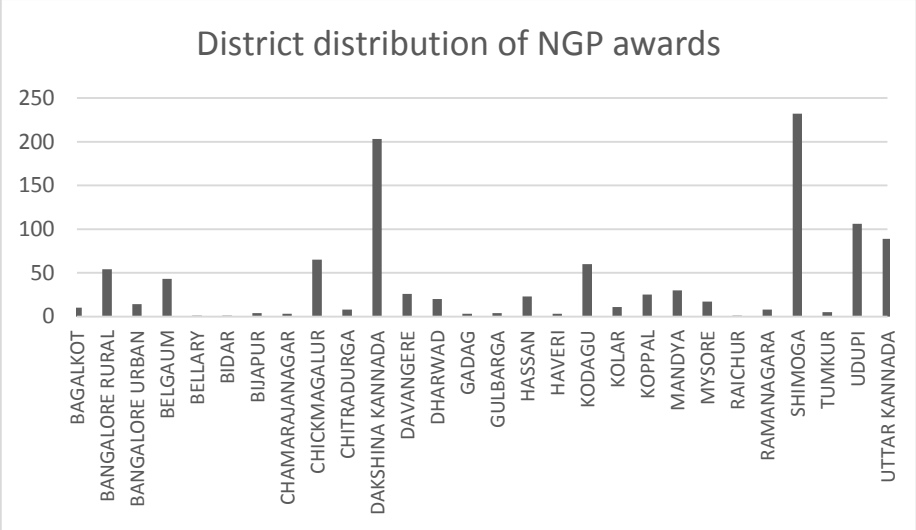

Figure 2. District-wise number of GPs awarded with NGP in Karnataka

Additionally, as shown in the above figures, A majority of the GPs were awarded in the years 2008 and 2009 and restricted largely to coastal and Malnad districts, which have better social and economic indicators in comparison to other districts of the state. Thus, looking at these figures related to NGP, it is evident that Karnataka has a lot to catch up, in comparison with its neighbouring states, and within the state, the progress seems to have slowed down, and limited to a few districts within the state.

In this context, it is important to understand the features of the NGP awarded GPs within the state, their current status of sanitation and the critical successes and failures of these GPs in order to strengthen the sanitation related initiatives of the NBA. Hence, this evaluation proposes to study the current status of sanitation and its influencing factors in a selected sample of NGP awarded GPs within the state.

2. Description of the evaluation study

2.1 Objectives and expected outcomes

The objective of this evaluation is to assess the present status of sustainability of the sanitation in NGP awarded GPs in 28 districts of the State, focusing on the usage and maintenance of Individual Household Latrines (IHHLs), School and Anganwadi latrines, Community sanitation complexes and Solid and Liquid Waste Management in NGP GPs. Further, this evaluation will also look in to award money released and how this money being utilized by respective GPs.

It has been 5 years since NGP is being awarded to the GPs in Karnataka. A glance of the awarded GPs shows that the awards have been obtained majorly in districts like Dakshina Kannada, Udupi and Shimoga, whereas the majority of GPs in the districts from North Karnataka are yet to meet the eligibility criterion for NGP. In this context, the evaluation tries to elicit characteristics that influence the behaviour and

prioritization of the awarded GPs towards safe sanitation. Further, since the evaluation focuses on GPs that have already been awarded NGP (in the span of 5 years), understanding the status of sustenance of sanitation activities will be crucial in evolving further policy suggestions to keep up the momentum created by efforts like TSC and NGP.

The major outcomes from the evaluation are to understand the following:

1. Functional efficiency of GP and its achievements with regards to sanitation
2. Status of all Sanitation components in GP – Existence, Physical condition and their usage.
3. Sustainability issues and its mitigation (usage and maintenance of sanitation facilities including IHHLs, School, Anganwadi and Community latrines and SLWM)
4. Suggestions and Recommendations to maintain sustainability in NGP GPs

To achieve these objectives, the focus issues of the evaluation are: activities undertaken under NGP and TSC, their outputs and outcomes. As shown in Figure 3, the activities of NGP are built upon the outputs of TSC (now NBA). Hence, to understand the sustainability of the sanitation outcomes reached under TSC and NGP, this evaluation focuses on the infrastructure created and its status and links them to sanitation outcomes.

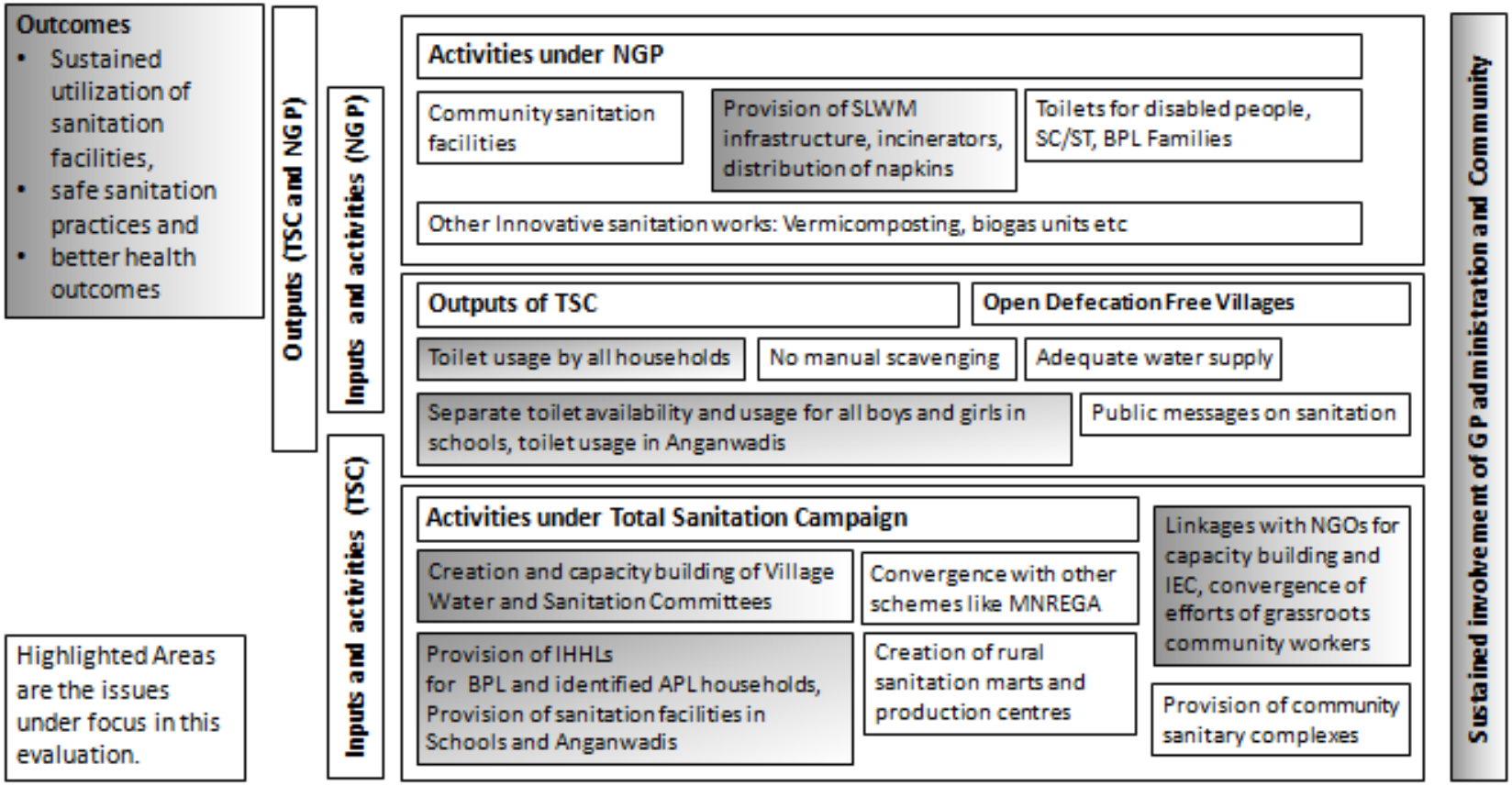

Figure 3. Log Frame of TSC and NGP

Figure 4 shows theory of change formulated for this study. It illustrates the building blocks necessary to achieve the long term goal of sustained safe sanitation practices. It also shows the drivers and dynamics through which the desired changes/outcomes emerge as envisioned in the outcomes of TSC and NGP.

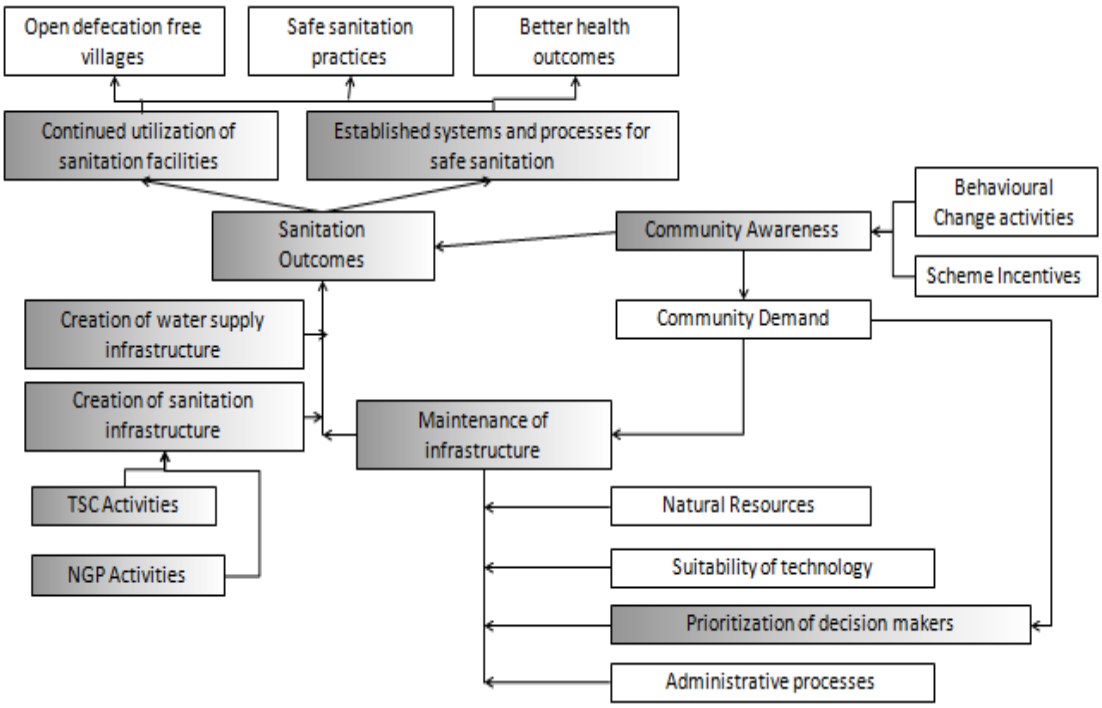

Figure 4. Theory of Change used for the evaluation

The highlighted areas will be the focus issues as part of this evaluation.

2.2 *Focus of the evaluation, specific objectives*

With the broad objectives outlined above, the evaluation focuses on three important aspects of TSC and NGP. These are:

a. ***Programme outputs***
    a. Current status of infrastructure created
    b. Activities carried out as part of NGP
b. ***Programme outcomes (of TSC and NGP)***
    a. Current status of utilization of the facilities created
    b. Status of systems and processes for guaranteeing safe sanitation
c. ***Programme effectiveness***
    a. The levels of awareness, demand and prioritization of sanitation issues in the GP
    b. Status of maintenance of infrastructure through TSC and NGP

To understand these issues, the specific objectives the evaluation tries to achieve were established. These are:

1. What is the current status of infrastructure related to sanitation in the GP
2. What is the status of utilization of the infrastructure created
3. What are the activities implemented under NGP
4. What are the factors affecting the sustainability of safe sanitation and drinking water practices in the GP
5. What is the extent of slip back (if any) among the sampled GPs

2.3 Evaluation questions

Based on the focus of the study and the specific objectives set, the following evaluation questions were framed.

1. What is the current status of infrastructure related to sanitation in the GP
    a. Current status of IHHLs
    b. Current status of School and Anganwadi Latrines
    c. Current status of Community Sanitation facilities
    d. Current status of SLWM facilities
2. What is the status of utilization of the infrastructure created
    a. Utilization of IHHLs
    b. Utilization of School and Anganwadi facilities
    c. Utilization of Community Sanitation facilities
    d. Utilization of SLWM facilities
3. What are the activities implemented under NGP
    a. Physical and financial progress
4. What are the factors affecting the sustainability of safe sanitation practices in the GP, with the focus on
    a. Socio-economic factors of the households
    b. Information, Education and Communication (IEC) tools and strategies adopted for behavioural change in communities
    c. Current levels of awareness among households about sanitation and drinking water
    d. Current status of cleanliness of households
    e. Availability and status of water supply
    f. Resource allocations for sanitation and drinking water in the GP.
    g. Prioritization of sanitation and drinking water issues, in comparison to other issues of the GP

h. Contribution of various stakeholders in achieving and sustaining safe sanitation practices

5. What is the extent of slip back (if any) among the sampled GPs
    a. Extent of households not having/not using IHHLs
    b. Extent of Schools and Anganwadi not having/not using latrines
    c. Extent of community sanitation complexes not being used
6. What are the social impacts of increased sanitation facilities at schools and households
    a. What are the comparative benefits of the sanitation facilities created between different groups of the population (Men-Women, Adults-Children, between different social groups)

2.4Evaluation methodology

Based on the objectives and the exploratory nature of this study, a mixture of methods has been adopted. For answering the specific evaluation questions 1, 2, 3 and 5 (understanding current status of infrastructure and utilization, measuring the extent of slip back), descriptive statistics will be used.

In understanding regional differences in the outputs and outcomes of NGP, comparison of means method (*Student's t-test)* is used on the sample households of the different regions. These measures help in providing statistically significant assessments of the regional disparities in sanitation outcomes. These results are presented in Chapter 4.

For answering question 4 (to understand factors affecting sustainability of sanitation activities), qualitative and quantitative methods are used. GP level governance patterns, prioritization of the GP administration towards sanitation, its effectiveness and investment on sanitation play an important role in the sustenance of sanitation. These qualitative issues are analyzed to understand their impact on the sanitation status of the GPs. The results are presented in Chapter 5.

To understand major characteristics of implementation of NGP in the surveyed GPs, perspectives of GP members and personnel and prioritization on sanitation issues at the GP level, Focus Group Discussions (FGDs) were conducted, involving GP personnel and current members. The information collected in FGDs is verified during village and household surveys. The qualitative information collected from these FGDs are analyzed as factors influencing the status of sanitation in the surveyed GPs. Thus, the current status of IHHL coverage is linked to the issues in GP level governance to understand sustenance of sanitation activities. This analysis is presented in Section 5.1.

Socio-economic characteristics of households considerably effect the sustenance of sanitation and provides insights into understanding factors that influence sanitation

practices of households. To understand their influence, household surveys (mentioned in the following section) were used to capture important household information (regarding social, educational and economic status of households, awareness levels, safe sanitation and cleanliness practices) and link them to status of sanitation in the respective households. Further, since this analysis requires inferential statistical methods, a model linking these socio-economic characteristics with sanitation outcomes is developed. This quantitative analysis takes the general functional form of

$$Y = F\,(X_1, X_2, X_3 \ldots X_n)$$

where Y is the sanitation outcome (dependent variable) and $X_1, X_2, X_3 \ldots X_n$ are the socio-economic characteristics (explanatory variables) of the household. To assess this relationship among the surveyed households, robust indicators are needed, that are relevant and applicable for households across the entire state. Looking at the diversity of the households and their geographical locations, it is crucial that dependable, simple, relevant and easily collectable variables are used to assess the relationship between socio-economic characteristics of households and its sanitation outcomes. Hence the following dependent variable and explanatory variables were used for this analysis.

Table 2. Variables included for quantitative analysis

Variable	Variable type	Description
Availability of IHHL	Dichotomous, dependent Variable	A general, robust, proxy indicator for safe sanitation practices[4].
Geographical division	Categorical, explanatory variable	This variable serves as a dummy variable for locating the regional disparities in sanitation practices.
Social Class	Categorical, explanatory variable	Describes the social class of the household (Ex: SC/ST, OBC and Minorities, General)
Education Level	Ordinal explanatory variable	Describes the highest education status attained by individuals of the HHs (Ex: Primary school,

[4] Further, as evident in Section 4.1, about 95% of the households having IHHLs were utilizing them.

		High school, PUC, Degree and above)
Roof Structure	Categorical, explanatory variable	Proxy indicator for economic status of the HH[5]
Awareness of Village Water and Sanitation Committee	Dichotomous explanatory variable	Proxy indicator for awareness about GP activities related to sanitation and related activities.
Information about Anganwadi Worker	Dichotomous explanatory variable	Proxy indicator for awareness about health related initiatives
Distance of source of water	Categorical, explanatory variable	Indicator for water availability.
Solid waste disposal mechanism	Categorical, explanatory variable	Proxy indicator for household sanitation practices.
Drinking water purified?	Dichotomous explanatory variable	Indicator for safe drinking practices

Based on the above model and the dichotomous nature of the dependent and explanatory variables, logistic regression model for analyzing the relationship between sanitation status and household socio-economic characteristics was developed. This analysis is presented in Section 5.2.

2.4.1 Data and information sources

Table 3. Data and Information Sources

Description of data	Data type	Data source
Description of the scheme, activities proposed, current progress, other evaluations etc	Secondary data	Literature survey, Government websites, department documents, progress reports etc
Local scheme activities, physical and financial progress, current infrastructure details	Primary Data	GP
GP's efficiency in implementation, Perspectives on NGP implementation, local bottlenecks, prioritization of	Primary data	Focus Group Discussions at the GP level

[5] Since getting reliable data on BPL status, extent of land owned, annual income are variables is difficult.

sanitation, involvement of local stakeholders etc		
Household details, current sanitation practices, awareness levels etc	Primary Data	Household interviews
Current status of sanitation infrastructure and utilization in the village, School and Anganwadis	Primary Data	Primary Observation

2.4.2 Sampling framework

For the purpose of this evaluation, 10% of the awarded GPs are chosen for physical verifications. Hence, the evaluation will be carried out in 107 GPs of the state, covering GPs that were awarded NGP between 2007 to 2011-12. Since the objective of the evaluation was to understand the status of sustainability of activities initiated through TSC and NGP in the awarded GPs, the following sampling that takes into account the following issues was used:

1. Regional representation (covering at least 5 districts and at least 10 GPs from each revenue division).
2. Representation of GPs having earned the awards in different years (at least 10 awarded GPs picked from each year).
3. Proportion of NGP awarded GPs within the district (selecting proportionately more GPs from districts like Shimoga, Udupi and Dakshina Kannada where most GPs have already been awarded NGP).
4. Wherever possible, samples to be chosen from Jala Nirmal project implementation areas to understand comparative performance of NGP awarded GPs with and without Jala Nirmal implementation (Off the 31 GPs covered in Belgaum and Gulbarga divisions, 18 GPs were included under the Jala Nirmal project).

The sampling of GPs and the full list of GPs is presented in Table 38 and Table 39 of Annexure A. The summary of sampled GPs is presented in Table 4.

Table 4. Summary of sampled GPs

Division	Total GPs Awarded	Sampled GPs	Share of division GPs in the sample
Bangalore	357	36	34%
Belgaum	172	20	19%
Gulbarga	32	11	10%
Mysore	508	40	37%
Grand Total	**1069**	**107**	

The year-wise breakup of selected GPs is presented in Table 5. The years of 2008-09 and 2009-10 are given more importance since these were the years when Karnataka received maximum number of NGP awards. Further, 2011-12 is prioritized over 2007-

08 and 2010-11 since a majority of GPs from Gulbarga and Belgaum divisions attained NGP awards during this year.

Table 5. Year-wise breakup of selected GPs

Year	Awarded GPs	Sample GPs	Share in sample
2007-08	121	11	10%
2008-09	479	37	35%
2009-10	245	23	21%
2010-11	121	17	16%
2011-12	103	19	18%
Total	**1069**	**107**	

Table 6. Region-wise distribution of selected GPs

Division	Year of NGP Award					Grand Total
	2007	2008	2009	2010	2011	
Bangalore	4	14	8	4	6	36
Belgaum	1	6	6	2	5	20
Gulbarga			1	6	4	11
Mysore	6	17	8	5	4	40
Selected GPs in each year (share in sample)	11 (10%)	37 (35%)	23 (21%)	17 (16%)	19 (18%)	107
Total Awarded GPs	**121**	**479**	**245**	**121**	**103**	**1069**

2.4.3 Data collection tools

The evaluation tool consists of the following sub-tools (attached in Annexure C):

1. GP questionnaire (to be filled by the GP Panchayath Development Officer (PDO) /Secretary)
2. GP level focus group discussion among GP personnel and elected members
3. Village level surveys (2 villages within the GP, including the GP headquarters)
4. School and Anganwadi surveys (within the 2 villages visited)
5. Household survey (20 households per GP covering at least 6 SC/ST households)

The GP questionnaire, to be filled by the PDO/Secretary captures the GP level activities, available physical, financial and human resources for sanitation purposes, the prevailing environmental opportunities and risks towards sanitation. It also provides the detailed action plan and status of implementation of activities under NGP.

The GP level focus group discussion focuses on understanding the successes, challenges and perspectives of the GP personnel and elected members regarding sanitation and captures qualitative understanding of the current status of sanitation. In the focus group discussions, the participation of at least 2 women (including GP

members) will be prioritized to collect gender related perspectives towards sanitation and the impacts of NGP.

The village level survey (conducted by the field team in two villages of the GP) serves as a validation tool for the information collected at the GP level and the issues discussed in the focus group discussion, as well as capturing the current status of sanitation and water supply infrastructure in the visited villages. In these surveys, other public offices present in the village will also be visited to verify the status of sanitation and drinking water facilities in the village. Wherever present, Primary Health Centres (PHCs) and Sub-Centres (SCs) will also be visited to understand the current status of health and the status of water-borne diseases. Similarly, the School and Anganwadi surveys assess the status of infrastructure and utilization of sanitation facilities in the respective institutions.

The household survey also serves as a validation tool for information collected at the GP level. Further, it captures the status of internalization of sanitation related life-style changes adopted by households. It also focuses on issues related to comparative benefits and burden on different members of the household due to water related and sanitation practices. While the selection of households for the survey is random, at least 30% of the chosen samples were SC/ST households.

As mentioned earlier, the objectives set for the evaluation necessitates a mixture of methods for data collection and analysis. Collection of qualitative data is essential in this evaluation to understand the following issues

1. The comparative priorities the GP places on sanitation and related activities
2. The relative differences in perceptions, attitudes and opinions towards sanitation among GP members and communities
3. Nature of awareness programmes created and the response of the GPs to such activities
4. The process of attitudinal change in communities towards sanitation
5. The role of different stakeholders in implementing sanitation activities

The data sources for the qualitative data are the GP level focus group discussions, open- ended questions in the school, Anganwadi and household surveys and field workers' observations on issues related to sanitation.

The FGDs are moderated and reporting of the answers is done in a structured fashion, wherein specific points emerging from the discussions are mapped to a structured survey tool. The responses to this survey tool are later coded. Similarly, the open-ended questions from the school, Anganwadi and household surveys and the field workers' observations are coded. Based on the initial reading and analysis of the qualitative data, codes were developed and the codebook was prepared. The codes

generated from the analysis of qualitative data were treated as nominal variables and included in the quantitative data analysis.

2.5 Field workers training and pilot test description

The NGP evaluation field team was recruited from a pool of field workers who had earlier experience in conducting large surveys[6]. A total of 16 field workers were recruited for the project. The field workers workshop was conducted for five days including the pilot testing of the survey tools. After an initial orientation about the evaluation for two days, a pilot study for the evaluation was carried out in two NGP GPs of Mysore district. The evaluation team was split into two groups, each group visiting one GP each. The pilot study contained a mixture of close ended questions and open ended questions (using structured and semi-structured tools). The pilot gave the field team an exposure of the actual field issues in collecting the data for the evaluation. It also gave the project coordinators a chance to test out the survey questions. After the pilot, the questions for fine-tuned and strategies for conducting FGDs and other data collection mechanisms were finalized. The field teams were divided into 4 teams, with each team containing 3 data enumerators and a team leader. The major responsibilities of the team leaders were to coordinate with the district and taluk officials and the GP personnel, conducting FGDs and overseeing the data collection and reporting processes of their respective teams. The data enumerators within each team had the responsibilities of transcribing the FGD at the GP level, conducting village surveys school and Anganwadi surveys and household surveys in each of the selected villages of the GP.

2.6 Summary of field evaluation activities

The fieldwork for the evaluation was conducted in 107 GPs, in 25 districts, covering 74 taluks of the state between the months of March and April 2013. Further, as mentioned in Section 2.4.2, 18 Jala Nirmala GPs were covered within the 31 GPs evaluated in the divisions of Belgaum and Gulbarga. Significant challenges faced during field work were: a) Announcement of general elections, b) year-end activities of the GP and c) closing of schools for annual summer holidays.

2.7 Scope and reference years for the evaluation

The evaluation is conducted in a sub-set of GPs that have already won the NGP award for sanitation. As stated above, NGP awards have been awarded to GPs in Karnataka beginning from 2007-08. Since this evaluation focuses on status of sustenance of sanitation activities, the sample GPs selected for the evaluation will include GPs that

[6] The field workers had prior experience with the India Human Development Survey project.

have won NGP awards in the five year period between the years 2007-08 - 2011-12. GPs that have won the award in 2012-13 are not included in this study.

2.8 Stakeholders and audience

The study is initiated by NBA, which is the primary stakeholder of this evaluation. Further, the department of Planning, Programme Monitoring and Statistics and Karnataka Evaluation Authority (KEA) and the individual ZPs are also important audiences for this study since the study not only provides a representative picture of the status quo of NGP awarded GPs, it also elicits the parameters that influence the sustenance of safe sanitation practices in the awarded GPs, providing useful information for taking further policy decisions with regards to sanitation and water supply in rural areas.

The next chapter proceeds to analyze the data gathered during the field evaluation and explores the current status of infrastructure and utilization of sanitation facilities in the sampled GPs.

2.9 Risks and limitations

The evaluation proposes to visit 107 GPs and conduct Focus Group Discussions, survey of Schools and Anganwadis, village surveys and household surveys. Hence, the success of data collection in the evaluation depends largely on the cooperation from selected districts, taluks and GPs. Further, the declaration of general elections in Karnataka and the enforcement of code of conduct may prevent holding Focus Group Discussions at the GP level with the members of the GP.

The nature of the evaluation makes this a snap-shot assessment of the status of sanitation. The evaluation is being done during summer and after a year when rainfall was below normal. Hence, the sanitation situation in the visited GPs may not be fully representative of the sanitation situation during normal years. The field visits in the evaluation are being conducted in March and April. The Schools visited as part of the evaluation will have students in March whereas the students may not be there in all the Schools visited during April. Thus, there may be biases in the data collected in the School sanitation surveys between the two months.

Based on the discussions with the Director, NBA, due to limitations in the Terms of Reference, time-line and budget, the evaluation restricts itself to GPs that have won NGP awards. The status quo and processes setup for sanitation in other GPs are not studied. Further, when analysing slip-backs and determining whether sanitation facilities have improved/declined, the analysis assumes that the GP had reached sanitation levels that met the eligibility criterion in the year when it was awarded the NGP. Hence, there is no fail-safe way of measuring the extent of real slip-back through

this evaluation. Thus the study does not provide evidence of the efficiency of NGP GPs visa-a-vi non-NGP GPs.

2.10 Summary

This chapter described in detail the objectives, focus and specific evaluation questions for this evaluation. Further, the chapter explained the evaluation methodology, including data sources, sampling framework, tools used for data collection and data analysis methods used in this study. Section 2.5 summarize the field workers orientation and Section 2.6 encapsulates the field activities and the data collection activities conducted as part of the evaluation.

3 Profile of sampled GPs

This chapter summarizes the profile of the selected GPs where field studies were conducted as part of the evaluation.

Table 7. Population profile of GPs visited

Division	District	<5000	5000-9999	10000-14999	15000-19999	Total GPs
Bangalore	Bangalore Rural (& Ramnagar)	1	6	1		8
	Bangalore Urban	2				2
	Chitradurga		1	1		2
	Davangere	1	4			5
	Kolar		2			2
	Shimoga	11	5			16
	Tumkur		1			1
	Total	**15**	**19**	**2**	**0**	**36**
Belgaum	Bagalkot		1	1		2
	Belgaum		4			4
	Bijapur		2			2
	Dharwad	1	2		1	4
	Uttar Kannada	5	3			8
	Total	**6**	**12**	**1**	**1**	**20**
Gulbarga	Bellary		1			1
	Bidar	1				1
	Gulbarga (&Yadgir)	1	2		1	4
	Koppal		4			4
	Raichur			1		1
	Total	**2**	**7**	**1**	**1**	**11**
Mysore	Chamarajanagar		1			1
	Chikmagalur	4		1		5
	Dakshin Kannada	2	9		1	12
	Hassan		2			2
	Kodagu	4	1			5
	Mandya		2			2
	Mysore		2			2
	Udupi	3	6	2		11
	Total	**13**	**23**	**3**	**1**	**40**
Total		**36**	**61**	**7**	**3**	**107**

Source: Secondary data collected from GPs

As shown in Table 7, the majority of the selected GPs (57%) fall in the population range of 5000 – 9999. This category also forms the majority of samples selected from every division of the state. The second largest population category of samples is that of GPs with less than 5000 population. Majority of the samples in this category are the GPs from Shimoga, Uttara Kannada Kodagu and Chikmagalur.

Table 8. Socio-economic profile of GPs visited

Division	District	% Of SC/ST HHs			% Of BPL HHs[7]				
		<25%	25% - 50%	> 50%	<25%	25% - 50%	50% - 75%	>75%	Grand Total
Bangalore	Bangalore Rural	3	5			1	1	6	8
	Bangalore Urban		2				1	1	2
	Chitradurga		2				1	1	2
	Davangere	1	3	1		1	1	2	5
	Kolar	1	1					2	2
	Shimoga	11	4	1		1	12	3	16
	Tumkur	1					1		1
	Total	**17**	**17**	**2**		**3**	**17**	**15**	**36**
Belgaum	Bagalkot	1	1			2			2
	Belgaum	2	1	1		3	1		4
	Bijapur	2					1	1	2
	Dharwad	4					1	3	4
	Uttar Kannada	8				1	5	2	8
	Total	**17**	**2**	**1**		**6**	**8**	**6**	**20**
Gulbarga	Bellary			1			1		1
	Bidar	1						1	1
	Gulbarga	2	2				3	1	4
	Koppal	1	3			2	1		4
	Raichur		1			1			1
	Total	**4**	**6**	**1**		**3**	**5**	**2**	**11**
Mysore	Chamarajanagar		1			1			1
	Chikmagalur	3	2		1	1	1	1	5
	Dakshin Kannad	11	1		1	7	4		12
	Hassan		2				1		2
	Kodagu	4	1			3		2	5
	Mandya	2					2		2
	Mysore	1	1					2	2
	Udupi	10	1			2	7	1	11
	Total	**31**	**9**		**2**	**14**	**15**	**6**	**40**
Total		**69**	**34**	**4**	**2**	**26**	**45**	**29**	**107**

Source: Secondary data collected from GPs

From Table 8, it can be seen that 65% of the GPs selected had less than 25% of their households represented by SC/ST households. About 70% of the selected GPs reported that the share of BPL households within their GPs was more than 50%. The below table presents the summary of field sites visited and information collected.

[7] 5 GPs did not provide valid BPL/APL HH data

Table 9. Data collection details

Division	District	Jala Nirmal	Taluks	GPs	FGD	Angan wadis	Schools	Village Surveys	HH Surveys
Bangalore	Bangalore Rural		4	7	7	14	14	14	140
	Bangalore Urban		2	2	2	4	4	4	40
	Chitradurga		1	2	2	4	4	4	40
	Davangere		4	5	5	10	10	10	100
	Kolar		2	2	2	3	4	4	40
	Ramanagar		1	1	1	2	2	2	20
	Shimoga		7	16	16	32	25	32	320
	Tumkur		1	1	1	2	2	2	20
	Total		**22**	**36**	**36**	**71**	**65**	**72**	**720**
Belgaum	Bagalkot	1	2	2	2	4	4	4	40
	Belgaum	2	4	4	4	8	8	7	80
	Bijapur	2	2	2	2	4	4	3	40
	Dharwad	2	4	4	4	8	8	8	80
	Uttar Kannada	4	8	8	8	16	16	15	160
	Total	**11**	**20**	**20**	**20**	**40**	**40**	**37**	**400**
Gulbarga	Bellary		1	1	1	2	1	1	20
	Bidar	1	1	1	1	2	2	2	20
	Gulbarga	2	1	2	2	4	4	4	40
	Koppal	1	4	4	4	8	7	8	80
	Raichur	1	1	1	1	2	2	2	20
	Yadgir	2	1	2	2	4	4	4	40
	Total	**7**	**9**	**11**	**11**	**22**	**20**	**21**	**220**
Mysore	Chamarajanagar		1	1	1	2	2	2	20
	Chikmagalur		5	5	5	10	10	9	100
	Dakshina Kannad		5	12	12	23	24	19	240
	Hassan		2	2	2	4	4	4	40
	Kodagu		3	5	5	10	10	9	100
	Mandya		2	2	2	4	4	4	40
	Mysore		2	2	2	4	2	4	40
	Udupi		3	11	11	22	21	17	220
	Total		**23**	**40**	**40**	**79**	**77**	**68**	**800**
Total		**18**	**74**	**107**	**107**	**212**	**202**	**198**	**2140**

In North Karnataka districts, of the 31 GPs selected for the evaluation, Jala Nirmala project[8] was in implementation in 18 GPs.

Table 10. Profiles of household survey respondents

Division	Total Respondents	Female Respondents (%)	GP Members	% of HH Responses		
				SC/ST	OBC/ Minorities	General
Bangalore	720	61%	48	44%	28%	28%
Belgaum	400	51%	22	41%	31%	28%
Gulbarga	220	43%	19	44%	30%	26%
Mysore	800	62%	61	38%	46%	15%
Total	**2140**	**58%**	**150**	**41%**	**35%**	**23%**

The above table describes the characteristics of the individual households interviewed during the evaluation study. As mentioned earlier in the section on sampling framework, 'SC/ST households' was the single largest category of households interviewed, followed by Other Backward Classes (OBC) and minority households. The survey was answered by 1241 women, which forms 58% of the total respondents. The individual survey also covered 150 GP members, which forms 7% of the individual survey sample.

[8] Jala Nirmala is a World Bank aided project under implementation in 11 districts of North Karnataka, focusing on drinking water supply and rural infrastructure. The drinking water and sanitation infrastructure in these GPs can be expected to be better than other GPs.

4 Status of infrastructure and utilization of sanitation facilities

This chapter describes the status of sanitation infrastructure and its utilization in the sampled GPs. In exploring the status of sanitation infrastructure the following issues were covered: Status and utilization of IHHLs, status and utilization of school and Anganwadi toilets, status of community sanitation complexes, extent of slip back in IHHLs, school and Anganwadi sanitation and solid and liquid waste management infrastructures present in the GP. The next section in the chapter compares the results with the overall status of sanitation at the state and national levels. The final section of the chapter summarizes the status of utilization of NGP funds in the state. Thus, this chapter summarizes the results for evaluation questions 1, 2, 3 and 5 mentioned in Section 2.3 (pp. 9).

4.1 Status of IHHLs

Attaining 100% IHHL coverage has been a critical issue in achieving ODF communities and hence, much of the activities involved in TSC and NGP have emphasized this issue in their implementation. Further, household surveys have been carried out to assess the status quo of IHHL coverage in at least 2 time frames. Initially, when TSC activities began, a base line survey was carried out to set IHHL targets for individual GPs. In 2012-13, another baseline survey was carried out to understand the status quo of IHHL coverage. The field activities of this evaluation were carried out approximately 2- 3 months after this base-line survey was carried out. A comparison of the findings of these three surveys, in the sample GPs provides a useful way of understanding performances and improvements of GPs of different divisions of the state. Table 11 provides this comparative statement of % of households without IHHLs, reported in each of the surveys, for the selected GPs of this evaluation. The table aggregates the percentage coverage at the district levels. The GP level results are presented in Annexure B, Table 41.

Table 11. Trend of IHHL coverage in sampled GPs (based on Baseline surveys carried out by NBA)

Division	District	Count of sampled GPs	% of HHs not having toilets		
			BLS (2007-08)	BLS (2012-13)	Sample Survey (present study)
Bangalore	Bangalore Rural	7	74.3%	15.2%	16.8%
	Bangalore Urban	2	62.1%	6.6%	0.0%
	Chitradurga	2	53.6%	37.7%	45.0%
	Davangere	5	83.6%	51.6%	49.0%
	Kolar	2	81.1%	30.2%	10.0%
	Ramanagar	1	22.2%	10.6%	35.0%
	Shimoga	16	52.1%	31.9%	21.4%
	Tumkur	1	48.7%	55.0%	25.0%
	Total	**36**	**63.6%**	**29.3%**	**23.7%**
Belgaum	Bagalkot	2	100.0%	60.7%	37.5%
	Belgaum	4	87.4%	69.1%	53.8%

	Bijapur	2	69.3%	25.3%	7.1%
	Dharwad	4	70.4%	55.8%	43.2%
	Uttar kannada	8	80.9%	29.4%	32.7%
	Total	**20**	**80.9%**	**46.3%**	**36.8%**
Gulbarga	Bellary	1	88.9%	55.0%	80.0%
	Bidar	1	39.6%	78.4%	70.0%
	Gulbarga	4	100.0%	46.3%	32.5%
	Koppal	4	100.0%	80.9%	93.8%
	Raichur	1	93.4%	72.9%	55.0%
	Total	**11**	**95.3%**	**67.5%**	**64.7%**
Mysore	Chamarajanagar	1	68.6%	75.5%	45.0%
	Chikmagalur	5	47.4%	22.1%	25.5%
	Dakshin kannada	12	34.4%	2.1%	5.8%
	Hassan	2	90.7%	53.8%	14.6%
	Kodagu	5	66.2%	16.5%	20.0%
	Mandya	2	87.5%	38.2%	35.0%
	Mysore	2	50.5%	5.4%	19.5%
	Udupi	11	40.3%	8.1%	5.0%
	Total	**40**	**48.2%**	**13.8%**	**13.4%**
Grand Total		**107**	**63.6%**	**30.9%**	**26.5%**

Source: Baseline Survey(BLS) data from NBA's website: http://tsc.gov.in

Based on the information provided in Annexure B, Table 41, the table below provides the summary statement of number of GPs falling under 4 categories of IHHL coverage. It captures the regional disparities in the performance of GPs in IHHL coverage. It shows that, among the 11 GPs surveyed in the Gulbarga division, 6 GPs (55%) had IHHL coverage of less than 25%. In Gulbarga division, only 2 GPs (18%) had IHHL coverage of more than 75%. In contrast, 34 out of 40 surveyed GPs (85%) in Mysore division and 23 out of 36 (64%) in Bangalore division had IHHL coverage of more than 75%.

Table 12. Division-wise summary of GP IHHL coverage status

	Number of GPs in each % category of IHHL coverage				
Division	**< 25%**	**25% – 50%**	**50%-75%**	**> 75%**	**Total**
Bangalore		6	7	23	36
Belgaum		4	10	6	20
Gulbarga	6	2	1	2	11
Mysore		2	4	34	40
Total	**6 (6%)**	**14 (13%)**	**22 (21%)**	**65 (61%)**	**107**

Table 13. Regional differences in IHHL coverage in sampled GPs

Division	**% of HH not having toilets**
Bangalore	23.7%
Belgaum	36.8%
Gulbarga	64.7%

Mysore	13.4%
Total	**26.5%**

These differences are statistically significant (T-test)

Figure 5 presents the performance of the surveyed GPs in IHHL coverage, based on their respective award years. For example, the first column set (2007) describes the IHHL coverage status of GPs that were awarded NGP in 2007. It shows that 73% of the GPs that were awarded NGP in 2007 had IHHL coverage of more than 75%, and 18% of these GPs had IHLL coverage of 50% – 75% and so on. From the table, it is clear that, among the GPs that were awarded NGP in 2007, 2008 and 2009, majority of GPs have been able to maintain high IHHL coverage rates, whereas GPs that were awarded in the years of 2010 and 2011, currently have varied IHHL coverage rates.

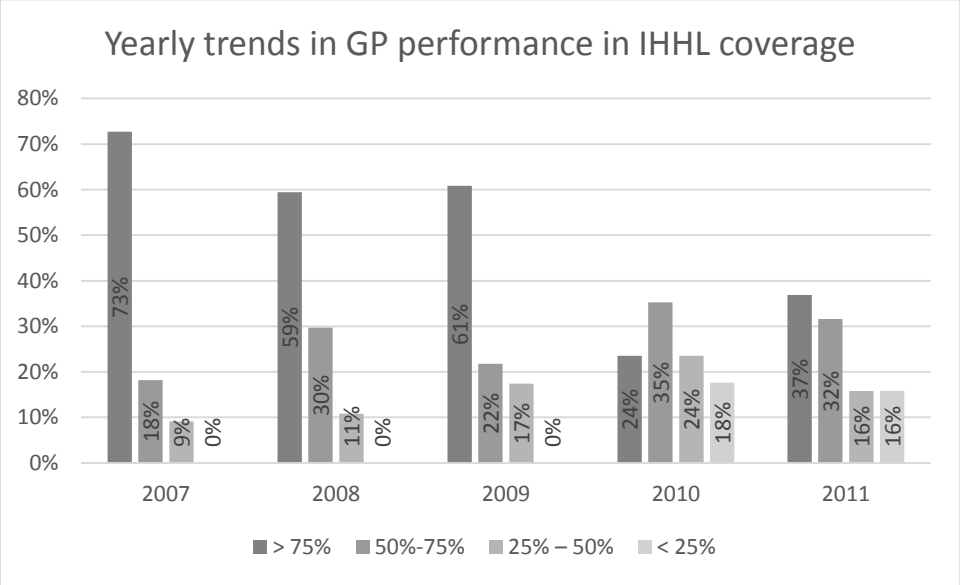

Figure 5. Yearly trends in GP performance in IHHL coverage

Based on these tables, the following interpretations can be made:

a. There has been a reduction (more than 30%) in the number of households not having toilets in the selected GPs between 2007 and 2012-13. These changes are visible in most of the GPs sampled other than those in the districts of Chamarajanagar, Tumkur and Bidar (Udigala, Nonavinakere and Konmelkunda GPs respectively, wherein status of IHHLs seems to have worsened, based on baseline surveys conducted in 2007 and 2012), However, ***it is a matter of concern that even in NGP awarded GPs, about 30% of the households still do not have IHHLs***.
b. On the average, the results of BLS 2012 and sample survey of households conducted as part of this evaluation are comparable to each other, although large inter-district and inter-divisional variations exist.

c. As summarized in the above tables, there are large regional disparities in provision of IHHLs to households. As seen from Table 13, these disparities are large and also statistically significant. NGP awarded GPs in the Gulbarga division, especially in Koppal, Bidar, Bellary and Raichur have significant challenges remaining in guaranteeing 100% IHHLs.
d. Similarly, districts like Belgaum, Chamarajanagar, Chitradurga, Davanagere, and Dharwad also have considerable number of households that do not IHHLs.

Table 14 presents the social profile of households not having IHHLs. It shows that of the interviewed households, in all regions of the state, the IHHL status of SC/ST households is worse off in comparison to other social groups.

Table 14. Social status of households without toilets

Division	Total Respondents	HHs without toilets (%)	% of SC/ST HHs without toilets	% of OBC/Minority HHs without toilets	% of general HHs without toilets
Bangalore	720	172 (23.7%)	31%	21%	14%
Belgaum	400	148 (36.8%)	44%	33%	31%
Gulbarga	220	143 (64.7%)	71%	64%	54%
Mysore	800	108 (13.4%)	24%	6%	10%
Grand Total	**2140**	**571 (27%)**	**35%***	**18%***	**20%***

**The difference in IHHL status of the SC/ST HHs with other groups is statistically significant. However, the difference between OBC HHs and General HHs is not statistically significant.*

The household samples in the survey covered GP members as well. The results show (Table 15) that at least 10% of the surveyed GP members did not have IHHLs themselves, among whom, the share of SC/ST GP members was the highest.

Table 15. Status of IHHL of GP members

Members	IHHL		Total
	Yes	No	
SC/ST	43	8	51
OBC/Minorities	51	6	57
General	40	2	42
Total	**134**	**16**	**150**

IHHL status of housing beneficiaries

As part of the household survey, 774 (36% of the sample) housing beneficiaries were surveyed[9]. The table below summarizes the status of IHHL specifically in these

[9] Housing schemes refer to several rural housing schemes (like Ashraya, Indira Awas etc) under which the beneficiaries have constructed their houses. Construction of IHHLs is mandatory for getting full financial support from these schemes.

households. 31% of the housing scheme beneficiaries did not have IHHLs (although construction of IHHL is mandatory for houses constructed under such schemes). The percentage of households without IHHLs was the highest in Gulbarga division, followed by Belgaum.

Table 16. Status of IHHL among housing scheme beneficiaries

Division	IHHL		Total
	Yes	No	
Bangalore	207	74 (26%)	281
Belgaum	81	54 (40%)	135
Gulbarga	28	55 (66%)	83
Mysore	218	57 (21%)	275
Total	534	240 (31%)	**774**

Table 17 provides the social class breakup of housing beneficiaries not having IHHLs. It is evident that SC/ST category are the largest (both nominally as well as ratio of beneficiaries within the class, denoted by the % values) group without IHHLs.

Table 17. Breakup of housing scheme beneficiaries without IHHLs

Division	SC/ST	OBC	General	Total
Bangalore	55 (31%)	18	1	**74**
Belgaum	38 (48%)	10	6	**54**
Gulbarga	37 (69%)	13	5	**55**
Mysore	47 (30%)	6	4	**57**
Total	**177** (38%)	**47**	**16**	**240**

Status of sanitation in Jala Nirmal GPs

As mentioned in the previous chapter, of the 31 GPs selected in North Karnataka (Belgaum and Gulbarga divisions), the Jala Nirmal project was under implementation in 18 GPs. This sub-section presents the comparative results of status of sanitation between the sampled Jana Nirmal GPs and non-Jala Nirmal GPs.

Table 18. Sanitation status in Jala Nirmal GPs

IHHL status of HHs in Belgaum and Gulbarga divisions	Total samples	Jala Nirmal GPs	Non JN GPs
Sampled HHs	620	360	260
HHs without IHHLs	290	146	144
% of HHs without IHHLs	**47%**	**41%**	**55%**

As seen from the above table, in the Gulbarga and Belgaum divisions, the IHHL status in the sampled Jala Nirmal GPs was better in comparison to the sampled Non Jala Nirmal GPs in these divisions. However, this difference between the two groups is not statistically significant. Hence, we cannot conclude that the implementation of Jala Nirmal project has a statistically significant positive impact on the sanitation status of the sampled GPs in the two divisions. However, coverage of Jala Nirmal project is

limited to specific villages within the selected GPs and hence, conclusive evidence of the relationship between Jala Nirmal implementation and IHHL coverage cannot be drawn in this study.

Status of utilization of IHHLs

From the survey, it was found that, out of the 1569 respondent households that had toilets, only 79 respondents (5%) were not using the toilets. Thus, based on the survey, we can summarize that, among the household that have toilets, the utilization rate of IHHLs is about 95%. The major reasons for not using existing toilets were: (a) toilets under repair, (b) toilet under construction and (c) religious reasons.

Gender related issues and IHHL coverage

This evaluation tried to elicit evidences of specific gender related issues with respect to IHHL coverage. The topics covered included the increase in work load for women due to the presence of toilets (bringing water and cleaning of toilets) and gender discrimination in usage of toilets. However, the responses to these questions do not indicate gender discrimination either in the usage or differential workloads due to the presence of IHHLs.

4.2 Status of sanitation facilities in Schools and Anganwadis

4.2.1 Status of school sanitation facilities

Off the 202 schools visited by the field team, there were no schools where both girls and boys toilets were not present. There was only one school (Govt. Higher Primary School, Kotebagilu, Kalabhavi GP, Bylahongala Taluk, Belgaum District) where a girls' toilet was not present. Further, there were 6 (1.5%) schools among those visited that did not have boys' toilets. In schools where toilets were present, the number of boys and girls toilets present were sufficient for the number of students present in the school (as prescribed by the norms of Sarva Shiksha Abhiyan[10])

While toilets were present physically, the actual number of schools where toilets were actually being used were less. The number of schools where girls' toilets were not being used were 12 (6%). In 14 schools (7%), boys' toilets were not being used. In 15 schools, toilets did not have water facilities. The detailed lists of these schools is provided in Table 42 - Table 45. Discussions with students and teachers reveal that there is no discrimination among children in cleaning of school toilets.

The presence and utilization of girls' and boys' urinals in schools was less satisfactory. Off the visited 202 schools, 31 schools (15%) did not have girls' urinals and 33 schools (16%) did not have boys' urinals. As seen from the table below, it can be seen that

[10] Separate Water Closet for 80 – 120 boys/girls

Urinals infrastructure is most lacking in the Bangalore division. Further, the non-availability of water for urinals is higher when compared to toilets.

Table 19. Status of Urinals in schools visited

Division	Urinals absent		Total visited schools
	Girls urinals	Boys Urinals	
Bangalore	15	19	65
Belgaum	7	7	40
Gulbarga	4	5	20
Mysore	5	2	77
Grand Total	**31**	**33**	**202**

4.2.2 Status of Anganwadi sanitation facilities

In comparison to schools, the infrastructure of sanitation available in Anganwadis was considerably lower. The summary of Anganwadi sanitation facilities is presented in Table 20.

Table 20. Status of Anganwadi sanitation facilities

Division	Anganwadis visited	No toilet	Toilets not being used	No water facilities	Having toilets, but not using them
Bangalore	71	10	11	33	3
Belgaum	40	7	11	24	4
Gulbarga	22	9	17	20	8
Mysore	79	8	11	20	8
Grand Total	**212**	**34**	**50**	**97**	**23**

Further, as seen in the table and in Figure 6, about a quarter of Anganwadis visited were not using toilets. Among Anganwadis that do have toilets, 13% do not use them. The major reasons for not using toilets in Anganwadis was lack of water. Water supply was not available in 97 (46%) of the Anganwadis visited. This ratio was highest in Gulbarga and Belgaum divisions. Further, the disparities in sanitation status is further amplified in the Gulbarga division, followed by Belgaum division.

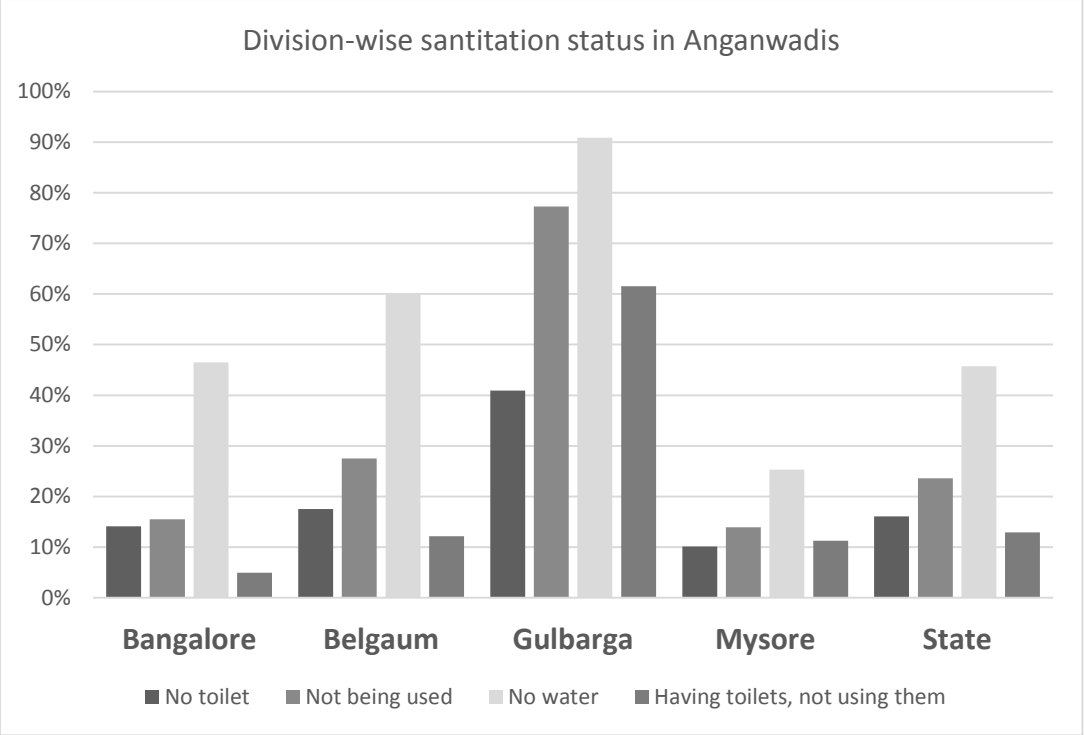

Figure 6. Sanitation status in Anganwadis

4.3 Status of community sanitation complexes and SLWM facilities

Table 21 summarizes the status of community sanitation complexes as reported by the GPs. About 9% of the community sanitation complexes are not functional (as reported by the GPs). Of the 56 GPs where community toilets were reported, the field teams visited community toilets in 43 GPs, covering 54 sanitation complexes.

Table 21. Community sanitation facility details reported by GPs

Division	GPs visited	GPs with no community toilets	GPs with Community Toilets	Total community toilets	Non functional
Bangalore	35	24	11	22	2
Belgaum	19	7	12	39	7
Gulbarga	11	4	7	28	3
Mysore	42	21	21	52	1
State	**107**	**56**	**51**	**141**	**13**

Table 22 presents the summary of the observations made during these visits. Of the 54 CSCs visited, 8 (15%) were not functional. Of the remaining, close to 1/3rd were in bad condition. When asked about the area and number of people covered by these CSCs, the GP personnel did not have specific figures. Further, the villagers in the vicinity of these CSCs responded that the management of CSCs is irregular and is taken up by the GP itself.

Table 22. Status of community sanitation complexes visited

Division	Number of GPs where CSCs were visited	Number of CSCs visited	Number of non-functional CSCs	Condition of CSCs		
				Good	Medium	Bad
Bangalore	11	13	1	3	5	4
Belgaum	7	11	4	2	1	4
Gulbarga	6	7	0	1	2	4
Mysore	19	23	4	5	12	3
State	**43**	**54**	**8**	**11**	**20**	**15**

4.4Status of solid and liquid waste management facilities

Table 23 presents the comparison of population profiles of GP and the garbage-bins being managed by the GPs. A total of 19 GPs reported that they do not have working garbage-bins for solid waste disposal. The table shows that there is no clear trends that link solid waste generation (based on population) and the infrastructure needed to manage solid waste.

Table 23. Status of garbage-bins managed by GPs

	Range of number of dust-bins reported by GPs						
GP Population ranges	0	1-10	11-20	20-30	31-50	>50	Total
< 5000	6	21	7	1	1		36
5000-9999	11	23	9	7	9	2	61
10000-14999	2		1	1	2	1	7
15000-19999		2				1	3
Grand Total	19	46	17	9	12	4	107

As shown in Table 24, a majority of GPs dispose the waste collected in these garbage bins by burning them inside the bin itself. About 27% of the GPs have a mechanism to dump the waste collected at the outskirts of the villages. Only 12 GPs (mostly from Udupi and Dakshina Kannada) had other mechanisms for waste disposal. These mechanisms included waste segregation, composting and other scientific methods of waste disposal.

Table 24. Solid waste disposal mechanisms

Division	Disposal mechanism from the dustbins					Grand Total
	Nothing done	Burnt within the dust-bin	Thrown outside	Other mechanisms	NA	
Bangalore		16	10	1	9	36
Belgaum		12	6	1	1	20
Gulbarga	1	6	2		3	11
Mysore	2	10	11	10	6	40
Grand Total	**3**	**44**	**29**	**12**	**19**	**107**

Table 25 shows the coverage of drainage systems in the visited GPs. It shows that about 50% of the visited GPs had more than 50% drainage coverage. Most of the GPs had a

mixture of kaccha drainage systems and box drainage (principally open drainage) systems. Only 17 of the visited GPs had closed drainage systems as the major source of drainage coverage. The table also confirms that in terms of draining coverage, all divisions have approximately similar magnitude of infrastructure.

Table 25. Division-wise drainage system coverage

Division	Coverage by drainage systems				
	<5%	<25%	<50%	<75%	>75%
Bangalore	31%	0%	11%	8%	50%
Belgaum	20%	15%	15%	25%	25%
Gulbarga	27%	9%	18%	9%	36%
Mysore	13%	10%	35%	18%	25%
Total	21%	7%	21%	15%	35%

4.5 Comparison of sanitation status

The previous sections presented in detail, the status of sanitation facilities in the selected NGP awarded GPs of the state. From these results, it is clear that the status-quo of school sanitation is much higher in comparison to that of Anganwadis and IHHLs. As shown earlier, the IHHL and Angangwadi sanitation status show large variance across the 4 divisions within the state.

Further, while other sanitation related infrastructure like CSCs and solid and liquid waste management were present in the GPs, the GPs did not clear picture on the necessity, coverage and actual demand of such infrastructure.

To contextualize the status of sanitation of the sampled NGP awarded GPs, comparative analysis of important indicators of sanitation (status of IHHL, toilet availability in schools and Anganwadis) was carried out between the sampled GPs and the state and national scenario. The data for this comparison is based on the *baseline survey* conducted by NBA, in 2012-13. The results are presented in Figure 7. It shows that the sampled NGP awarded GPs have performed considerably better than the state as well as the nation in terms of IHHLs (% of households having toilets). Further, the graph shows that although sanitation status of schools in NGP awarded GPs is higher, the other GPs in Karnataka as well as the nation are not far behind (both have a 90%+ coverage in % of schools having toilets). NGP awarded GPs perform better than the state and the nation on an average, in Anganwadi toilet coverage. Karnataka lags behind the national average in IHHL coverage as well as % of Anganwadis having toilets.

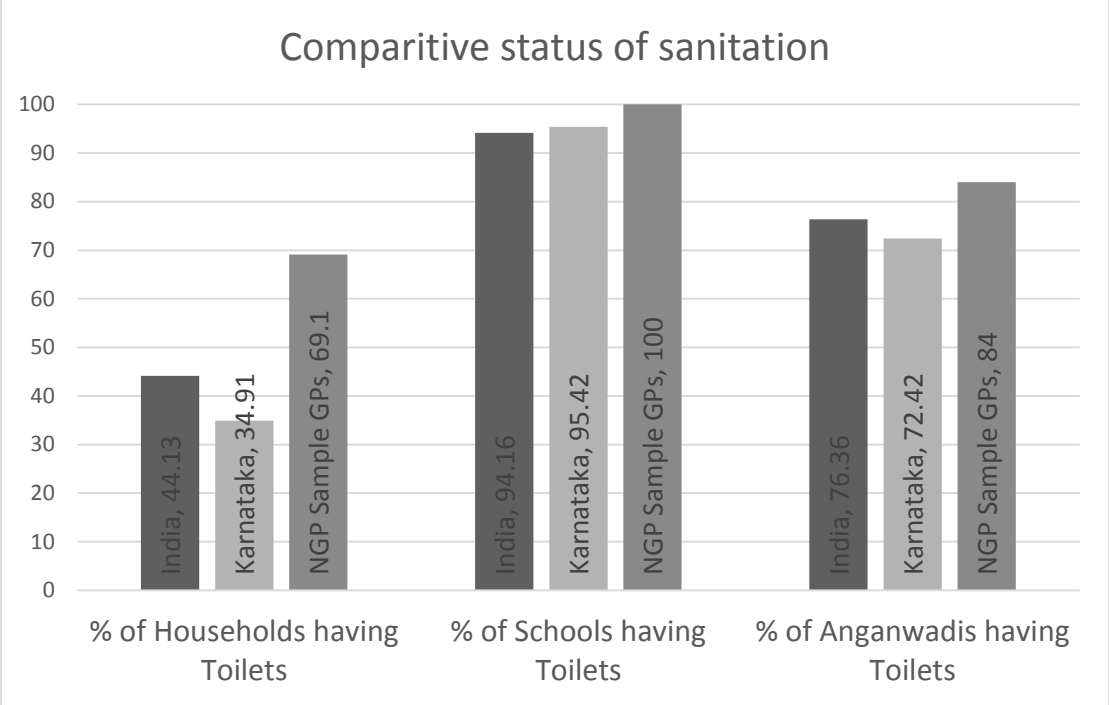

Figure 7. Comparative status of sanitation

4.6 Utilization of NGP funds

This section captures the status of fund utilization in the sampled NGP awarded GPs. The table below shows the status of NGP award funds. From the table, it can be seen that a majority of GPs for which the award was declared in 2011, reported that funds had not reached them. Interestingly, one GP mentioned that the award money had not been transferred to them since their IHHL position had to improve significantly. In this GP, based on the household survey, it was found that 45% of the visited households did not have IHHL (the BLS conducted by NBA in 2012-13 reports that more than 75% of the households do not have toilets). Further, in the remaining GPs, (awarded between 2007 and 2010), only 44% of the GPs had fully utilized the NGP award funds (39/88). In many GPs, work was stalled, either because the second tranche of funds were not released, or there were other problems related to the execution of the works taken up. However, during the time of the survey, execution of works had stopped due to the declaration of general elections. Wherever respondents said that works had been stalled due to elections, this particular reason has been ignored, since it was a temporary event.

Table 26. Year-wise status of NGP funds

Award Year	Status of NGP Funds						
	Funds Not released	Action plan not approved	Works in progress	Works stalled	Comp leted	No info provided	Total
	Number of GPs within each category						
2007			2	1	6	2	11

2008	1	1	13	3	18	1	37
2009			7	6	10		23
2010	3	1	7		5	1	17
2011	15			1		3	19
Total	**19**	**2**	**29**	**11**	**39**	**7**	**107**

Table 27 presents the status of NGP funds spread across the four divisions of the state. Majority of the sampled GPs in Belgaum and Gulbarga division were still at different stages in utilizing the funds provided by the NGP awards.

Table 27. Division-wise status of NGP funds

	Status of NGP Funds						
Division	**Funds Not released**	**Action plan not approved**	**Works in progress**	**Works stalled**	**Comp leted**	**No info provided**	**Total**
	Number of GPs within each category						
Bangalore	5	1	10	4	14	2	36
Belgaum	4		7	1	6	2	20
Gulbarga	5		1	1	2	2	11
Mysore	5	1	11	5	17	1	40
Total	**19**	**2**	**29**	**11**	**39**	**7**	**107**

The two tables below show the expenditure patterns reported by GPs. This information is formulated based on the observations of action plans prepared for NGP awards. As seen from Table 28, a substantial number of GPs did not provide this information (27%). In the remaining GPs, a majority had expenditure patterns according to NGP guidelines (65%, 51/78). 19 of these GPs had not prepared action plans. 2 GPs did not have copies of their action plans, that were submitted to their respective TPs and 8 GPs could not produce their NGP award action plans. As seen from the table, 19 GPs had executed works that were largely against the norms of NGP. The works include purchases of tractors, repairs of roads and other buildings not related to sanitation, felicitation functions etc.

Table 28. Year-wise expenditure patterns of NGP funds

	Expenditure patterns of NGP award funds				
Award Year	**Against NGP guidelines**	**Mostly IHHLs**	**According to guidelines**	**No information available**	**Total**
	Number of GPs within each category				
2007	2		7	2	11
2008	6	5	23	3	37
2009	6	2	14	1	23
2010	5	1	7	4	17
2011				19	19
Total	**19**	**8**	**51**	**29**	**107**

Table 29. Division-wise expenditure patterns on NGP award funds

Division	Expenditure patterns of NGP award funds				Total
	Against NGP guidelines	Mostly IHHLs	According to guidelines	No information available	
	Number of GPs within each category				
Bangalore	9	5	14	8	36
Belgaum	4		10	6	20
Gulbarga	2		2	7	11
Mysore	4	3	25	8	40
Total	**19**	**8**	**51**	**29**	**107**

The question of utilization of NGP funds raised several issues within the GPs. Many GPs were confused on the amount of funds they should actually receive. Some GPs expected Rs 4,00,000 while they had received only Rs 2,00,000 in the first tranche. Some GPs reported that they were supposed to receive only Rs 2,00,000 and this has already been received. While NGP award money is based on the population of the GP, the patterns of awarded money, as reported by GPs did not show any clear picture.

4.7 Summary

This chapter presented the status quo of sanitation infrastructure and utilization of NGP funds in the selected GPs. The chapter analyzed sanitation infrastructure at households, schools and Anganwadis. Results of the analysis of infrastructure status and utilization of community sanitation infrastructure and solid and liquid waste management at the GP level was reported.

- The analysis shows that there are large regional and social disparities in IHHL coverage status. Further, the analysis showed that 31% of the housing scheme beneficiaries surveyed in the evaluation did not have IHHLs. Based on this survey, only 17% of the GPs visited met this criteria and about 40% of the GPs visited had have less than 75% IHHL coverage.
- Status of school sanitation facilities and utilization is better in comparison to that of Anganwadis. In schools, provision of water facilities and creation and utilization of urinals needs to be concentrated.
- Utilization of toilets, availability of water and large regional disparities in sanitation infrastructure were the major issues in the analysis of Anganwadi sanitation facilities.
- In the sampled GPs, the status of solid and liquid waste management infrastructure did not show particular trends linked to population or local requirements. Streamlining SLWM expenditures has to be emphasized. Asset planning, management and utilization, rather asset creation has to be emphasized.

- The utilization patterns of NGP funds show that about 47% of the sampled GPs had spent the funds according to NGP guidelines. Considerable number of GPs did not have financial information. Further, there was confusion on the exact quantity of funds expected from the awards.
- The chapter also presented a comparative analysis of the important indicators of sanitation available in the selected GPs versus that of the overall state and national figures, as reported in the Baseline Survey conducted by NBA in 2012-13.

The next chapter analyzes qualitative and quantitative issues related to the sustenance of sanitation activities implemented through TSC and NGP. It looks at GP level and household level factors that influence sanitation outcomes and analyzes them using a mixture of qualitative and quantitative methods.

5 Status of sustenance of sanitation activities

The sustenance of sanitation related activities is dependent on a number of factors. Section 2.4 presented the methodology for analyzing these factors and their linkage with sanitation outcomes. The first section of this chapter relates qualitative aspects like the priorities and activities conducted by the GPs to their sanitation status, followed by analysis of household characteristics that relate to the status quo of sanitation practices initiated by TSC and NGP.

5.1 Priorities and activities related to sanitation at the GP level

Important components in sustaining sanitation related activities of the GP are the interest and priorities the GPs and other stakeholders place on sanitation and the perceived issues in implementing sanitation related activities. In order to understand these issues in detail, information was gathered through FGDs with GP members and personnel and secondary data collection in all the GPs visited. This section summarizes the results of the analysis of this data.

5.1.1 Priority issues of the sampled GP (tabulation of performance pending)

In order to understand the GPs' priorities, FGDs on their activities and priorities were conducted in all the GPs visited. The table below lists the top 3 priority issues recognized by GPs in course of the discussions.

Table 30. Top three priorities recognized by GPs in FGDs

Division	Water	Sanitation infrastructure (including IHHLs)	Roads
Bangalore	27	17	11
Belgaum	18	12	10
Gulbarga	6	9	3
Mysore	35	14	16
State	**86**	**52**	**40**

The table shows that at least 48% of the GPs visited identify the creation of sanitation infrastructure as one of the top three priorities of their GP.

The FGD was conducted in summer season and understandably, water related issues were the top priority for about 80% of the visited GPs. Creation of roads was another 'top 3 priority issue' recognized by the GPs. The figure below explains the categories of GPs that placed higher (top 3) priorities for sanitation. Understandably, the GPs that have less sanitation coverage (in terms of IHHL) seemed to prioritize the creation of sanitation infrastructure (more than those that had higher IHHL coverage).

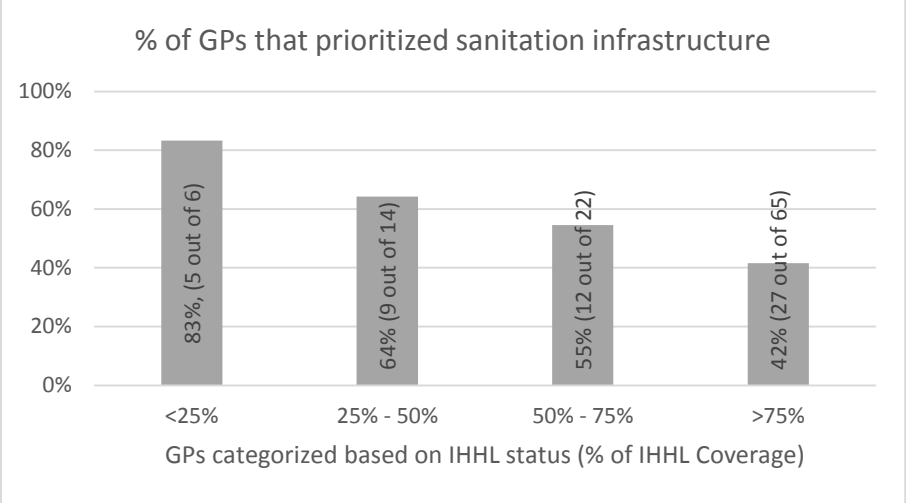

Figure 8. Trends in GP sanitation priorities

However, only 25 of the 107 GPs (23%) recognized the maintenance of existing sanitation facilities as a top priority issue. The majority of such GPs were from the districts of Dakshina Kannada, Shimoga and Udupi. These were also the districts that have won the most number of NGP awards. To understand the interest the GP takes in implementing activities under NGP and TSC, the FGDs further explored activities and awareness programmes implemented by the GPs with regards to sanitation.

5.1.2 Special activities under NGP and TSC

An issue that indicates the sustainability of sanitation activities is the internalization and implementation of activities suggested by TSC/NGP. For attaining the NGP award and maintaining the same level of sanitation, a GP would have to mobilize resources from various sources, engage with local communities and civic societies and plan for the overall sanitation of their villages (and not just focus on IHHLs). These special activities indicate that a GP has truly internalized the spirit of NGP and hence, can be expected to sustain the efforts put forth at the time of getting nominated for the NGP awards. While activities like resource mobilization and Shramadan helped GPs to spread awareness and involve multiple stakeholders, they were not successful in enabling the GPs to carry on the sanitation activities, independent of the financial resources provided by the state. The GP members in all the GPs visited opined that without the financial support of the state, creation of sanitation infrastructure (IHHLs, community sanitation facilities and SLWM structures) is not feasible.

Based on the FGDs conducted in the sampled GPs, the table below groups the GPs based on these special activities conducted by it as part of implementation of NGP and TSC. The table shows that GPs in all divisions have tried to mobilize resources (including donations) from various sources for funding sanitation activities. However, other than GPs in the Mysore division, very few GPs used the concept of Shramadan and fewer GPs in the sample involved non-governmental organizations (NGOs) in the

implementation of sanitation related activities. Additionally, as part of implementation of NGP and TSC, the focus of most GPs in the sample was the construction of IHHLs. However, GPs in the districts of Dakshina Kannada, Chickmagalur, Kodagu and Bangalore Rural focused on activities related to solid waste disposal as well[11].

Table 31. Special activities under NGP and TSC

Division	Sampled GPs	Resource mobilization	Shramadan	NGO involvement	Solid waste disposal
Bangalore	36	8	6	4	8
Belgaum	20	12	5	6	2
Gulbarga	11	5	0	4	0
Mysore	40	14	37	4	29
Total	**107**	**39**	**48**	**18**	**39**

The impact of such activities is shown in how GPs have continued sanitation related activities at present. As discussed in Section 4.4 (pp 31), GPs from Dakshina Kannada use mechanisms other than burning/throwing solid waste outside for disposing solid waste collected in their garbage bins. GPs from all other divisions have implemented comparatively less activities involving Shramadhan from local communities. This is in stark contrast with the activities conducted by GPs in the Mysore division.

Figure 9 shows the relationship between the special activities carried out by GPs under TSC/NGP and the performance of these GPs in IHHL coverage[12]. It helps to understand how such special activities relate to IHHL status of the GPs. The horizontal axis explains the different special activities implemented by the GPs under TSC/NGP. The vertical bars denote the GPs categorized based on % of IHHL coverage, as discussed in Section 4.1, (pp. 23). The figure can be interpreted as follows: Of the GPs that had IHHL coverage of 0% – 25%, 17% implemented activities related to resource mobilization. Among the GPs that achieved IHHL coverage status of 75% - 100%, 42% of the GPs implemented resource mobilization related activities.

[11] For example, GPs in Dakshina Kannada mentioned that usage of plastic was banned in their district and hence, through NGP and TSC, they focused on activities towards eliminating the use of plastic and sorting, collecting and destroying plastic waste.

[12] Status of IHHL coverage is treated as an indicator of overall performance of the GP in sanitation.

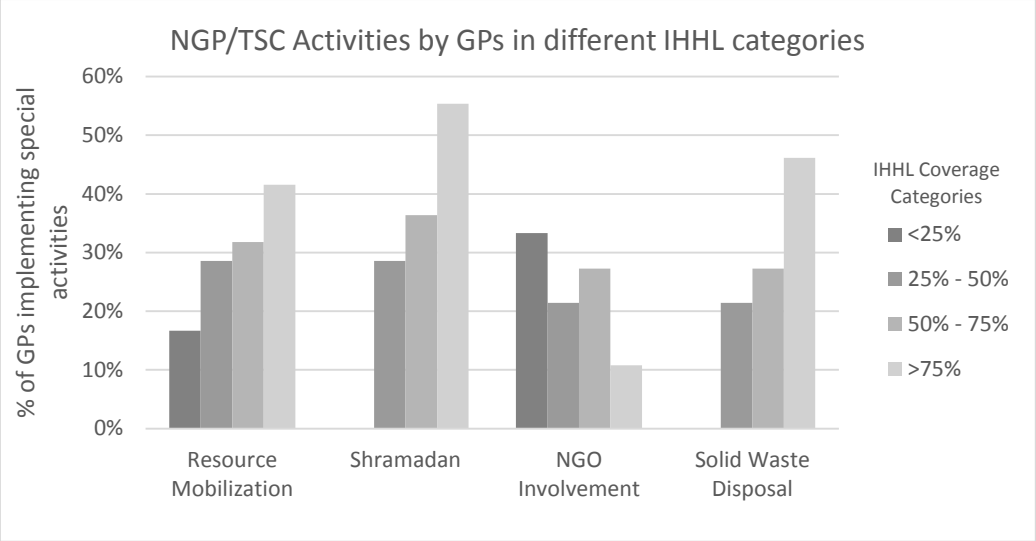

Figure 9. Special activities under NGP/TSC categorized by GP IHHL status

Based on the figure, it is evident that more 'well performing GPs' (with IHHL coverage status higher than 75%) have implemented special activities under TSC/NGP in comparison to GPs with lower IHHL coverage status. Thus, among the sampled GPs, it can be seen that GPs that have taken the extra effort to implement special activities for sanitation have been able to achieve higher sanitation status. Conversely, lesser % of GPs with lower IHHL coverage status have attempted to implement special activities like Shramadan, resource mobilization and advanced sanitation activities like solid and liquid waste disposal activities.

5.1.3 Awareness programmes as part of NGP/TSC

Awareness creation is a crucial process in determining the sustainability of sanitation in villages. In order to understand the involvement of GPs in the process of awareness creation, the FGDs tried to explore the diversity of awareness creation events held by the GPs. The findings of these discussions are summarized in Table 32.

Table 32. Awareness programmes as part of NGP/TSC

Division	Sampled GPs	Meetings	Awareness programmes	Special Meetings/Grama Sabhas	Imposition of Penalties	SHG/youth group involvement
Bangalore	36	31	30	4	2	7
Belgaum	20	9	17	1	1	0
Gulbarga	11	5	9	1	0	1
Mysore	40	40	38	10	0	2
Total	**107**	**85**	**94**	**16**	**3**	**10**

Most GPs conducted awareness creation through discussions in meetings normally arranged by the GP (like Grama Sabhas and Ward Sabhas). Further, GPs also undertook the prescribed awareness activities like street plays, wall writing, jathas etc.

Very few GPs conducted special meetings/Grama Sabhas solely for the purpose of sanitation. GPs in Bangalore Rural and Bijapur implemented penalties for open defecation. 10 GPs involved the local SHGs and youth groups to spread awareness about sanitation. Districts that tried this unique activity include Bangalore Rural, Bangalore Urban, Shimoga, Bidar and Udupi.

5.1.4 Involvement of stakeholders

The sustenance of sanitation practices brought through programmes like TSC and NGP require a considerable shift in the mindset of the people. A difficult task like this cannot be expected to be solely taken up by an implementing body like the GP alone. The involvement of local and external stakeholders not only provides extra resources in this initiative but also provides different perspectives and technical skills needed for keep a sustained effort in bringing the change in mindsets. The table below gives the summary of involvement of other stakeholders in the process of application for NGP. It shows that in the majority of the sampled NGP awarded GPs (75%), there were other stakeholders (other than GP/TP/ZPs) involved in the process. However, based on the perspectives of the GP members in the FGDs, other elected members did not seem to be involved actively in the exercise. Further, in the Gulbarga division, the participation of other stakeholders was not as much as other divisions and achieving sanitation results and attaining the award has rested with the PRIs. Participation of other stakeholders was high in all districts of in the Mysore division.

Table 33. Stakeholder involvement in NGP application process

Division	Sampled GPs	PRIs	Local groups involved	NGOs	Elected Representatives (MLA, ZP, TP members)
Bangalore	36	11	12	13	0
Belgaum	20	8	5	7	0
Gulbarga	11	6	2	3	0
Mysore	40	1	6	32	1
Total	**107**	**26**	**25**	**55**	**1**

Figure 10 shows the relationship between the involvement of stakeholders in sanitation related activities and the performance of the sampled GPs in IHHL coverage[13]. It helps to understand how stakeholder's involvement relates to IHHL status of the GPs. The horizontal axis shows the different categories of stakeholder involvement in the GPs for implementing activities related to TSC/NGP. The vertical bars denote the GPs categorized based on % of IHHL coverage. From the figure, it is clear that GPs with less IHHL coverage have had very less stakeholder involvement

[13] Similar to the previous section, the status of IHHL coverage is treated as an indicator of overall performance of the GP in sanitation.

(and conversely, GPs that have retained high IHHL coverage status have involved multiple stakeholders in sanitation related activities).

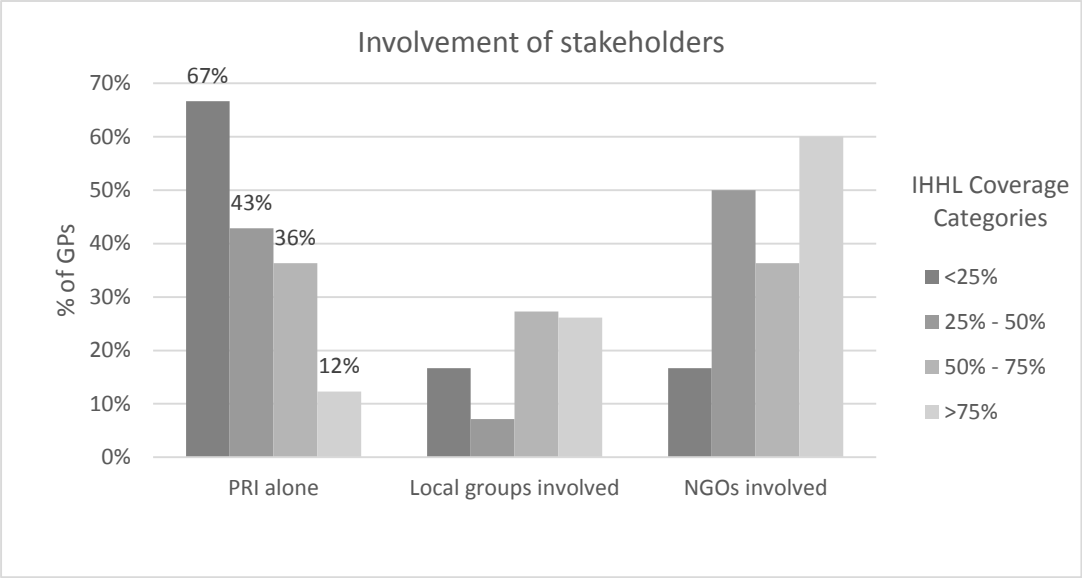

Figure 10. Involvement of stakeholders categorized by GP IHHL status

5.1.5 Resources for sanitation and water supply

Allocation of financial and human resources towards operation and maintenance of infrastructure is a crucial indicator of sustainability of sanitation related activities. Further, since the GPs have to invest on these resources by either mobilizing tax resources or allocate finances from their untied grants, the expenditure on these issues denotes the priorities the GPs place on enabling an environment for guaranteeing safe sanitation. In this regard, the evaluation team collected average yearly expenditures on a) the salaries of watermen and b) annual expenditures incurred for cleaning and other hygiene related activities incurred by GPs. The tables below summarize these expenditures. The figures in the tables are the average expenditures reported by GPs in each division, under each population category for maintaining sanitation facilities in their geographical area.

Table 34. Average expenditure on salaries on watermen

	Divisions				
Population	**Bangalore**	**Belgaum**	**Gulbarga**	**Mysore**	**State**
<5000	156506	134652	92586	180628	158112
<10000	271863	222559	220980	197151	228371
<15000	184452	306360	173460	303204	251191
<20000		451008	198504	375000	341504
Averages	**222614**	**211233**	**188302**	**204181**	**210025**

It can be seen from the above table that as expected, larger GPs on an average, spend higher amount in wages of watermen. However, among the smaller GPs, those in Shimoga, Uttara Kannada, Kodagu, Chikmagalur (within Mysore and Bangalore

divisions) spend substantially higher than those in districts of Belgaum and Gulbarga. The geographical spread of these GPs may play a significant role in determining the range of expenditures made in this aspect. Nevertheless, the difference in expenditures between the different divisions was not statistically significant. Hence, we cannot specifically conclude that these trends are significant. Similarly, the trends in expenditures on cleaning and sanitation activities, across the divisions do not show conclusive trends. Additionally, the HR expenditures for operation and maintenance costs as well as expenditures on cleaning and sanitation activities do not show recognizable relationships with IHHL status of the GPs.

Table 35. Average annual expenditures on cleaning

	Divisions				
Population	**Bangalore**	**Belgaum**	**Gulbarga**	**Mysore**	**State**
0-4999	52320	135088	109368	54614	71587
5000-9999	197997	110927	173102	102479	141562
10000-14999	147000	25200	72000	450300	228960
15000-19999		167232	17200	132000	105477
Averages	**152151**	**115233**	**130383**	**110980**	**125089**

5.1.6 Summary of governance issues

- From the FGDs, it was found that close to half the GPs sampled consider the creation of sanitation infrastructure as a priority task. Further, it is interesting to note that the GPs that place importance on sanitation infrastructure are also GPs that lag behind in IHHL status. Hence, it can be concluded that a majority of the less performing GPs do realize the importance of sanitation. Understandably, drinking water was the issue on which recognized by the majority of GPs as a focus area
- It can be seen that there is considerable diversity in using the financial resources provided by the state for implementing activities related to awareness creation and involvement of multiple stakeholders. However, GPs are fully dependent on government for (a) providing leadership, guidance and innovation on introducing and internalizing sanitation related behavior changes and (b) financial assistance for creation of sanitation infrastructure. Further, in most GPs, members mentioned that without government grants, it is not possible to even sustain the rigor of sanitation activities like construction of toilets, construction of SLWM structures and creation of water supply infrastructure to sustain the utilization of these structures.
- Barring exceptional cases, the GP level awareness activities are basically driven by district administration and are restricted to meetings, wall writings and street plays (most of which are suggested at the state/district levels and implemented without changes at the GP level). GPs that had other stakeholders

participate in sanitation activities and GPs that used innovative activities as part of TSC/NGP have achieved higher IHHL coverage status.

- Shortage of funds, availability of space, water resources and lack of people's participation are the major issues identified by GPs as challenges in implementing sanitation activities effectively.
- In cases where a significant population lacked IHHL facilities, the GP members agree that NGP was given to their GPs not on the basis of their success in achieving open defecation free villages, but on the assurance that they will improve their sanitation status considerably.

5.2 Socio-economic characteristics of households

In this section, the linkages between sanitation status (as measured by presence of IHHL) and household socio-economic characteristics are explored. These indicators and their description are presented in Table 2, Section 2.4 (pp.11). The cross tabulation of these socio-economic characteristics with household IHHL status is presented in Annexure B, Table 54 - Table 62. The cross tabulations are validated with correlation values using the Cramer's V[14] statistic. The quantitative linkages of these socio-economic characteristics are explored using inferential statistical methods below. For this purpose, as mentioned in Section 2.4, logistic regression is used. SPSS was used for conducting the statistical analysis.

5.2.1 Logistic regression analysis of sanitation outcome

The equation for the logistic regression[15] is

$$\boldsymbol{ln\left(\frac{p}{1-p}\right) = logit = b_0 + b_1 div + b_2 soc + b_3 edu + b_4 roof + b_5 vwsc + b_6 aww + b_7 wsrc + b_8 swdm + b_9 wpur}$$

Where p is the probability of the household having IHHL. The explanatory are presented in Table 2.

Table 36. Explanatory variables in logistic regression

Variable	Usage in the equation
Geographical division	*div*

[14] The Cramer's V is a measure of association between two nominal variables based on chi-square

[15] Logistic regression is used widely for studying and predicting the relationship between a dichotomous dependent variable and one or more explanatory variables. Here, $\left(\frac{p}{1-p}\right)$ refers to the '*odds ratio*' – *the relative likelihood the event will happen* (in our case, the relative likelihood of a household having IHHL). It can also be defined as *change in likelihood of a HH having IHHL for a unit change in any of the explanatory variable.*

Social Class	*soc*
Education Level	*edu*
Roof Structure	*roof*
Awareness of Village Water and Sanitation Committee	*vwsc*
Information about Anganwadi Worker	*aww*
Distance of source of water	*wsrc*
Solid waste disposal mechanism	*swdm*
Drinking water purified?	*wpur*

The results of this logistic regression is presented next.

Null model[16]

$$\boldsymbol{logit = b_0}$$

Classification Table[a,b]

Observed			*Predicted*		
			IHHL		Percentage Correct
			No	Yes	
Step 0	IHHL	No	0	571	.0%
		Yes	0	1569	100.0%
	Overall Percentage				73.31%

a. Only the Constant is included in the model.

b. The cut value is .500

Model results

Null Model		Wald	Sig.	Exp(B)
	Constant	437.258	.000	2.777

Model Results

$$\boldsymbol{logit = b_0 + b_1 div + b_2 soc + b_3 edu + b_4 roof + b_5 vwsc + b_6 aww + b_7 wsrc + b_8 swdm + b_9 wpur}$$

Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step 1	624.949	19	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	1863.762	.252	.368

[16] The null model includes only the intercept alone. It provides a way to compare the improvements in the fit, due to the inclusion of explanatory variables.

Classification Table[a]

Observed			*Predicted*		
			IHHL		Percentage Correct
			No	Yes	
Step 1	IHHL	No	259	312	45.3%
		Yes	111	1458	92.9%
	Overall Percentage				80.23%

a. The cut value is .500

Model results				
Explanatory Variables		Wald	Sig.	Exp(B) (Odds ratio)
Category variable	**Category**			
div	Mysore (default)	112.683	.000	
	Bangalore	.925	.336	.855
	Belgaum	36.297	.000	.355
	Gulbarga	79.320	.000	.101
soc	General (default)	42.130	.000	
	SC/ST	20.805	.000	.490
	OBC	.303	.582	1.098
edu		34.985	.000	1.411
roof	Concrete (default)	33.969	.000	
	Kaccha	22.041	.000	.149
	Stone	.415	.519	.781
	Sheet	19.133	.000	.293
	Mangalore Tiles	17.170	.000	.322
vwsc		45.728	.000	2.993
aww		.034	.854	.907
wsrc	Nearby (default)	41.943	.000	
	Very far	6.557	.010	.247
	Within 300 Mts	14.368	.000	.461
	Within 100 Mts	31.061	.000	.485
swdm	Road side (default)	45.159	.000	
	Backyard	11.167	.001	2.375
	Garbage bin	14.624	.000	3.208
	Open Pit	.022	.881	1.035
wpur		12.009	.001	1.625
	Constant	8.076	.004	6.309

5.2.2 Interpretation of results

The results of the logistic regression are presented above. The analysis was conducted for 2140 households with 9 variables, acting as predictors. Omni-bus tests for model coefficients (chi-square: 624.949, df: 19, $p < 0.000$) and increase in the overall percentage of classification (from 73.31% to 80.23%) show that the full model used for the regression was statistically significant in comparison to the null model (with only the

intercept as the explanatory variable). This indicates that the explanatory variables used in the model, as a group that represents the socio-economic characteristics of the households reliably distinguished between households having IHHLs and households those that did not. The Nagelkerke's R^2: 0.368, indicates a fairly adequate relationship (for a spatially diverse sample like this one), between prediction and grouping.

The prediction success overall was 80.23% (92.9% for IHHL presence and 45.3% for its absence. The Wald statistic for the 9 explanatory variables (and within the categorical variables, for each category) indicates whether the variable made a significant contribution in predicting the household IHLL status. The individual interpretation of the Wald statistic together with the odds ratio: Exp(B) is presented in Table 37.

Table 37. Interpretation of model variables in logistic regression

Explanatory Variables		Interpretation
div	Mysore (default)	The overall role of *div* variable is statistically significant. However, between Mysore and Bangalore divisions, the effect of this variable is negligible. The statistically significant odds ratio for Belgaum and Gulbarga divisions mean that households in these divisions have lesser probability of having IHHLs in comparison to Mysore. Households in Gulbarga division, thus has the lowest odds of having IHHLs.
	Bangalore	
	Belgaum	
	Gulbarga	
soc	General (default)	The overall role of *soc* variable is statistically significant. However, between households of general and OBC categories, the effect of this variable is negligible. The statistically significant odds ratio for SC/ST households mean that they have lesser likelihood of having IHHLs in comparison to households of the general social class.
	SC/ST	
	OBC	
edu		With increase in one educational level, the odds of the household having IHHL increases by 1.4 times. Thus, the statistic shows that the odds of a household having IHHL increases as education levels increase.
roof	Concrete (default)	The overall role of *roof* variable (a proxy indicator for economic well-being) is statistically significant. However, significance of this variable is negligible for households having Stone roofs. The statistically significant odds ratio for households having Kaccha roof, Sheet roof and Mangalore tiles roofs mean that they have lesser likelihood of having IHHLs in comparison to households of having concrete roofs.
	Kaccha	
	Stone	
	Sheet	
	Mangalore Tiles	
vwsc		A household knowing about VWSC is almost 3 times more likely to have an IHHL than a household that doesn't.
aww		Knowing Anganwadi worker does not have significant effect on the odds of the household having IHHL.
wsrc	Nearby (default)	The overall role of *wsrc* variable is statistically significant The statistically significant odds ratio for households with farther sources of water mean that they have lesser likelihood of having IHHLs in comparison to households having access to water nearby.
	Very far	
	Within 300 Mts	
	Within 100 Mts	
swdm	Road side (default)	The overall role of *swdm* variable is statistically significant. Between households that dispose waste outside and in open pits, the difference in their odds of having IHHLs is negligible. For households disposing waste either in their own backyard or in garbage bins the odds of having toilets increases by 2.4 and 3.2 times respectively in comparison to those that dispose waste on the roadside.
	Backyard	
	Garbage bin	
	Open Pit	
wpur		A household that purifies its drinking water is 1.6 times more likely to have IHHL than a household that doesn't.

5.2.3 Summary of quantitative analysis

The results of the quantitative analysis of socio-economic characteristics of households served two important purposes.

1. It provided statistical evidence, in the context of NGP awarded GPs, for widely accepted notions that link sanitation outcomes to social and economic issues. Particularly, the results of the analysis validate that
    a. The SC/ST households lag behind households of other classes significantly in achieving IHHL coverage. This result has been re-iterated in this evaluation multiple times.
    b. Economic well-being translates to better sanitation outcomes[17]
    c. Education level of the household effects IHHL status positively.
    d. Distance of the source of water affects usage of toilets considerably.
    e. IHHL status is significantly better in NGP GPs sampled from Mysore and Bangalore divisions, in comparison to those in Belgaum and Gulbarga divisions. This issue also has been brought out multiple times in this report.
2. It provided new evidence that links awareness levels of households and their sanitation related practices to sanitation outcomes. Specifically,
    a. Households that are aware of GP level activities related to sanitation (working of the VWSC functioned as a proxy indicator) are more likely to have IHHLs than households that are not, indicating that such interventions play an important role in affecting sanitation outcomes.
    b. Presence of toilets is strongly related to other sanitation practices (like sold waste disposal and drinking water purification). Further, these issues: responsible disposal of household waste and purification of drinking water are issues that have larger, visible impact on sanitation and health status of households and villages. This indicates that interventions that target larger behavior changes may be more successful for sustaining sanitation practices than those that concentrate on individual activities like construction and usage of IHHLs.

[17] In this case, having IHHL was the broad sanitation outcome expected.

6 Summary of results and recommendations

The previous chapters documented in detail the different activities taken up as part of this evaluation, the data collection methods and the analysis of data collected. This chapter summarizes the major findings of the study and concludes with the recommendations. The findings are split into 4 sections. The first section summarizes the status quo of infrastructure and utilization of sanitation services. The next two sections summarize the results of FGDs with GP members and personnel and quantitative analysis of household survey respectively. The last section of the results summarizes the field impressions of the study team.

6.1 Status of sanitation infrastructure and utilization

1. On an average, the sampled NGP GPs perform exceedingly better than the non-NGP GPs in the state on the issue of IHHLs. There is an average increase of more than 30% in the number of households having toilets in the selected GPs between 2007 and 2012-13. While the progress made in these GPs in regards to IHHL coverage is significant, they still lag behind considerably, in comparison to the mandatory requirement of 100% IHHL coverage. Based on this survey, only 17% of the GPs visited met this criteria and about 40% of the GPs visited had have less than 75% IHHL coverage. Majority of GPs that were awarded NGP in 2007, 2008 and 2009 seem to maintain high IHHL coverage status, whereas those awarded in 2010 and 2011 lag behind in maintaining high IHHL coverage.
2. Large regional disparities exist in the performance of the sampled GPs. Status of coverage of IHHLs in the Gulbarga and Belgaum divisions in general is much poorer (and far from attaining NGP eligibility criterion) in comparison to those in Mysore and Bangalore divisions. Specifically, the districts of Koppal, Bidar, Bellary, Raichur, Belgaum, Chamarajanagar, Chitradurga, Davanagere, and Dharwad have significant challenges remaining in guaranteeing 100% IHHLs.
3. While there is a wide recognition of regional disparities in overall development status of districts, a cause of concern in this particular case is that the award process of NGP is standardized and has specific requirements in sanitation standards that are to be applicable and met universally. However, the decision making process for awarding GPs with NGP seems to have ignored these norms in many poorly performing GPs (the entire list of GPs and their IHHL coverage status is available in Annexure B, Table 41, pp. 64).
4. Comparative analysis of IHHL status among different social groups reveal that SC/ST households are significantly behind others. This phenomenon

was observed among all the 3 categories households surveyed: housing scheme beneficiaries, current GP members as well as the general GP households and in all the geographical divisions of the state.

5. Whilst most schools visited had toilets in them, utilization of toilets and provision of water for these facilities needs improvement. Further, school sanitation coverage is much better in comparison with Anganwadis and IHHLs. However, this is a universal phenomenon, observable both at the state and national levels (Figure 7, pp. 33)

6. Anganwadis lag behind schools significantly in provision of toilet facilities. The Anganwadis visited in the Gulbarga division sufferer substantially due to the non-availability of water in their premises.

7. The GPs from Udupi and Dakshina Kannada generally perform better than other GPs in terms of solid waste management. In these districts, there is substantial guidance from respective ZPs towards SLWM.

8. While many GPs had less slip back as far as IHHLs were concerned, the status of SLWM left a lot to be desired. Streamlining SLWM expenditures, asset planning, management and utilization, rather asset creation has to be emphasized.

9. Majority of GPs (48%) have spent their funds according to the guidelines of NGP. However, there are considerable number of GPs (18%) that have spent the NGP award funds against the guidelines of NGP. Some examples include purchase of tractors, felicitation functions, one-time cleaning of drainages etc.

   Many GPs that won the NGP awards in 2011 have not received the award funds. Further, there is considerable confusion on release timeline of funds, the exact sum of award money and the number of tranches in which it is going to be released. Hence, only 39 GPs (36%) had fully utilized the funds from NGP award.

10. Utilization rates of households having IHHLs was much higher than expected (about 95%). However, utilization levels in schools and Anganwadis was comparatively less. Utilization levels of Anganwadi toilets showed large regional disparities.

6.2 GP perspectives on sanitation

Even with the declaration of NGP, many GPs seemed to have demand for construction of even higher number of IHHLs (through NBA). The reasons for this included increase in households due to splits in families and the notion that IHHLs for a new eligible household has to be built using government financial assistance. Looking at

the complete dependence on the government for the creation of sanitation, this repetition of requirement of IHHL is a cause of concern.

Based on the impressions from FGDs and interaction with district and taluk NBA coordinators, GP members and personnel, it can be concluded that the GP administration (including GP members and personnel) in majority of the sampled GPs do place priority and agree that sanitation related activities need to be sustained. Further, since GPs are fully dependent on the government funds for sanitation activities, at this point, GPs are only able to follow guidelines and suggestions provided by ZPs and TPs for implementing the prescribed activities. Thus, while interest to continue the prioritization of sanitation activities exist, without government intervention, sanitation activities cannot be sustained.

In GPs where IHHL coverage was poor, the GP members recognized the following bottlenecks: Shortage of funds, availability of space, water resources and lack of people's participation as challenges in implementing sanitation activities effectively.

In GPs which conducted locally innovative activities and involved other stakeholders, IHHL coverage status was considerably higher (Figure 9, pp. 40, Figure 10, 42). This shows that if GPs do take interest in sanitation activities and have the flexibility to bring in local innovation in IEC activities, results in terms of sanitation outcomes will be substantially better. Analysis of GP's financial expenditures on activities related to operation and management of sanitation and drinking water infrastructure does not show conclusive trends.

6.3 Socio-economic characteristics of households

Quantitative analysis of household characteristics was carried out to understand the crucial differences in socio-economic characteristics of households having IHHLs and those that don't. This analysis was carried out with the intention of pinpointing directions in which IEC activities have to be targeted to achieve sustenance and prevent slip back. The results of this analysis is presented in section 5.2.3 (pp. 49). The analysis arrived at two conclusions:

1. It provided statistical evidences for widely accepted notions that link sanitation outcomes to social and economic issues; specifically, that social status, economic and education status and overall regional development status play a significant role in sanitation outcomes.

2. Households that are more involved and aware of GP level decentralization initiatives and holistic IEC activities are at higher odds of having better sanitation outcomes than those households that are not exposed to these interventions.

Based on these findings, we can conclude that interventions related to sanitation have to retain the focus on marginalized communities with special focus on low performing districts, while at the same time, pursuing holistic and locally relevant IEC strategies.

It was reassuring to see that children in most schools visited had been taught about the importance of sanitation. Children could recognize at least 10 unique safe sanitation practices.

The team found that Schools and Anganwadis are the best places to bring in long-term sustainable behavioural changes in sanitation practices.

6.4 Field Impressions

The field team of the project spent considerable amount of time discussing sanitation related issues with district and taluk officials, GP personnel and members and households from diverse backgrounds. The field team was also asked to document issues that do not necessarily appear in the actual data collection process, but are important in determining sanitation outcomes. To understand and analyze these issues, a field team workshop was conducted at the end of the survey to capture these perspectives. The results of this analysis is presented below.

By its very nature, the analysis is qualitative and hence may not be statistically generalizable. However, this analysis captures the major explanatory theories because of which the status quo may exist and further, what can be done to address them.

The plausibility and importance of each such explanatory theory has to be decided based on field knowledge and understanding of local contexts.

In understanding the issues related to sustainability of sanitation related activities, the field team mentioned issues that can be broadly categorized into two themes. These issues are discussed below.

In a GP in Shimoga, a GP member recollected that between 2007 and 2009, the focus was on TSC. In 2009 – 2011, the focus was on MGNREGA. Now a days, he said the focus is on BPL cards and site-less households.

In this GP, the recent PDO did not even know that the GP had funds remaining from TSC and NGP. The priority of the current GP administration was not sanitation.

6.4.1 Interest of district and taluk officials in sanitation related activities

From the FGDs, it is understood that sanitation activities were initiated and driven by ZP and TP officials. In many districts, it was noted that a particular CEO of the ZP or the EO of the taluk had taken special interest in making sure that GPs achieve 100% IHHL coverage status during their tenure.

While Secretaries and GP members remembered these aspects fondly, they also shared that during those periods, the pressure on GPs was so high that the officials had to make sure that households constructed toilets (either temporary or permanent), just to reach their targets.

Hence, neither was the priority given towards behavior change and IEC nor to make sure that the IHHL constructed could be used for a sufficiently long time. Thus, after the particular higher official changed, or when the GPs actually won NGPs or when focus of the interventions changed (for example, from TSC to MGNREGA), the focus at the GP level had to change suddenly.

In a household interview in Udupi, the head of the house complained that the GP has not provided him with any benefits, although he belonged to ST category and a BPL card holder. He said, "This GP could not even provide me money for the toilet that we had constructed much before everyone else".

From the interview, it was evident that his house had a toilet since two decades.

Thus, the impetus built for sanitation could not be sustained and before long term issues like stabilization of decentralization processes (VWSCs) and behavioral change w.r.t sanitation could be addressed, the focus of activities of the GP shifted.

This scenario of frequent shifting of focusses, changing political environment in the GP and personnel changes, erodes accountability of schemes and reduces beneficiary selection to tokenism (see box). This not only results in the schemes and activities not reaching a sustainable status, but also creates an environment where long-term planning at the GP level is suppressed, leading to inefficient expenditure and wastage of resources. In such situations, where communities haven't been able to internalize the benefits of sanitation fully, they begin to encash long term advantages of sanitation and health for short term financial gains. Further, incremental increase in financial support for construction of toilets creates a sense of 'missed opportunity' for such households leading to more leakage of funds.

6.4.2 Limitations in understanding sustainability

Another category of issues that was witnessed by the field teams in a number of GPs was the limited perception and ability to address sustainability.

GPs that experienced over-extraction of ground water recognized that bore-wells in their area may not run successfully. But, they did not invest on activities towards ground-water recharge.

Some GPs utilized a substantial portion of the NGP award funds either for clearing of clogged drains, or felicitating those involved in getting the NGP awards. In such cases, in one season alone, the fund utilization was complete. Neither the GP personnel nor the GP members could think of using the NGP funds for sustaining sanitation activities. Further, in such cases, the reasoning was of short term practical necessity (and dependence of state funds) than long term gains through innovation and ownership.

These cases show a clear lack of understanding the concept of sustainability and planning for works and activities that address these issues. Similarly, addressing sustainability begins with identifying local solutions to local issues. However, due to the perceived lack flexibility in implementation norms of schemes, GPs often did not attempt to solve the unique local sanitation related issues. For example, in a few GPs in North Karnataka, households had a severe lack of space to build IHHLs. Instead of attempting local innovations to address this issue, GP personnel complained that they cannot convince their communities to build IHHLs, irrespective of the schemes the government proposes.

It is clear that in GPs where gaps in expected (as in NGP guidelines) and actual IHHL coverage is enormous, the process of awarding NGP to the GPs has simply failed to recognize the reality of sanitation status in these GPs. The yearly trends in IHHL coverage of GPs also show that the performance of GPs awarded in 2010 and 2011 is worse in comparison to those awarded earlier. Field impressions also indicate that the process of applying for NGP is not necessarily initiated by the GPs themselves, rather, driven by pressures from ZPs and TPs[18]. Further, the current processes of validation of sanitation status depends heavily 'inspecting and verification' by the appointed teams and does not allow for wider participation and public discussion on the progress made by the GP in its sanitation status. This affects the social accountability and the seriousness of the award incentive and the verification process at the grassroots level.

These impressions lead to doubting the authenticity of the processes of application for awards and verification of sanitation status of GPs. Thus, the very purpose of 'incentivising GPs' to promote sanitation is lost, specifically in poor performning GPs.

[18] Although the documentation and paper-work for application processes indicate that the GPs themselves 'applied' for the NGP award.

6.5 Recommendations

The evaluation presented the status quo of sanitation infrastructure and its utilization in the sampled NGP GPs. It explored various issues that influence sanitation outcomes. While overall development and holistic awareness building will have positive impacts on sanitation outcomes, the evaluation suggests the following specific recommendations, based on the results of the analysis of data and field experiences.

- Although NGP awarded GPs are substantially better than other GPs in Karnataka in IHHL coverage status, it is a matter of concern that NGP GPs in districts like Belgaum, Bellary, Bidar, Chamarajanagar, Chitradurga, Davanagere, Dharwad, Koppal, Raichur and Tumkur have a long way to go. The current levels of IHHL coverage in a majority of GPs does not meet the eligibility criterion for NGP awards. Barring exceptions, substantial efforts are needed in the GPs of Belgaum and Gulbarga divisions to achieve 100% IHHL coverage as well as utilization of sanitation facilities in schools and Anganwadis. Hence, prioritization of these districts in implementation strategies could be considered.
- Comparative analysis of IHHL status among different social groups reveal that SC/ST households are significantly behind others. Special focus has to be provided to improve the IHHL coverage status of these social classes.
- Utilization rates of sanitation facilities in schools and Anganwadis has to be improved. Looking at the long term advantages of imbibing safe sanitation practices to children, the study recommends focus on creation and utilization of safe sanitation facilities and stressing on safe sanitation practices in all schools and Anganwadis of the state.
- Streamlining SLWM expenditures, developing protocols of safe disposal of solid and liquid waste, asset planning, management and utilization, rather asset creation has to be emphasized in GPs where IHHL coverage has reached satisfactory levels.
- Clarity has to be provided to award winning GPs about the fund allocation and utilization norms.
- GPs should be encouraged to involve more stakeholders and creating locally relevant strategies in implementation of sanitation related activities.
- Strategies for increasing awareness levels and sustaining sanitation practices should take long term systemic approaches involving communitization and involvement of multiple stakeholders in sanitation activities, rather than targeting on individual components alone, by single implementation agencies.
- The study recommends strict screening of the application and verification processes for the awards. This could also involve penalization for false claims and false award recommendations for GPs. Involving field personnel from other related wings of the government lends accountability to the process of

verification. For example, mandatory certification of the status of sanitation of the GP by the local Medical Officer and Anganwadi workers can be considered to enhance the accountability of the GP's application for the awards.

- The verification process for awarding NGP may include public discussions (for example, through Grama Sabhas) to compliment other steps, wherein the visiting team has the time and space to fully understand the progress made by the GP on multiple fronts related to sanitation. This helps to increase the social accountability of the verification process. The presence of field personnel who have certified the sanitation status and mandatory video recording of the discussions help to enhance the authenticity of the verification process.

Annexure A

Table 38. Sampling of GPs

Division	District	Taluks	GPs Visited	Jala Nirmal GPs
Bangalore	Bangalore Rural (& Ramnagar)	5	8	
	Bangalore Urban	2	2	
	Chitradurga	1	2	
	Davangere	4	5	
	Kolar	2	2	
	Shimoga	7	16	
	Tumkur	1	1	
	Total	**22**	**36**	
Belgaum	Bagalkot	2	2	1
	Belgaum	4	4	2
	Bijapur	2	2	2
	Dharwad	4	4	2
	Uttara kannada	8	8	4
	Total	**20**	**20**	**11**
Gulbarga	Bellary	1	1	
	Bidar	1	1	1
	Gulbarga (& Yadgir)	2	4	4
	Koppal	4	4	1
	Raichur	1	1	1
	Total	**9**	**11**	**7**
Mysore	Chamarajnagar	1	1	
	Chikmagalur	5	5	
	Dakshina Kannad	5	12	
	Hassan	2	2	
	Kodagu	3	5	
	Mandya	2	2	
	Mysore	2	2	
	Udupi	3	11	
	Total	**23**	**40**	
Total	**27 Districts**	**74 Taluks**	**107 GPs**	**18 Jala Nirmal GPs**

Table 39. Selected GPs for evaluation

Sl No	Year	Division	District	Taluk	GP
1	2009	Bangalore	Bangalore Rural	Devanhalli	Harohalli
2	2009	Bangalore	Bangalore Rural	Dodballapur	Majarahosahally
3	2010	Bangalore	Bangalore Rural	Dodballapur	Tubugere
4	2011	Bangalore	Bangalore Rural	Hoskote	Lakkondahalli
5	2009	Bangalore	Bangalore Rural	Hoskote	Samethanahally
6	2011	Bangalore	Bangalore Rural	Nelamangala	Soladevanahalli
7	2009	Bangalore	Bangalore Rural	Nelamangala	Vishweshwara
8	2011	Bangalore	Bangalore Urban	Bangalore North	Gantiganahalli
9	2009	Bangalore	Bangalore Urban	Bangalore South	Taralu
10	2007	Bangalore	Ramanagar	Magadi	Kudur
11	2010	Bangalore	Chitradurga	Chitradurga	Matadakurubarahatti
12	2007	Bangalore	Chitradurga	Chitradurga	Medehalli
13	2010	Bangalore	Davangere	Harappanahalli	Chirasthahalli
14	2011	Bangalore	Davangere	Harihara	Jigali
15	2008	Bangalore	Davangere	Harihara	Kumbaluru
16	2009	Bangalore	Davangere	Honnali	Chatnahalli
17	2011	Bangalore	Davangere	Jagalur	Biderakere
18	2010	Bangalore	Kolar	Malur	Lakkur
19	2011	Bangalore	Kolar	Mulbagal	Devarayasamudra
20	2008	Bangalore	Shimoga	Bhadravati	Aneveri
21	2008	Bangalore	Shimoga	Bhadravati	K.K. Magge
22	2008	Bangalore	Shimoga	Hosanagara	M. Guddekoppa
23	2008	Bangalore	Shimoga	Hosanagara	Trinive
24	2009	Bangalore	Shimoga	Sagar	Herebilagunji
25	2007	Bangalore	Shimoga	Sagar	Ullur
26	2008	Bangalore	Shimoga	Sagar	Yadajigalemane
27	2008	Bangalore	Shimoga	Shikarpur	Hirejamburu
28	2008	Bangalore	Shimoga	Shikarpur	Udugani
29	2008	Bangalore	Shimoga	Shimoga	Hadonahalli

30	2008	Bangalore	Shimoga	Shimoga	Kommanal
31	2008	Bangalore	Shimoga	Sorab	Barangi
32	2008	Bangalore	Shimoga	Sorab	Tattur
33	2009	Bangalore	Shimoga	Tirthahalli	Bandya-Kukke
34	2008	Bangalore	Shimoga	Tirthahalli	Honnethalu
35	2007	Bangalore	Shimoga	Tirthahalli	Konanduru
36	2008	Bangalore	Tumkur	Tiptur	Nonavinakere
37	2011	Belgaum	Bagalkot	Badami	Kotikal
38	2008	Belgaum	Bagalkot	Bagalkot	Murnal
39	2009	Belgaum	Belgaum	Belgaum	Nilaji
40	2011	Belgaum	Belgaum	Bylahongal	Kalabhavi
41	2009	Belgaum	Belgaum	Gokak	Madawal
42	2011	Belgaum	Belgaum	Ramdurg	Manihal
43	2011	Belgaum	Bijapur	B. Bagewadi	Byakod
44	2009	Belgaum	Bijapur	Bijapur	Kanamadi
45	2009	Belgaum	Dharwad	Dharwad	Kurubagatti
46	2011	Belgaum	Dharwad	Hubli	Varur
47	2008	Belgaum	Dharwad	Kalghatgi	Mukkal
48	2010	Belgaum	Dharwad	Kundgol	Sounshi
49	2008	Belgaum	Uttar Kannada	Ankola	Agsur
50	2010	Belgaum	Uttar Kannada	Bhatkal	Yelavadikavoor
51	2009	Belgaum	Uttar Kannada	Honavar	Melin Idgunji
52	2007	Belgaum	Uttar Kannada	Karwar	Chendiya
53	2008	Belgaum	Uttar Kannada	Kumta	Murur
54	2008	Belgaum	Uttar Kannada	Siddapur	Itgi
55	2009	Belgaum	Uttar Kannada	Sirsi	Banavasi
56	2008	Belgaum	Uttar Kannada	Yellapur	Mavinmane
57	2011	Gulbarga	Bellary	Sandur	Bhujanganagar
58	2009	Gulbarga	Bidar	Bhalki	Konmelkunda
59	2011	Gulbarga	Gulbarga	Sedam	Dugnoor
60	2010	Gulbarga	Gulbarga	Sedam	Kangadda

61	2010	Gulbarga	Koppal	Gangavathi	Marali
62	2011	Gulbarga	Koppal	Koppal	Kavaloor
63	2010	Gulbarga	Koppal	Kushtagi	Dotihal
64	2010	Gulbarga	Koppal	Yelburga	Hirebidanal
65	2010	Gulbarga	Raichur	Sindhnur	Channalli
66	2010	Gulbarga	Yadgir	Shorapur	Devikera
67	2011	Gulbarga	Yadgir	Shorapur	Kodekall
68	2010	Mysore	Chamarajanagar	Chamarajanagar	Udigala
69	2008	Mysore	Chikmagalur	Kadur	K. Bidare
70	2010	Mysore	Chikmagalur	Koppa	Tuluvinakoppa
71	2011	Mysore	Chikmagalur	Mudigere	Kundur
72	2009	Mysore	Chikmagalur	Narasimharajapur	Gubbiga
73	2008	Mysore	Chikmagalur	Tarikere	Ajjamura
74	2007	Mysore	Dakshin Kannad	Bantwal	Kurnadu
75	2008	Mysore	Dakshin Kannad	Bantwal	Vittla
76	2008	Mysore	Dakshin Kannad	Beltangadi	Arasinamakki
77	2007	Mysore	Dakshin Kannad	Beltangadi	Indabettu
78	2008	Mysore	Dakshin Kannad	Mangalore	Kinnigoli
79	2007	Mysore	Dakshin Kannad	Mangalore	Munnuru
80	2008	Mysore	Dakshin Kannad	Puttur	Badagannuru
81	2009	Mysore	Dakshin Kannad	Puttur	Kolthige
82	2008	Mysore	Dakshin Kannad	Puttur	Nelyady
83	2009	Mysore	Dakshin Kannad	Sullia	Bellare
84	2007	Mysore	Dakshin Kannad	Sullia	Panja
85	2008	Mysore	Dakshin Kannad	Sullia	Yedamangala
86	2011	Mysore	Hassan	Holenarsipur	Kattebelaguli
87	2008	Mysore	Hassan	Sakaleshpur	Heggadde
88	2009	Mysore	Kodagu	Madikeri	Galibeedu
89	2008	Mysore	Kodagu	Somvarpet	Kodagarahalli
90	2010	Mysore	Kodagu	Somvarpet	Kudige
91	2010	Mysore	Kodagu	Virajpet	Kanoor

92	2011	Mysore	Kodagu	Virajpet	Srimangala
93	2009	Mysore	Mandya	Maddur	Annur
94	2011	Mysore	Mandya	Mandya	Mangala
95	2008	Mysore	Mysore	Hd Kote	Sagare
96	2010	Mysore	Mysore	Nanjangud	Deviramanahalli
97	2008	Mysore	Udupi	Karkal	Hebri
98	2008	Mysore	Udupi	Karkal	Nitte
99	2008	Mysore	Udupi	Karkal	Shivapura
100	2008	Mysore	Udupi	Kundapura	Beloor
101	2008	Mysore	Udupi	Kundapura	Kergal
102	2007	Mysore	Udupi	Kundapura	Maravanthe
103	2009	Mysore	Udupi	Kundapura	Shankaranarayana
104	2009	Mysore	Udupi	Udupi	Cherkadi
105	2008	Mysore	Udupi	Udupi	Thenka
106	2007	Mysore	Udupi	Udupi	Uliyaragoli
107	2009	Mysore	Udupi	Udupi	Varamballi

Table 40. District-wise, year-wise distribution of sampled GPs

Division	District	2007	2008	2009	2010	2011	Grand Total
Bangalore	Bangalore Rural			4	1	2	7
	Bangalore Urban			1		1	2
	Chitradurga	1			1		2
	Davangere		1	1	1	2	5
	Kolar				1	1	2
	Ramanagar	1					1
	Shimoga	2	12	2			16
	Tumkur		1				1
Bangalore Total		**4**	**14**	**8**	**4**	**6**	**36**
Belgaum	Bagalkot		1			1	2
	Belgaum			2		2	4
	Bijapur			1		1	2
	Dharwad		1	1	1	1	4
	Uttar Kannada	1	4	2	1		8
Belgaum Total		**1**	**6**	**6**	**2**	**5**	**20**
Gulbarga	Bellary					1	1
	Bidar			1			1

	Gulbarga				1	1	2
	Koppal				3	1	4
	Raichur				1		1
	Yadgir				1	1	2
Gulbarga Total				**1**	**6**	**4**	**11**
Mysore	Chamarajanagar				1		1
	Chikmagalur		2	1	1	1	5
	Dakshin Kannada	4	6	2			12
	Hassan		1			1	2
	Kodagu		1	1	2	1	5
	Mandya			1		1	2
	Mysore		1		1		2
	Udupi	2	6	3			11
Mysore Total		**6**	**17**	**8**	**5**	**4**	**40**
Grand Total		**11**	**37**	**23**	**17**	**19**	**107**

Annexure B

Table 41. Comparison of status of IHHLs in sampled GPs

District	Taluk	GP	NGP Award Year	% of HHs in the GP without IHHLs		% of HHs surveyed without IHHLs
				BLS (2007-08)	BLS (2012-13)	
Bangalore Rural	Nelamangala	Soladevanahalli	2011	89.8%	29.5%	0%
Bangalore Urban	Bangalore North	Gantiganahalli	2011	39.0%	5.5%	0%
Bangalore Urban	Bangalore South	Taralu	2009	73.9%	7.5%	0%
Shimoga	Sagar	Ullur	2007	67.3%	6.8%	0%
Bijapur	Bijapur	Kanamadi	2009	51.6%	22.5%	0%
Gulbarga	Sedam	Kangadda	2010	100.0%	20.0%	0%
Dakshin Kannad	Bantwal	Kurnadu	2007	48.2%	0.0%	0%
Dakshin Kannad	Bantwal	Vittla	2008	27.5%	2.6%	0%
Dakshin Kannad	Beltangadi	Arasinamakki	2008	53.2%	0.0%	0%
Dakshin Kannad	Beltangadi	Indabettu	2007	40.9%	2.7%	0%
Dakshin Kannad	Mangalore	Kinnigoli	2008	13.3%	0.0%	0%
Dakshin Kannad	Mangalore	Munnuru	2007	10.4%	0.0%	0%
Dakshin Kannad	Puttur	Nelyady	2008	48.8%	1.1%	0%
Dakshin Kannad	Sullia	Bellare	2009	46.5%	3.6%	0%
Udupi	Karkal	Hebri	2008	47.2%	5.0%	0%
Udupi	Udupi	Cherkadi	2009	57.6%	5.8%	0%
Udupi	Udupi	Thenka	2008	27.1%	3.4%	0%
Udupi	Udupi	Varamballi	2009	14.1%	1.1%	0%
Bangalore Rural	Hoskote	Samethanahally	2009	74.7%	9.6%	5%
Hassan	Sakaleshpur	Heggadde	2008	72.3%	39.5%	5%
Mysore	Hd Kote	Hanchipura	2008	65.4%	8.1%	5%
Bangalore Rural	Dodballapur	Majarahosahally	2009	95.7%	0.0%	5%
Bangalore Rural	Nelamangala	Vishweshwara	2009	41.2%	3.5%	5%
Kolar	Malur	Lakkur	2010	72.9%	34.3%	5%
Shimoga	Hosanagara	M. Guddekoppa	2008	32.3%	17.7%	5%
Chikmagalur	Narasimharajapur	Gubbiga	2009	40.2%	5.8%	5%
Kodagu	Madikeri	Galibeedu	2009	71.9%	14.6%	5%
Kodagu	Virajpet	Srimangala	2011	100.0%	13.2%	5%
Udupi	Karkal	Nitte	2008	33.4%	9.3%	5%
Udupi	Karkal	Shivapura	2008	68.4%	13.6%	5%
Udupi	Kundapura	Beloor	2008	62.4%	9.8%	5%
Udupi	Kundapura	Maravanthe	2007	34.4%	3.7%	5%
Shimoga	Hosanagara	Trinive	2008	48.8%	22.7%	10%
Shimoga	Shikarpur	Udugani	2008	77.7%	15.3%	10%
Shimoga	Sorab	Tattur	2008	55.3%	43.6%	10%
Gulbarga	Sedam	Dugnoor	2011	100.0%	63.1%	10%

Chikmagalur	Koppa	Tuluvinakoppa	2010	43.8%	6.5%	10%
Dakshin Kannad	Puttur	Badagannuru	2008	34.4%	1.1%	10%
Dakshin Kannad	Sullia	Panja	2007	26.2%	5.7%	10%
Udupi	Kundapura	Kergal	2008	53.5%	19.4%	10%
Udupi	Udupi	Uliyaragoli	2007	13.6%	1.1%	10%
Shimoga	Bhadravati	Aneveri	2008	24.2%	45.6%	14%
Bijapur	B. Bagewadi	Byakod	2011	95.7%	30.0%	14%
Kolar	Mulbagal	Devarayasamudra	2011	89.3%	25.8%	15%
Shimoga	Bhadravati	K.K. Magge	2008	65.6%	51.9%	15%
Shimoga	Shikarpur	Hirejamburu	2008	53.5%	40.2%	15%
Chikmagalur	Tarikere	Ajjamura	2008	46.3%	24.9%	15%
Dakshin Kannad	Puttur	Kolthige	2009	40.5%	4.7%	15%
Kodagu	Somvarpet	Hosakote	2010	6.0%	15.7%	15%
Udupi	Kundapura	Shankaranarayana	2009	45.8%	25.2%	15%
Davangere	Honnali	Chatnahalli	2009	96.2%	30.6%	20%
Shimoga	Tirthahalli	Konanduru	2007	41.4%	24.3%	20%
Uttar Kannada	Honavar	Melin Idgunji	2009	78.1%	39.6%	20%
Kodagu	Somvarpet	Kodagarahalli	2008	4.0%	16.5%	20%
Chikmagalur	Mudigere	Kundur	2011	80.8%	42.9%	24%
Bangalore Rural	Devanhalli	Harohalli	2009	50.4%	24.6%	25%
Bangalore Rural	Hoskote	Lakkondahalli	2011	90.1%	18.6%	25%
Shimoga	Shimoga	Hadonahalli	2008	64.7%	0.0%	25%
Shimoga	Tirthahalli	Honnethalu	2008	51.8%	24.5%	25%
Tumkur	Tiptur	Nonavinakere	2008	48.7%	55.0%	25%
Dharwad	Hubli	Varur	2011	83.0%	48.0%	25%
Uttar Kannada	Ankola	Agsur	2008	84.1%	40.1%	25%
Uttar Kannada	Yellapur	Mavinmane	2008	93.2%	11.0%	25%
Hassan	Holenarsipur	Kattebelaguli	2011	98.9%	69.8%	25%
Mandya	Maddur	Annur	2009	82.6%	25.0%	25%
Chitradurga	Chitradurga	Matadakurubarahatti	2010	48.6%	42.9%	30%
Shimoga	Sagar	Herebilagunji	2009	73.9%	41.4%	30%
Shimoga	Sagar	Yadajigalemane	2008	45.2%	32.3%	30%
Shimoga	Tirthahalli	Bandya-Kukke	2009	35.0%	40.7%	30%
Bagalkot	Bagalkot	Murnal	2008	100.0%	46.6%	30%
Uttar Kannada	Karwar	Chendiya	2007	87.0%	13.0%	30%
Gulbarga	Shorapur	Devikera	2010	100.0%	24.7%	30%
Uttar Kannada	Siddapur	Itgi	2008	72.3%	54.6%	32%
Bangalore Rural	Dodballapur	Tubugere	2010	89.8%	32.7%	35%
Bangalore Rural	Magadi	Kudur	2007	22.2%	10.6%	35%
Uttar Kannada	Kumta	Murur	2008	84.9%	33.3%	35%
Dakshin Kannad	Sullia	Yedamangala	2008	47.2%	7.9%	35%
Mysore	Nanjangud	Deviramanahalli	2010	35.4%	2.4%	35%

Belgaum	Belgaum	Nilaji	2009	74.7%	16.6%	40%
Belgaum	Ramdurg	Manihal	2011	91.9%	84.9%	40%
Uttar Kannada	Bhatkal	Yelavadikavoor	2010	79.8%	26.7%	40%
Dharwad	Kalghatgi	Mukkal	2008	36.4%	12.9%	43%
Bagalkot	Badami	Kotikal	2011	100.0%	72.3%	45%
Chamarajanagar	Chamarajanagar	Udigala	2010	68.6%	75.5%	45%
Mandya	Mandya	Mangala	2011	91.3%	49.3%	45%
Shimoga	Sorab	Barangi	2008	71.4%	41.4%	50%
Dharwad	Kundgol	Sounshi	2010	63.7%	60.3%	50%
Davangere	Harappanahalli	Chirasthahalli	2010	96.6%	57.4%	55%
Davangere	Harihara	Jigali	2011	79.9%	43.1%	55%
Davangere	Jagalur	Biderakere	2011	94.0%	74.6%	55%
Shimoga	Shimoga	Kommanal	2008	27.3%	34.0%	55%
Dharwad	Dharwad	Kurubagatti	2009	96.1%	82.7%	55%
Uttar Kannada	Sirsi	Banavasi	2009	73.3%	18.1%	55%
Raichur	Sindhnur	Channalli	2010	93.4%	72.9%	55%
Kodagu	Virajpet	Kanoor	2010	100.0%	21.4%	55%
Chitradurga	Chitradurga	Medehalli	2007	58.4%	29.7%	60%
Davangere	Harihara	Kumbaluru	2008	58.1%	40.9%	60%
Belgaum	Gokak	Madawal	2009	94.9%	98.0%	65%
Belgaum	Bylahongal	Kalabhavi	2011	86.7%	85.5%	70%
Bidar	Bhalki	Konmelkunda	2009	39.6%	78.4%	70%
Chikmagalur	Kadur	K. Bidare	2008	42.3%	29.3%	71%
Bellary	Sandur	Bhujanganagar	2011	88.9%	55.0%	80%
Gulbarga	Shorapur	Kodekall	2011	100.0%	65.5%	90%
Koppal	Gangavathi	Marali	2010	100.0%	69.8%	90%
Koppal	Koppal	Kavaloor	2011	100.0%	71.5%	95%
Koppal	Kushtagi	Dotihal	2010	100.0%	92.5%	95%
Koppal	Yelburga	Hirebidanal	2010	100.0%	85.6%	95%

Table 42. Schools without boys' toilets

Division	District	Taluk	GP	Village	School
Bangalore	Bangalore Rural	Nelamangala	Soladevanahalli	Goravanahalli	LPS
	Davangere	Harappanahalli	Chirasthahalli	Chirasthahalli	HPS
				Alagilavada	HPS
Belgaum	Belgaum	Belgaum	Nilaji	Shindolli	HPS
Gulbarga	Koppal	Kushtagi	Dotihal	Hesaruru	LPS
Mysore	Chikmagalur	Tarikere	Ajjampura	Ajjampura	HPS (North)

Table 43. Schools where girls' toilets are not being used

Division	District	Taluk	GP	Village	School
Bangalore	Kolar	Malur	Lakkur	Lakkuru	HPS
	Shimoga	Shikarpur	Udugani	Bhadrapura	HPS
		Shimoga	Kommanal	Khannikere	HPS

		Sorab	Tattur	Chikkabburu	LPS
				Tattur	HPS
Belgaum	Bagalkot	Badami	Kotikal	Togunasi	HPS
	Bijapur	Bijapur	Kanamadi	Kanmadi	High School
Gulbarga	Bellary	Sandur	Bhujanga Nagar	Bhujanga Nagar	Model HPS
	Koppal	Koppal	Kavaloor	Kavaluru	HPS
		Kushtagi	Dotihal	Dotihala	Model HPS
	Raichur	Sindhnur	Channalli	Nindrampura	HPS
Mysore	Udupi	Karkal	Hebri	Gandhinagarachara	HPS

Table 44. Schools where boys' toilets were not being used

Division	District	Taluk	GP Name	Village	School
Bangalore	Kolar	Malur	Lakkur	Lakkuru	HPS
	Shimoga	Shikarpur	Udugani	Bhadrapura	HPS
		Shimoga	Kommanal	Khannikere	HPS
		Sorab	Tattur	Chikkabburu	LPS
				Tattur	HPS
Belgaum	Bagalkot	Badami	Kotikal	Togunasi	HPS
	Belgaum	Ramdurg	Manihal	Manihala	HPS
	Bijapur	Bijapur	Kanamadi	Kanmadi	High School
	Uttar Kannada	Sirsi	Banavasi	Kadagoda	LPS
Gulbarga	Bellary	Sandur	Bhujanga Nagar	Bhujanga Nagar	HPS
	Koppal	Gangavathi	Marali	Achara Narasipura	HPS
		Koppal	Kavaloor	Kavaluru	HPS
	Raichur	Sindhnur	Channalli	Nindrampura	HPS
Mysore	Udupi	Karkal	Hebri	Gandhinagarachara	HPS

Table 45. Schools without water facilities to toilets

Division	District	Taluk	GP Name	Village	School
Bangalore	Chitradurga	Chitradurga	Medehalli	Medehalli	HPS
	Davangere	Harihara	Jigali	Jigali	HPS
	Shimoga	Hosanagara	M. Guddekoppa	M. Guddekoppa	HPS
		Shikarpur	Udugani	Bhadrapura	HPS
		Sorab	Tattur	Chikkabburu	LPS
		Sorab	Tattur	Tattur	HPS
Belgaum	Bijapur	Bijapur	Kanamadi	Kanmadi	High School
Gulbarga	Bellary	Sandur	Bhujanga Nagar	Bhujanga Nagar	HPS
	Bidar	Bhalki	Konmelakunda	Ahamadabad	LPS
	Gulbarga	Shorapur	Kodekall	Rayanapalya	HPS
	Koppal	Kushtagi	Dotihal	Dotihala	Model HPS
		Yelburga	Hirebidanal	Chikkabidanala	HPS
	Raichur	Sindhnur	Channalli	Channalli	HPS
				Nindrampura	HPS
Mysore	Dakshina Kannada	Mangalore	Kinnigoli	Kinnigoli	HPS

Table 46. Anganwadis without toilets

Division	District	Taluk	GP Name	Village
Bangalore	Chitradurga	Chitradurga	M.K.Hatti	M.K.Hatti
				Sibara
			Medahalli	Medahalli
	Davangere	Harihara	Kumbaluru	Kumbaluru
				Nitturu
	Kolar	Mulbagal	Devarayanasamudra	Devarayanasamudra
	Shimoga	Bhadravati	Anaveri	Ittigehalli
		Shimoga	Hadonahalli	Madikebeluru
		Sorab	Bharangi	Yalivala
	Tumkur	Tiptur	Nanavinakere	Nanavinakere
Belgaum	Belgaum	Belgaum	Nillji	Nillji
	Bijapur	Basavana Bagewadi	Byakoda	Solavadi
	Dharwad	Kalghatgi	Mukkal	Calsahunasikatte
	Uttar Kannada	Ankola	Agasuru	Adluru Konagadde
		Honavar	Melina Idagunji	Kelagina Idagunji
		Kumta	Mururu	Nelikere
		Sirsi	Banavasi	Kadugoda
Gulbarga	Bellary	Sandur	Bhujanganagar	Bhujanganagar
	Gulbarga	Shorapur	Devikera	Devikera
			Kodekall	Kodekall
				Rayana Palya
	Koppal	Gangavathi	Marali	Acharanarasapura
		Kushtagi	Dhotihala	Dhotihala
				Hesaruru
	Raichur	Sindhnur	Channalli	Channalli
				Siddrampura
Mysore	Dakshin Kannad	Bantwal	Kurnadu	Cheluru
		Puttur	Kolthige	Maalethodi
	Kodagu	Madikeri	Galibidu	Kaaluru
		Somvarpet	Hosakote	Chaklihole Paisari
		Virajpet	Sreemangala	Sreemangala
				Sreemangala (Kakuru)
	Udupi	Karkal	Shivapura	Kerebettu
		Kundapura	Maravante	Maravante-I

Table 47. Anganwadis having toilets, but not using them

Division	District	Taluk	GP Name	Village
Bangalore	Davangere	Harappanahalli	Chirasthahalli	Alagilawada
		Honnali	Chattnalli	Sogeelu
		Jagalur	Bidarakere	Rastamakunte
Belgaum	Belgaum	Ramdurg	Manihal	Manihal
		Kalghatgi	Mukkal	Mukkal
		Kundgol	Shimshi	Hosalli
	Uttara Kannada	Siddapur	Itagi	Itagi
Gulbarga	Bellary	Sandur	Bhujanganagar	Bhujanganagar
		Bhalki	Konamelanunda	Ahamadabad
				Konamelanunda

	Gulbarga	Shorapur	Devikera	Ratthala
	Koppal	Koppal	Kavaluru	Gudageri
		Koppal	Kavaluru	Kavaluru (SC Road)
		Yelburga	Hirebidanala	Chikkabidanala
				Hirebidanala
Mysore	Chikmagalur	Kadur	K.Bidare	B. Basavanahalli
	Dakshina Kannada	Puttur	Badagannur	Kukkajji
	Kodagu	Madikeri	Galibidu	Galibidu
		Virajpet	Kanuru	Kanuru
	Mandya	Maddur	Annuru	Aalabhujanahalli
		Mandya	Mangala	Lokasara
				Mangala
	Mysore	Heggadadevankote	Hanchipura	Masahalli

Table 48. Description of Community Sanitation Complexes

Division	District	Number of GPs where CSCs were visited	Number of CSCs visited	Condition of CSCs		
				Good	Medium	Bad
Bangalore	Bangalore Rural	2	2	0	2	0
	Bangalore Urban	1	2	1	1	0
	Chitradurga	1	1	0	1	0
	Davangere	3	4	0	1	3
	Shimoga	3	3	2	0	1
	Tumkur	1	1	0	0	1
	Total	**11**	**13**	**3**	**5**	**5**
Belgaum	Bagalkot	1	2	0	1	1
	Belgaum		1	0	0	1
	Bijapur	1	1	1	0	0
	Dharwad	1	2	0	1	1
	Uttara Kannada	4	5	0	3	2
	Total	**7**	**11**	**1**	**5**	**5**
Gulbarga	Bidar	1	1	1	0	0
	Gulbarga	1	2	0	1	1
	Koppal	3	3	0	0	3
	Raichur	1	1	0	0	1
	Total	**6**	**7**	**1**	**1**	**5**
Mysore	Chikmagalur	1	1	0	1	0
	Dakshina Kannada	8	10	0	8	2
	Kodagu	3	3	2	1	0
	Mandya	1	2	0	2	0
	Mysore		1	0	0	1
	Udupi	6	6	3	3	0
	Total	**19**	**23**	**5**	**15**	**3**
Grand Total		**43**	**54**	**10**	**26**	**18**

Table 49. Coverage by drainage systems in sampled GPs

Division	District	Coverage by drainage systems					Total
		<5%	<25%	<50%	<75%	>75%	
Bangalore	Bangalore Rural					8	8
	Bangalore Urban					2	2
	Chitradurga	2					2
	Davangere	2				3	5
	Kolar				1	1	2
	Shimoga	7		4	2	3	16
	Tumkur					1	1
	Total	**11**		**4**	**3**	**18**	**36**
Belgaum	Bagalkot					2	2
	Belgaum		1		1	2	4
	Bijapur			1	1		2
	Dharwad		1		2	1	4
	Uttar Kannada	4	1	2	1		8
	Total	**4**	**3**	**3**	**5**	**5**	**20**
Gulbarga	Bellary				1		1
	Bidar			1			1
	Gulbarga			1		3	4
	Koppal	2	1			1	4
	Raichur	1					1
	Total	**3**	**1**	**2**	**1**	**4**	**11**
Mysore	Chamarajanagar			1			1
	Chikmagalur			2	1	2	5
	Dakshin Kannad	1	2	4	1	4	12
	Hassan			1	1		2
	Kodagu		2	2	1		5
	Mandya				1	1	2
	Mysore					2	2
	Udupi	4		4	2	1	11
	Total	**5**	**4**	**14**	**7**	**10**	**40**
Grand Total		**23**	**8**	**23**	**16**	**37**	**107**

Table 50. GPs with expenditure patterns conflicting with NGP guidelines

Year	Division	District	Taluk	Gp Name
2009	Bangalore	Bangalore Rural	Devanhalli	Harohalli
2009	Bangalore	Bangalore Rural	Dodballapur	Majarahosahalli
2010	Bangalore	Bangalore Rural	Dodballapur	Tubugere
2009	Bangalore	Bangalore Rural	Hoskote	Samethanahally
2007	Bangalore	Bangalore Rural	Magadi	Kuduru
2009	Bangalore	Bangalore Rural	Nelamangala	Vishweshwara Pura
2008	Bangalore	Davangere	Harihara	Kumbaluru
2008	Bangalore	Shimoga	Shikarpur	Udugani
2008	Bangalore	Shimoga	Shimoga	Hadonahalli
2008	Belgaum	Bagalkot	Bagalkot	Murunala

2009	Belgaum	Belgaum	Belgaum	Nilaji
2010	Belgaum	Dharwad	Kundgol	Sounshi
2010	Belgaum	Uttar Kannada	Bhatkal	Yalavadikavoor
2010	Gulbarga	Koppal	Gangavathi	Marali
2010	Gulbarga	Koppal	Yelburga	Hirebidanal
2008	Mysore	Dakshin Kannad	Mangalore	Kinnigoli
2009	Mysore	Mandya	Maddur	Annuru
2008	Mysore	Mysore	Heggadadevankote	Hanchipura
2007	Mysore	Udupi	Kundapura	Maravante

Table 51. GPs where NGP funds were used for mostly for IHHLs

2009	Bangalore	Bangalore Urban	Bangalore South	Taralu
2008	Bangalore	Chitradurga	Chitradurga	Medahalli
2008	Bangalore	Shimoga	Bhadravati	Aneveri
2008	Bangalore	Shimoga	Shikarpur	Hirejamburu
2008	Bangalore	Shimoga	Sorab	Tattur
2008	Mysore	Dakshin Kannad	Puttur	Badagannuru
2009	Mysore	Dakshin Kannad	Puttur	Kolthige
2010	Mysore	Mysore	Nanjangud	Deviramanahalli

Table 52. GPs with expenditure patterns according to NGP guidelines

2009	Bangalore	Chitradurga	Chitradurga	M.K.Hatti
2010	Bangalore	Davangere	Harappanahalli	Chirasthahalli
2009	Bangalore	Davangere	Honnali	Chatnahalli
2010	Bangalore	Kolar	Malur	Lakkuru
2008	Bangalore	Shimoga	Bhadravati	Kage Kodamagge
2008	Bangalore	Shimoga	Hosanagara	M. Guddekoppa
2008	Bangalore	Shimoga	Hosanagara	Trinive
2008	Bangalore	Shimoga	Sagar	Yadagigalamane
2008	Bangalore	Shimoga	Shimoga	Kommanal
2008	Bangalore	Shimoga	Sorab	Bharangi
2009	Bangalore	Shimoga	Tirthahalli	Bandya-Kukke
2008	Bangalore	Shimoga	Tirthahalli	Honnethalu
2007	Bangalore	Shimoga	Tirthahalli	Konanduru
2008	Bangalore	Tumkur	Tiptur	Nonavina Kere
2009	Belgaum	Belgaum	Gokak	Madavala
2009	Belgaum	Bijapur	Bijapur	Kanamadi
2009	Belgaum	Dharwad	Dharwad	Kurubagatti
2008	Belgaum	Dharwad	Kalghatgi	Mukkal
2008	Belgaum	Uttar Kannada	Ankola	Agasuru
2007	Belgaum	Uttar Kannada	Honavar	Melin Idgunji
2008	Belgaum	Uttar Kannada	Kumta	Murur
2008	Belgaum	Uttar Kannada	Siddapur	Itgi
2009	Belgaum	Uttar Kannada	Sirsi	Banavasi
2010	Belgaum	Uttar Kannada	Yellapur	Mavinmane
2009	Gulbarga	Bidar	Bhalki	Konmelkunda
2010	Gulbarga	Gulbarga	Shorapur	Devikera
2008	Mysore	Chikmagalur	Kadur	K. Bidare
2010	Mysore	Chikmagalur	Koppa	Tuluvinakoppa
2009	Mysore	Chikmagalur	Narasimharajapura	Gubbiga

2008	Mysore	Chikmagalur	Tarikere	Ajjampura
2007	Mysore	Dakshin Kannad	Bantwal	Kurnadu
2008	Mysore	Dakshin Kannad	Bantwal	Vittla
2007	Mysore	Dakshin Kannad	Beltangadi	Indabettu
2007	Mysore	Dakshin Kannad	Mangalore	Munnuru
2008	Mysore	Dakshin Kannad	Puttur	Nelyady
2007	Mysore	Dakshin Kannad	Sullia	Punju
2008	Mysore	Dakshin Kannad	Sullia	Yadamangala
2009	Mysore	Kodagu	Madikeri	Galibeedu
2010	Mysore	Kodagu	Somvarpet	Hosakote
2008	Mysore	Kodagu	Somvarpet	Kodagarahalli
2010	Mysore	Kodagu	Virajpet	Kanoor
2008	Mysore	Udupi	Karkal	Hebri
2008	Mysore	Udupi	Karkal	Nitte
2008	Mysore	Udupi	Karkal	Shivapura
2009	Mysore	Udupi	Kundapura	Beloor
2008	Mysore	Udupi	Kundapura	Kergal
2009	Mysore	Udupi	Kundapura	Shankaranarayana
2009	Mysore	Udupi	Udupi	Cherkadi
2008	Mysore	Udupi	Udupi	Tenka
2007	Mysore	Udupi	Udupi	Uliyaragoli
2009	Mysore	Udupi	Udupi	Varamballi

Table 53. GPs where information about NGP expenditure was not available

2011	Bangalore	Bangalore Rural	Hoskote	Lakkondahalli
2011	Bangalore	Bangalore Rural	Nelamangala	Soladevanahalli
2011	Bangalore	Bangalore Urban	Bangalore North	Gantiganahalli
2011	Bangalore	Davangere	Harihara	Jigali
2011	Bangalore	Davangere	Jagalur	Bidarakere
2011	Bangalore	Kolar	Mulbagal	Devarayasamudra
2009	Bangalore	Shimoga	Sagar	Hirebilagunji
2007	Bangalore	Shimoga	Sagar	Ullur
2011	Belgaum	Bagalkot	Badami	Kotikal
2011	Belgaum	Belgaum	Bylahongal	Kalambavi
2011	Belgaum	Belgaum	Ramdurg	Manihal
2011	Belgaum	Bijapur	Basavana Bagewadi	Byakod
2011	Belgaum	Dharwad	Hubli	Varur
2007	Belgaum	Uttar Kannada	Karwar	Chendiya
2011	Gulbarga	Bellary	Sandur	Bhujanganagara
2011	Gulbarga	Gulbarga	Sedam	Dugnoor
2010	Gulbarga	Gulbarga	Sedam	Kangadda
2011	Gulbarga	Gulbarga	Shorapur	Kodekall
2011	Gulbarga	Koppal	Koppal	Kavaloor
2010	Gulbarga	Koppal	Kushtagi	Dotihal
2010	Gulbarga	Raichur	Sindhnur	Channahalli
2010	Mysore	Chamarajanagar	Chamarajanagar	Udigala
2011	Mysore	Chikmagalur	Mudigere	Kundur
2008	Mysore	Dakshin Kannad	Beltangadi	Arasina Makki
2008	Mysore	Dakshin Kannad	Sullia	Bellare

2011	Mysore	Hassan	Holenarsipur	Kattebelaguli
2008	Mysore	Hassan	Sakaleshpur	Heggadde
2011	Mysore	Kodagu	Virajpet	Srimangala
2011	Mysore	Mandya	Mandya	Mangala

Table 54. Geographical divisions and IHHL status

Division	IHHL		Total
	No	Yes	
Bangalore	172 (23%)	548	**720**
Belgaum	148 (37%)	252	**400**
Gulbarga	143 (65%)	77	**220**
Mysore	108 (13)%	692	**800**
Total	**571 (27%)**	**1569**	**2140**

Cramer's V:0.35, Significant at 0.01 level of significance

Table 55. Social class and IHHL status

Social class	IHHL		Total
	No	Yes	
SC/ST	314 (35%)	576	**890**
OBC and Minorities	148 (20%)	616	**758**
Others	109 (22%)	392	**492**
Total	**571 (27%)**	**1569**	**2140**

Cramer's V: 0.17, Significant at 0.01 level of significance

Table 56. Highest education level attained and IHHL status

Education Level	IHHL		Total
	No	Yes	
Primary School	196 (45%)	232	**428**
High School	187 (27%)	497	**684**
PUC	119 (22%)	429	**548**
Degree	69 (14%)	411	**480**
Total	**571 (27%)**	**1584**	**2140**

Cramer's V: 0.24, Significant at 0.01 level of significance

Table 57. Roof category and IHHL status

Roof status	IHHL		Total
	No	Yes	
Kaccha Roof	35 (60%)	23	**58**
Stone Roof	25 (31%)	56	**81**
Sheet Roof	169 (41%)	238	**407**
Burnt Tiles	318 (23%)	1046	**1364**
Concrete Roof	24 (10%)	206	**230**
Total	**571 (27%)**	**1569**	**2140**

Cramer's V: 0.23, Significant at 0.01 level of significance

Table 58. Knowledge of VWSC and IHHL status

Knowledge about VWSC	IHHL		Total
	No	Yes	
No	487 (31%)	1085	**1572**
Yes	77 (13%)	491	**568**
Total	**571 (27%)**	**1569**	**2140**

Cramer's V: 0.18, Significant at 0.01 level of significance

Table 59. Knowledge of Anganwadi worker and IHHL status

Knowledge about Anganwadi worker	IHHL		Total
	No	Yes	
No	8 (26%)	23	31
Know	563 (27%)	1546	2109
Total	571 (27%)	1569	2140

Cramer's V: 0.0, No statistical significance

Table 60. Distance of water source and IHHL status

Distance of water source	IHHL		Total
	No	Yes	
Very Far	12 (55%)	10	**22**
Within 300 Mts	75 (47%)	85	**160**
Within 100 Mts	212 (40%)	312	**524**
Near by	271 (19%)	1163	**1434**
Total	**571 (27%)**	**1569**	**2140**

Cramer's V: 0.25, Significant at 0.01 level of significance

Table 61. HH Solid waste disposal and IHHL status

Solid waste disposal mechanism	IHHL		Total
	No	Yes	
Backyard	68 (15%)	374	**442**
Garbage bin	37 (11%)	301	**338**
Open Pit	422 (34%)	810	**1232**
Road side	44 (34%)	84	**128**
Total	**571 (27%)**	**1584**	**2140**

Cramer's V: 0.23, Significant at 0.01 level of significance

Table 62. Safe drinking water practice and IHHL status

Does the HH purify drinking water	IHHL		Total
	No	Yes	
No	459 (34%)	872	**1331**
Yes	112 (14%)	697	**809**
Total	**571 (27%)**	**1569**	**2140**

Cramer's V: 0.22, Significant at 0.01 level of significance

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