I. Background

Water and sanitation were included in the national agenda during the country's First Five year plan (1951-56). It was only in the early eighties, with the thrust of the International Water and Sanitation Decade, that India's first Nation wide programme for rural sanitation, the *Central Rural Sanitation Programme* (CRSP), was launched in 1986 by Ministry of Rural Development with the objective of improving the quality of life of rural people and to provide dignity to women. The programme provided large subsidy for construction of sanitary latrines for BPL households. It was supply driven, highly subsidized, and gave emphasis on a single construction model. The CRSP did not give any importance to school sanitation, which is considered as one of the vital components of sanitation. CRSP also did not give priority to have linkages with various local institutions like ICDS, Mahila Samakhya, women PRIs, NGOs, research institutions, SHGs Etc. Keeping in view these limitations, CRSP was restructured in 1999 with the emergence of above findings with a provision for phasing out the allocation-based component by the end of the Ninth Plan i.e. 2001-2002 and moving from a project mode of implementation into a people's campaign towards achieving total sanitation.

Government of India's reforms in sanitation along with the water supply thus started to gain in strength from the middle of 1999 onwards. In the new approach, **Total Sanitation Campaign** was launched in April 1999, advocating a shift from a high subsidy to a low subsidy regime, a greater household involvement and demand responsiveness, and making provision for the promotion of a range of toilet options to promote increased affordability. Total Sanitation Campaign (TSC) emphasized more on Information, Education and Communication (IEC), Human Resource Development and Capacity Development activities to increase awareness among the rural people and generation of demand for sanitary facilities. The programme is being implemented with a focus on community led and people centered initiatives.

II. Objectives of the TSC are:

- 1. Bring about an improvement in the general quality of life in the rural areas.
- 2. Accelerated sanitation coverage in rural areas to access to toilets to all by 2012.

- **3.** Motivate communities and Panchayat Raj Institutions promoting sustainable sanitation facilities through, awareness creation and health education.
- **4.** In rural areas, cover schools and Anganwadis , with sanitation facilities and promote hygiene education and sanitary habits among students.
- **5.** Encourage cost effective and appropriate technologies for , ecologically safe and sustainable sanitation.
- **6.** Develop community managed environmental sanitation systems focusing on solid and solid waste management.
 - Additional objectives for the TSC to consider could be:
- 7. Convert SLWM as a means of income generation considering waste as resources for rural communities.
- 8. Minimize dependence on subsidy by involving various mechanisms like PPP, convergence to other schemes and SHGs to sustain the sanitation system.
- 9. Monitor the developed system and its impact through study and research work.
- 10. Consider gender equality/disabled/backward class of societies with more care and involvement.

III. Programme Components with achievement in activities and issues for TSC implementation

1. Start-up activities

As a start up activity all Districts conducted a baseline survey to identify the demand in toilet. Once the project objectives are achieved, fresh survey may be required to assess the situation about access to sanitation and usage of sanitation facilities, the quality of toilets constructed, its usefulness and impact on environment.

2. Information, Education and Communication (IEC)

Information, Education and Communication (IEC) is important component of the Programme. These intend to create demand for sanitary facilities in the rural areas for households, schools, Anganwadis, Balwadies and Community Sanitary Complexes. Each project district prepares a detailed IEC action plan with defined strategies to reach all sections of the community and get it approved by DWSM.

The IEC activities at present show slow progress. Monitoring the IEC at all level is required. It is to be considered as an important tool for awareness and effective demand generation. New ideas to carry out IEC to generate effective demand need to be evolved.

3. Rural sanitary Marts and Production Centers:

The Production Centres and rural sanitary marts may be built up in PPP mode or by SHGs.

4. Provision of Revolving Fund in the District:

Utility of revolving fund to be reviewed based on utilization pattern and feedback from districts.

5. Construction of Individual household Latrines:

Component	Sanctioned (As per cumulative project objectives)	Achievement (cumulative ason 31.03.10)
IHHL(BPL)	5,97,57,268	3,57,46,504
IHHL(AP)	6,22,12,962	3,04,26,508
Total IHHL	12,19,70,220	6,61,73,012

In construction of individual household latrine (IHHL) the performance of Manipur, Jammu & Kashmir, Bihar, Assam, Arunachal Pradesh, Nagaland, Jharkhand, Meghalaya, Orissa, Rajasthan, Chattisgarh, Uttarakhand and Karnataka is below the national average. When it comes to school toilet the performance is below the national average in Meghalaya, Nagaland, J & K, Manipur, Himachal Pradesh, West Bengal, Bihar, M.P., Goa, Uttarakhand, Tripura and Tamilnadu. State-wise percentage physical performance is given below

State	IHHL BPL%	IHHL APL%	IHHL(APL+ BPL)%	Sanitary Complex%	School Toilet%	Balwadi- Toilet%
ANDHRA PRADESH	62.96	57.76	61.12	100.00	85.47	37.04
ARUNACHAL PRADESH	27.18	30.14	27.58	15.41	89.98	73.47
ASSAM	31.56	17.84	26.85	8.06	82.04	58.34
BIHAR	27.44	10.55	19.92	24.56	55.27	15.41
CHHATTISGARH	55.47	39.50	46.88	27.99	93.00	95.29
D & N HAVELI	1.49	0.00	1.49	8.33	0.00	0.00
GOA	90.50	63.98	74.47	0.00	61.01	10.60
GUJARAT	82.94	83.61	83.28	98.32	100.00	96.79
HARYANA	83.38	85.87	85.11	79.93	77.95	77.22
HIMACHAL PRADESH	85.44	93.64	91.53	15.79	53.70	37.57
JAMMU & KASHMIR	21.12	6.26	13.31	50.00	48.04	7.27
JHARKHAND	47.00	10.42	33.25	10.06	82.41	37.37
KARNATAKA	53.07	50.76	51.82	45.82	100.00	100.00
KERALA	99.36	100.00	100.00	80.00	99.17	90.05
MADHYA PRADESH	58.79	50.94	54.29	44.01	59.55	64.22
MAHARASHTRA	60.78	60.48	60.58	46.00	95.40	100.00
MANIPUR	7.93	15.03	9.77	33.42	50.75	18.73
MEGHALAYA	28.88	45.33	33.54	23.45	29.72	16.48
MIZORAM	97.50	99.31	97.90	67.86	100.00	100.00
NAGALAND	34.20	5.86	30.00	63.27	42.90	58.14
ORISSA	46.15	21.37	37.12	5.87	90.26	76.30
PUDUCHERRY	12.17	0.00	12.17	0.00	0.00	100.00
PUNJAB	24.81	98.21	59.03	15.33	93.14	31.61
RAJASTHAN	32.32	42.27	39.48	24.48	79.42	47.40
SIKKIM	100.00	100.00	100.00	100.00	100.00	100.00
TAMIL NADU	76.51	61.66	69.22	100.00	71.74	85.88

TOTAL	59.77	48.90	54.22	53.94	76.33	71.51
WEST BENGAL	93.37	51.49	74.55	52.19	54.41	36.72
UTTARAKHAND	53.08	48.13	50.60	12.98	61.81	18.49
UTTAR PRADESH	74.01	52.95	61.38	99.37	83.41	79.16
TRIPURA	93.17	73.08	87.73	71.68	66.59	86.85

State-wise detailed physical progress is at Annexure-I

Financial Progress

The total financial outlay under the TSC is Rs. 18770.54 crore Central, State and beneficiary shares of the projects are Rs. 11716.62 crore, Rs. 4990.16 crore and Rs. 2063.76 crore respectively. An amount of Rs.5209.76 crore has already been released by the Government of India for implementation of these projects, out of which Rs. 4387.84 crore has been reported to be utilized as reported by the States. Expenditure against centre release is below national average in Manipur, Punjab, D & N Haveli, Arunachal Pradesh, J & K, Meghalaya, Orissa, Assam, Himachal Pradesh, Rajasthan, Bihar, Andhra Pd., Karnataka, Mizoram, Jharkhand, Puducherry, West Bengal, Uttarakhand, Tripura and Haryana.

State-wise status is given below-

(Rs. in crore)

State	Approved- Centre share	Centre-Release	Centre-Exp	% Exp. against released
ANDHRA PRADESH	955.07	397.94	299.09	75.16
ARUNACHAL PRADESH	41.28	25.70	13.91	54.13
ASSAM	543.42	219.88	152.64	69.42
BIHAR	1249.39	368.35	275.76	74.86
CHHATTISGARH	401.63	201.67	190.31	94.37
D & N HAVELI	0.71	0.03	0.02	53.02
GOA	5.74	1.72	1.50	87.01
GUJARAT	360.46	218.53	204.46	93.56
HARYANA	127.50	84.39	70.51	83.55
HIMACHAL PRADESH	99.99	37.71	27.46	72.81
JAMMU & KASHMIR	217.75	44.83	26.64	59.42
JHARKHAND	492.70	174.37	139.34	79.91
KARNATAKA	516.16	188.06	146.15	77.72
KERALA	113.58	78.53	72.70	92.58
MADHYA PRADESH	991.49	412.66	359.19	87.04
MAHARASHTRA	784.33	375.40	360.14	95.94
MANIPUR	64.58	22.68	10.50	46.29
MEGHALAYA	77.31	28.02	17.41	62.15
MIZORAM	22.13	22.19	17.32	78.07
NAGALAND	46.76	17.13	15.81	92.27
ORISSA	849.02	336.68	228.30	67.81
PUDUCHERRY	4.53	0.95	0.76	80.30
PUNJAB	136.82	15.22	7.29	47.86
RAJASTHAN	517.46	179.91	132.40	73.59
SIKKIM	12.64	10.10	10.10	100.00
TAMIL NADU	604.96	325.29	299.90	92.19
TRIPURA	55.27	42.95	35.42	82.45
UTTAR PRADESH	1773.43	1064.63	1019.75	95.78
UTTARAKHAND	94.61	32.58	26.44	81.17
WEST BENGAL	555.89	281.67	226.65	80.47

GRAND TOTAL	11716.62	5209.77	4387.85	84.22
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State-wise detailed financial progress is at Annexure-IIA & B

6. Community Sanitary Complex (CSC):

Community Sanitary Complex is an important component of the TSC. These Complexes, comprising an appropriate number of toilet seats bathing cubicles, washing platforms, Wash basins etc, can be set up in a place in the village acceptable to women/men/ landless families and accessible to them. These sanitary Complexes may be constructed in weekly markets, fair/exhibition grounds, places of religious significance and bus/taxi stands etc, in particular, are areas where people gather in large numbers and more often than not are forced to go out in the open for their toilet requirements. Highways, where people perform long journeys are another area where small hotels/dhabas may be found in plenty, but toilets are rarely seen. The maintenance of such complexes is very essential for which Gram Panchayat should own the ultimate responsibility or make alternative arrangements at the village level.

A definite model for CSC may be developed and its operation & maintenance be developed through PPP/community groups.

Component	Cumulative Sanctioned	Cumulative Achievement
Community Complexes	33,703	18,281

7. Institutional Toilets

- School Toilets
- Anganwadi Toilets

Target for school toilet unit construction was 13,04,783, out of which 9,95,967 (76%) unit school toilets have been constructed as of march 2010. All states had committed themselves to cover all uncovered rural schools and anganwadi with sanitation facilities by March 2011. Gujarat, Karnataka, Kerala, Mizoram and Sikkim have already achieved the targets set under TSC for building school toilets. Other States are required to accelerate the pace of implementation as they are registering slow progress.

In addition to creation of hardware in the schools, it is essential that hygiene education is imparted to the children on all aspects of hygiene. For this purpose, at least one teacher in each school must be trained in hygiene education who in turn should train the children through interesting activities and community projects that emphasize hygiene behaviour.

Component	Sanctioned	Achievement as of March
		2010
School Toilets	13,04,783	9,97,327
Anganwadi Toilets	4,64,914	3,32,463

IV. \overline{I}

Independent assessment of rural sanitation

Provision of sanitation and a clean environment are vital to improve the health of our people, to reduce incidence of diseases and deaths. To address this challenge the international

community has pledged to halve the proportion of people without access to safe drinking water and basic sanitation facilities by 2015 as part of the Millennium Development Goals.

The Department of Drinking Water Supply, Ministry of Rural Development, Government of India has taken on this enormous challenge by pledging to provide sanitation facilities in all rural areas and ensure an open defecation free rural India by 2012 through its flagship programme "Total Sanitation Campaign" (TSC). While 65% sanitation coverage has been achieved under TSC it is crucial to assess the impact of the programme on rural sanitation vis a vis international assessment reports on Sanitation.

The Joint Monitoring Programme (JMP) for Water Supply and Sanitation published by WHO/UNICEF describes the status and trends with respect to the use of safe drinking-water and basic sanitation, and progress made towards the MDG drinking-water and sanitation target. As the world approaches 2015, it becomes increasingly important to identify who are being left behind and to focus on the challenges of addressing their needs. This report presents some striking disparities: the gap between progress in providing access to drinking-water versus sanitation; the divide between urban and rural populations in terms of the services provided; differences in the way different regions are performing, bearing in mind that they started from different baselines; and disparities between different socioeconomic strata in society.

While JMP 2010 figures based on 2008 data states that rural India has achieved a sanitation coverage of 31%, the Online Reporting Data from Department of Drinking Water Supply states that India has achieved 65.8% sanitation coverage as of now.

There appears to be a big data gap between the JMP figures and the data reported by the Department. We therefore need to identify the reasons for this data gap and take suitable measures to plug this gap so that a unified and authentic picture of the sanitation converge in India may be reported and appropriate plan of action may thus be prepared.

The census 2011 has already begun which shall report on the sanitation status in India. All states should facilitate the census to report actual coverage as it will form the basis for future reports on sanitation coverage by independent agencies.

(a) NGP Impact Study

The Department of Drinking Water Supply is undertaking a study titled "Assessment Study of Impact and Sustainability of NGP" on the NGP awarded GPs during 2005-2008. The main purpose of the study is to assess the impact of NGP on the pace of progress of sanitation availability and usage in the country under TSC and its related impacts on health, education, gender empowerment, social inclusion in rural areas on different user groups particularly the rural poor. This study will also assess the durability and sustainability of the provision and usage of sanitary facilities over time. The rationale of this evaluation study will be to provide important evidence NGP component of the TSC. The study will provide a national level report on assessment of impact of NGP.

The study will be conducted in 12 States of Kerala, West Bengal, Tripura, Haryana, Maharashtra, Uttar Pradesh, Himachal Pradesh, Andhra Pradesh, Rajasthan, Bihar, Chhattisgarh & Karnataka. 664 NGP GPs from 54 districts of 12 States will be surveyed with a sample of 15 households in each GP. The study will be completed in three months time from 12th May 2010.

V. ECOSAN- Experiences:

Every sanitation system consists of five components namely of toilet, collection, transport & treatment of excreta and disposal/use of waste products. Ecological sanitation, or "ecosan", is an on-site sanitation system which combines all components together. "ecosan", is a new paradigm that aims at the systematic closure of material flow-cycles. It supposes that rather than being pollutants or waste, excreta can be useful resource. It is based on an overall view that material flows are part of an ecologically and economically sustainable wastewater management system that can be tailored to the needs of the users and local conditions. It is based on the idea that urine, faeces and water are resources in an ecological loop. This approach seeks to protect public health, prevent pollution and at the same time return valuable nutrients and humus to the soil. The recycling of nutrients helps to enhance food production.

Under conventional systems, large quantities of clean water, suitable for drinking are applied for flushing and carriage of waste. Significant energy is also consumed for conveying and treating wastewater in centralized treatment plants that are often electromechanized.

The principles of ecological sanitation involve preventing pollution rather than attempting to control it after pollute, sanitizing urine & faeces and using the safe products for agricultural purposes. Ecosan incorporates the following principles:

- An effort to conserve resources in the management of sanitation and wastewater
- recycling and reuse of waste matter
- Rendering recyclables from waste (human and animal excreta, grey water) safe for reuse
- Minimization of the use of energy and water in sanitation and wastewater management
- Pollution prevention

In ecological sanitation urine and faeces are separated at source and are not mixed with water. This sanitation system avoids the contamination of large volumes of water with pathogens. In addition, the separation of urine and faeces make it easier to recover and recycle nutrients such as phosphorous and nitrogen. The separated urine can be applied to the soil as a hygienic fertilizer after dilution and/or processing. Faeces, on the other hand, can be safely composted in-situ and allows for the integration of organic waste treatment into food production. The compost and application urine can reduce our dependency on use of chemical fertilizer and enhance food production. Experiences from Tamil Nadu on ECO SANITATION shall be shared in the conference.

Recently, Hon'ble MoRD has approved inclusion of "ECOSAN" as one of the component under TSC and amendment has been issued in the guidelines accordingly

VI. Up-scaling Sold and Liquid Waste Management activities:

Solid and liquid waste management (SLWM) is one of the components of Total Sanitation Campaign. The TSC aims at achieving the goal of open defecation free rural

India by 2012. The clean village/GP concept takes into account that the waste material of the GP would be managed in a sustainable and environment-friendly manner. The target of SLWM activities would be to achieve a status of a zero waste society with zero disposal and discharge by adopting reducing, reusing and recycling the waste material in total.

As of now, up to 10% of District project outlay can be spent for meeting capital cost on the SLWM activities with Centre, State & beneficiary share of 60: 20: 20. The Department is in the process of up-scaling the SLWM activities in the rural areas at different level.

VII. Caring for adolescent girls and young women

Sanitation is a key issue for adolescent girls and women, consistent with their need for privacy, dignity, safety and self respect. Lack of basic sanitation and safe water significantly impacts the health and safety of women and leads to low enrollment and high drop particularly for adolescent girls at puberty in schools Many households do not have toilet facilities and most women are forced to take care of their daily needs before and after sunlight. The dignity of women is compromised many times and particularly the adolescent girls feel highly embarrassed to be seen defecating in public. Lack of awareness on menstrual hygiene lead to many girls either completely dropping out of school at puberty or miss out on crucial learning hours due to absence from School during menstruation.

The demand driven Total Sanitation Campaign gives a special focus to address the sanitation needs of women who play role in planning, implementation, monitoring of the programme. Women as change agents in the Total Sanitation Campaign have had a tremendous impact in many Panchayats. They have been involved not only in mobilizing communities to create a demand for sanitation facilities but also actual construction of toilets and managing production centers and rural sanitary marts for provision of affordable sanitary ware.

VIII. TSC in 12th Plan:

Total Sanitation Campaign is being implemented in 606 districts in the country. The project outlay for 606 TSC projects sanctioned so far is Rs.18770 crore. As a result of the initiatives taken under TSC, following achievements have been made against project objectives:

Component	Sanctioned	Achievement
IHHL(BPL)	5,97,57,268	3,57,46,504
IHHL(APL)	6,22,12,962	3,04,26,508
Total IHHL	12,19,70,220	6,61,73,012
School Toilets	13,04,783	9,97,327
Anganwadi Toilets	4,64,914	3,32,463
Community Complexes	33,703	18,281

While, schools and Anganwadis shall get covered with sanitation facilities by March 2011, It is expected that approximately 2.4 crore more households shall be covered with sanitation facilities by the end of 11th Plan.

Planning for 12th plan

(i) Finishing the unfinished objectives

At the current annual trend of fund availability for TSC, it is seen that approximately 1.2 crore rural households are being provided sanitation facilities each year. 3.18 Crore households, therefore, shall still be required to be provided sanitation facilities in rural areas by the end of 11th Plan. This balance number of 3.18 crore rural households approximately, shall be required to be covered for sanitation facilities during the 12th Plan as per present project objectives. Any change in the definition of BPLs or identification of new households not having sanitation facilities shall change the requirement accordingly. It would also be ensured that poorest of the poor including SC/ST and minorities are all covered while achieving the cent percent rural sanitation coverage.

(ii) Special focus on difficult areas

Difficult areas like flood affected, coastal, and hilly and desert areas will now require focused attention and specific solution. This may also involve development of appropriate technologies which are cost effective, combined with credible means of social mobilization.

(iii) Solid & Liquid Waste Management (SLWM)

Total Sanitation Campaign has initially focused on provision of sanitation facilities in rural areas to prevent open defecation and disposal of human excreta. The 'Way Forward' now is to emphasize on Solid & Liquid Waste Management activities. Gram panchayats need to be motivated to evolve institutional mechanisms for collection and disposal of biodegradable and non biodegradable waste in the GPs. For **bio degradable waste**, simple technologies like composting, vermi-composting and bio-gas plants shall be promoted. For **non-bio degradable waste**, appropriate technologies like recycle and reuse shall need to be promoted under the Campaign. Concept of **Zero Waste Management** would be promoted for maximizing waste recovery through recycling and reuse.

Another area under Solid & Liquid Waste Management which requires attention is proper disposal and reuse of **Grey Water**, wherever possible. The emphasis shall be on proper treatment of Grey Water and its use for a variety of purposes including irrigation. Grey water reuse for domestic purposes like watering of kitchen gardens would require promotion. In **peri-urban areas**, its usage for toilet flushing needs attention.

(iv) Personal Hygiene Management

Though school sanitation and hygiene is an important component of TSC at present, attention is on coverage of schools with sanitation facilities. But thrust shall now be required to be made for the following:

- Provision of hand-washing as an integral part of sanitation facilities in schools and Aganwadis
- Provision for menstrual hygiene for rural women and adolescent girls.

(v) Eco Sanitation

Once the behavior change efforts now being made through pour-flushed toilets are successful, Eco Sanitation shall be required to be promoted to save water and to close the loop of sanitation through ecological means.

(vi) Disabled friendly toilets

Total Sanitation Campaign (TSC) aims at achieving universal sanitation coverage in the rural areas. Therefore, the Campaign cannot afford to ignore sizeable population of physical challenged persons. At least one toilet for persons with special needs would be required to be provided in all institutions in rural areas.

(vii) Special Sectors for Convergence/Sanitation coverage

There are various sectors wherein there is a need of greater convergence of TSC to clean and health environment in the country as a whole. Some of these sectors which shall require convergence with TSC in 12th Plan are:

- a) Sanitation in Railways
- b) Sanitation and food hygiene at Tourists and religious places
- c) Sanitation facilities on Highways and at petrol pumps.

Suggestions for Strategy for rural sanitation for years 2010 – 2022

The strategy for achieving sanitation may be based on the following principles –

- Collective approach to change communities must adopt safe sanitation behavior and practices
- ❖ Local government must lead Gram Panchayats should be at the forefront of imitating, facilitating and monitoring sustained behavior change. Gram Panchayats may delegate operational responsibility to third party groups / organizations (e.g. CBOs)
- ❖ Choice of technological options may be available to household and community for interventions so long as they subscribe to basic environmental safe standards.
- ❖ Financing for household interventions may be undertaken by households themselves (own sources / credit), while for community shall be available as credit / grant. Poorer households may be eligible for post outcome (ODF community) incentive for household facilities.

Strategy for Total Sanitation

The areas under Total Sanitation will cover -

- Access to a safe sanitation facility and ending of open defecation in all the areas of the GP by all (residents, visitors, migrants) in households, institutions and public places.
- Hygiene behavior by all the people of the village, including handwashing (with soap and water) at critical times, safe handling of water and food.
- Management of solid and liquid waste (garbage and grey water) within the village premises.

The strategies to address Total Sanitation -

• The strategy to address total sanitation may be aimed at the community to motivate it to achieve total sanitation to achieve health and other quality of life benefits. The

- achievement of a 100% achievement of safe sanitation, at the collective level, may be the main message disseminated through various interpersonal and mass media mediums.
- The Gram Panchayat may be the main institution which shall have the mandate and responsibility of achieving and sustaining Total Sanitation status in the GP area. It shall have its subcommittees such as VWSC, VWHSC to carry out its mandate on an operational basis.
- The funding required for making the GP Total Sanitation could be a mix of household investments, GP funding and external grants and credit. Household sanitation may be, to the greatest extent, be undertaken with self financing by the households either from its own sources or through soft credit, while community level capital investments (for school and anganwadi sanitation, SLWM, etc.) may be partially or fully funded by external sources (government, NGO, funding bodies).
- The strategy may incentivize GPs which has achieved Total Sanitation and are sustaining it. This could be undertaken through programs on the lines of NGP, state reward programs. Districts and states may also incentivize GPs through priority in other development programs.
- Monitoring of the sustenance of the Total Sanitation may be undertaken through periodic assessments, quality studies by the governments at the state and national levels, as well as through third party studies.

Strategy for individual household sanitation

Individual household sanitation will cover -

- safe sanitation facilities for all households
- Safe sanitation facilities for the elderly and disabled individuals
- Safes sanitation for difficult areas hilly / coastal

The strategy to cover individual household sanitation -

- The approach to motivate the households to adopt improved and safe sanitation facilities may be a decentralized, community led one. The motivation of the families may be undertaken at a collective level, using a variety of interpersonal and mass media communication approaches. Interpersonal communication shall include all forms of participatory, visual based approaches, which enables the community to participate in an interactive manner, makes them analyze the situation and thereby internalize the need for adoption of sanitation behavior. Drivers that 'trigger' the community towards ending open defecation, which shall create emotional responses from the community (such as shame, disgust, prestige, status, etc.) shall be given precedence over traditionally applied logical ones (such as health). Mass media too shall promote messages, which may focus on emotional triggers, to move households and communities towards ending open defecation.
- The institutional structure for promoting may have the main leadership role played by the Gram Panchayat, with its sub-committees like the VWSC/VHWSC. The district and the block teams shall play a facilitating role in supporting the GP in identifying and engaging motivators, building up capacities of motivators to initiate behavior change of the community, and monitoring sustainability of the outcomes.
- The strategy for technology may only focus on the substructure of the toilet, to effectively contain waste. Technology shall focus on making available various options for the household to choose from, at various affordability points. Contamination of the groundwater, access to disease vectors (like mosquitoes) should be the main criteria by which the technology is considered appropriate, from the environmental angle. The strategy shall also undertake R&D in the field of technology, to come out with options which are affordable and suited to the environment (e.g. ecosan toilets). Toilets for

differently abled persons shall also be researched under this strategy, to come out with effective models.

- The financing strategy may aim at motivating the households to construct their own toilets based on their financial affordability. The availability of various toilet options depending on various costing points will facilitate the household to finance their own toilets. Availability of credit through formal credit options like micro finance, banking finance, or informal arrangements for credit at the village level, may be promoted to facilitate the household to finance their toilets.
- The strategy may make incentives available to gram Panchayats for making the village ODF these may be used by GPs to assist households which are below the poverty line for construction and usage of toilets (minimum of six months) to ensure that community spirit behind making the village open defecation free is not hampered, the incentives shall be given only after the entire village becomes ODF. Incentives shall also available at community level for other milestones such as ensuring Total Sanitation. The strategy shall also promote state run competitive reward schemes (such as Sant Gadge Baba Campaign in Maharasthra, Maharshi Valmiki Puraskar in Himachal Pradesh) to ensure the scaling up of sanitation across the state, as also ensuring sustainability of outcomes achieved by GPs.
- The strategy shall promote monitoring by appropriate institutions at appropriate levels to ensure progress and sustainability. Monitoring shall measure indicators of processes, coverage, usage and sustainability of household toilets and ODF villages. Monitoring under this strategy shall use direct reporting by program implementers, as well as third party studies and assessments.

Strategy for institutional sanitation

The strategy for institutional sanitation will cover -

- Sanitation facilities for schools
- Sanitation facilities for anganwadi centres
- Sanitation facilities at Panchayat offices, other institutions in the GP

The strategies to cover institutional sanitation may be -

- The approach for ensuring sanitation facilities at institutions shall include the construction of the facilities, and the preparation of a plan for the operation and maintenance of the facility.
- The approach for construction and usage of toilet facilities for schools and other institutions shall be undertaken through the Gram Panchayats. In specific institution, approach shall include bodies such as the Village Education Committee, through which the construction and the maintenance of the facility shall be undertaken.
- The technology adopted shall be such which are economical, and easily maintainable by the institution. The facility shall be built according to the norms set, which includes the number of users to a facility.
- The strategy for construction of institutional facility shall make available full or partial grant to the institution to construct the facility. The financing for operation and maintenance shall be undertaken by the institution or Gram Panchayat or both.
- Incentives for institutions, either as standalone (for e.g. rewards for cleanest school) or as part of a larger incentive program (e.g. NGP) shall be part of the strategy, to motivate institutions to undertake the behavior change and sustain it.
- Monitoring of the sustained usage and its upkeep will be undertaken, through routine monitoring systems and evaluation studies/assessments.

Strategy for hygiene behavior

The areas for hygiene behavior may cover -

- Handwashing with soap and water at critical times after defecation, before eating, after cleaning baby's defecation among all, especially children and caregivers.
- Safe storage and handling of water and food in the household and community.
- Personal hygiene among all.

The strategies to cover hygiene behavior may be -

- The approach to change hygiene behavior shall be through communications, mostly using mass media, to create enabling conditions for people to want to adopt hygiene behavior. The communication will ensure that proper hygiene behavior should be seen by the people as a status issue, that it is a social norm to adopt these practices. Positive reinforcements for adoption of these behavior along with negative image for non practicing shall be used throughout the communication.
- The institution which shall be most appropriate for the facilitation of hygiene behavior change shall be the school and the household. The communication campaign for this behavior change shall be undertaken at the state, district and block nodal agencies for implementation of the sanitation program, as well as the schools.
- The strategy shall not involve any financing at any levels, except to fund the software campaign for motivating the behavior change among the people.
- The incentives for hygiene behavior shall be included in the overall incentive programs such as the NGP, state reward programs, school reward programs, etc. Non cash incentives like a better status, better family and improvement in quality of life would be added as incentives in the communication for hygiene behavior change.
- Monitoring of change of hygiene behavior is most appropriately done at the local level, at the school and the village levels. Teachers and village leaders would be the most likely agents for the monitoring of this behavior.

Strategy for SLWM

The strategy for SLWM may cover -

- Management of all the solid waste generated in the village biodegradable and non biodegradable.
- Management of all grey water generated in the village.
- General cleanliness of the village.

The strategies for SLWM may be -

- The approach to solid and liquid waste management may be based on motivating the community to see health, economic and aesthetic value in managing the waste generated in the village. The concept of zero waste, i.e. recycling the waste to productive use, will be promoted, so that community sees value. The management of the waste shall be ideally done at the household level, and if possible, at the community level.
- The Gram Panchayat will be the institutional responsible for the overall management of solid and liquid waste management. Within this responsibility, it may outsource responsibility of operation and management to other institutions such as CBOs/SHGs/private operators, etc.
- The strategy will fund the capital expenditure required, wholly or partially, for the establishment of community based approaches to waste management. The operation and

- maintenance costs of the operations shall be borne by the households / village itself; public funding may be available to subsidise part of the operating costs.
- Incentives for SLWM may be given as part of the overall incentives available for the village, such as the NGP, state reward programs, etc.
- Under the strategy, monitoring of the sustainability of the proper management of waste and clean habitats may be undertaken. This shall be undertaken through regular monitoring systems, periodic assessments as part of the NGP, state reward programs, etc. as well as periodic studies by second or third party organizations.

Strategy for sanitation in special situation

- The approach to sanitation in public areas shall be through communication to ensure motivation of the various facilities (tourist/religious authorities, restaurant owners) to provide sanitary facilities, as well as regulatory approaches to ensure that public place owners comply with the existing laws and rules to provide such facilities. Coordination with the other departments, in the case of railways, shall also be undertaken to ensure that sanitation facilities are provided.
- The National, State, district and Gram Panchayat governments will be involved in formulation of strategies.

A matrix may be suggested as follows –

	Approache s adopted	Institutional arrangements	Appropriate technology	Financing	Incentives for outcomes	Monitoring and Evaluation
Access to Safe Sanitation Facility for Households					e.g. What incentives can given to GPs for achieving Total Sanitation	
Access to Safe Sanitation Facility for Institutions						e.g. What are the indicators for monitoring school sanitation facilities
Hygiene Behavior	e.g. what approaches are reqd for changing hygiene behavior at scale					
Management of Solid and Liquid Waste			e.g. what are the appropriate technologies for SLWM in rural villages			
Achievement of Total Sanitation						
Tracking the usage and sustainability of outputs and outcomes		e.g. Which institutions will undertake the monitoring of usage and sustainability				

Sanitation at public places		e.g. What financing can be available for toilets at	
		tourist places	

Annexure-I

TOTAL SANITATION CAMPAIGN (TSC)

						PHYSICA	L PROGRES	S REPORT	AS OF M	IARCH, 2010							
Sr.	State Name			Pro	ject Objecti	ves							Project Pe	rformance			
		IHHL BPL	IHHL APL	IHHL TOTAL	SCW	School Toilets	Balwadi Toilets	RSM	PC	IHHL BPL	IHHL APL	IHHL TOTAL	SCW	School Toilets	Balwadi Toilets	RSM	PC
1	ANDHRA PRADESH	6636229	3629688	10265917	575	115908	14990	220	0	4177994	2096662	6274656	908	99065	5553	418	23
2	ARUNACHAL PRADESH	115560	18301	133861	318	3944	1866	39	0	31408	5516	36924	49	3549	1371	5	0
3	ASSAM	2220017	1161020	3381037	211	34772	16819	115	0	700686	207119	907805	17	28528	9812	58	122
4	BIHAR	6195779	4975535	11171314	2362	76581	6595	364	0	1700137	524947	2225084	580	42327	1016	380	720
5	CHHATTISGARH	1568600	1823853	3392453	618	51663	10211	100	6	870074	720455	1590529	173	48048	9730	66	11
6	D & N HAVELI	2480	0	2480	12	0	0	1	0	37	0	37	1	0	0	0	0
7	GOA	17935	27388	45323	150	731	547	3	0	16231	17522	33753	0	446	58	0	0
8	GUJARAT	2074729	2234040	4308769	1724	24106	22888	94	0	1720715	1867790	3588505	1695	24267	22154	347	2
9	HARYANA	636940	1458494	2095434	1335	9160	7599	16	1	531102	1252349	1783451	1067	7140	5868	94	9
10	HIMACHAL PRADESH	218154	632583	850737	1229	17863	10408	59	0	186395	592323	778718	194	9592	3910	19	2
11	JAMMU & KASHMIR	687145	760882	1448027	1046	26263	1045	95	4	174919	54063	228982	626	13976	90	12	0
12	JHARKHAND	2327306	1402189	3729495	1203	42687	11472	249	0	1093882	146092	1239974	121	35177	4287	224	508
13	KARNATAKA	2581758	3042323	5624081	1305	34714	23059	296	6	1370228	1544373	2914601	598	36178	24036	209	14
14	KERALA	961831	111911	1073742	1090	3600	4957	98	0	955631	142689	1098320	872	3570	4464	66	24
15	MADHYA PRADESH	3614346	4852847	8467193	1602	137730	27595	356	29	2124942	2471818	4596760	705	82020	17722	354	28
16	MAHARASHTRA	3518475	6369380	9887855	8210	87452	56082	288	27	2138542	3851999	5990541	3777	83429	56402	1507	48
17	MANIPUR	194887	68367	263254	386	3919	1201	35	0	15451	10278	25729	129	1989	225	17	3
18	MEGHALAYA	216333	85500	301833	290	10331	1851	36	0	62474	38757	101231	68	3070	305	4	0
19	MIZORAM	59679	16861	76540	560	3219	912	20	0	58185	16744	74929	380	3219	912	0	0
20	NAGALAND	180092	31254	211346	275	2972	1302	29	0	61583	1830	63413	174	1275	757	11	0
21	ORISSA	4485050	2571598	7056648	818	70663	25160	289	0	2069954	549511	2619465	48	63782	19198	283	718
22	PUDUCHERRY	18000	0	18000	0	26	16	3	0	2191	0	2191	30	0	16	2	0
23	PUNJAB	623198	544370	1167568	411	7464	3274	81	0	154600	534610	689210	63	6952	1035	7	0
24	RAJASTHAN	1960903	5023430	6984333	1544	68134	21198	317	0	633842	2123634	2757476	378	54114	10048	187	34
25	SIKKIM	51302	35712	87014	789	1604	340	12	0	58104	36496	94600	913	1606	416	0	0
26	TAMIL NADU	4400583	4244955	8645538	1438	53678	27970	249	0	3367067	2617248	5984315	1546	38510	24021	194	65
27	TRIPURA	454757	169017	623774	226	6833	6024	35	0	423689	123517	547206	162	4550	5232	143	432
28	UTTAR PRADESH	8264144	12372693	20636837	2366	269860	107302	404	24	6116198	6550840	12667038	2351	225085	84937	245	75
29	UTTARAKHAND	441631	444670	886301	470	3925	1601	71	10	234416	214019	448435	61	2426	296	24	1
30	WEST BENGAL	5029415	4104101	9133516	1140	134981	50630	338	32	4695827	2113307	6809134	595	73437	18592	353	211
	GRAND TOTAL	59757258	62212962	1.22E+08	33703	1304783	464914	4312	139	35746504	30426508	66173012	18281	997327	332463	5229	3050

	SI. State Name Total IHHL School Toilets Sanitary Complex Balwadi Toilets RSM/PC												
SI. No.	State Name	Total Projects Outlay	IHI	1 L	School	Toilets	Sanitary (Complex	Balwadi	Toilets	RSM/PC		
			Approv	Exp	Approv	Ехр	Approv	Exp	Approv	Exp	Approv	Ехр	
1	Andhra Pradesh	164613.07	112397.81	44499.34	23381.6	16165.87	661.05	629.22	786.78	178.66	648	172.53	
2	Arunachal Pradesh	6073.86	3237.65	785	788.8	761.18	636	87.23	93.36	57	184.88	12.38	
3	Assam	80110.33	62065.22	13438.13	6920.69	5951.44	362	12.05	841.11	524.92	541.55	140.56	
4	Bihar	196711.08	143709.39	27912.21	15316.19	8332.87	2176.7	200.49	340.96	57.9	1253.27	348.09	
5	Chhattisgarh	61803.92	34143.76	15884.64	10332.6	9553.81	1200.5	454.15	510.62	477.48	528	208.11	
6	D & N Haveli	78.64	61.3	0.22	0	0	3.6	0.24	0	0	3.5	0	
7	Goa	972.92	208.7	212.2	146.2	26.85	375	0	27.35	2.49	10.5	0	
8	Gujarat	58869.27	38221.22	21065.36	4821.2	4675.59	2013.22	1555.5	1144.58	1020.05	824.5	191.05	
9	Haryana	21350.38	10924.68	6062.12	1831.83	1465.76	2035.75	1553.83	380.07	282.73	395.77	160.7	
10	Himachal Pradesh	15041.47	4837.15	769.91	3622.79	1673.04	2243.51	239.07	520.37	180.32	217.65	55.02	
11	Jammu & Kashmir	31837.27	18454.12	2278.34	5252.6	2750.68	1665.64	345.16	52.34	4.23	466.11	26.3	
12	Jharkhand	76801.39	49479.07	14059.14	8267.8	6995.11	2383.15	166.87	590.19	248.23	780.5	566.17	
13	Karnataka	82471.63	55179.29	15979.16	7212.38	4790.48	2563.46	1320.43	1236.34	1175.84	889.1	192.11	
14	Kerala	21512.48	13056.94	11487.75	720	725.26	1288.3	820.37	247.91	211.84	270	141.61	
15	Madhya Pradesh	150970.22	74313.32	32189.8	27276.41	14306.46	2760.84	1469	1380.72	565.05	1310.81	450.77	
16	Maharashtra	122940.81	61856.91	25389.52	17369.09	16167.79	10423.4	3716.45	2804.33	2852.24	1142.41	923.25	
17	Manipur	9482.3	5735.92	336.56	779.64	270.93	753.32	180.04	60.08	49.19	174.7	32.54	
18	Meghalaya	11193.33	6034.75	1271.98	2066.2	639.88	594.98	106.62	92.59	17.64	136.5	18.75	
19	Mizoram	3318.41	904.26	813.91	643.8	639.13	654.21	354.64	45.64	43.91	70	0	
20	Nagaland	6811.77	4720.28	1110.69	568.67	329.49	125.37	28.16	68.63	41.75	98.36	31.24	
21	Orissa	131320.04	85065.48	20993.64	14132.6	10546.27	1636	72.51	1258.18	596.79	1042.5	138.04	
22	Puducherry	516.78	447.88	32.84	5.2	0	0	23.47	3.2	3.2	10.5	3.5	
23	Punjab	21444.64	14270.39	298.74	1483.19	492.68	434.49	42.71	180.64	5	288.1	0	
24	Rajasthan	79488.97	42515.81	6068.49	13575.74	8551.22	2973.55	545.94	1060.06	435.74	1079.5	263.4	
25	Sikkim	2059.79	562.95	1939.34	320.8	336.92	488.99	286.36	34	40	39.93	0	
26	Tamil Nadu	100564	66608.79	37769.71	10738.36	7802.35	2700.35	1370.49	1484.13	1436.38	759.48	402.23	
27	Tripura	9071.25	4980.46	4044.21	1345.73	852.41	164.62	179.95	332.07	297.59	103.24	114.97	
28	Uttar Pradesh	301053.36	175701.67	150363.6	47423.28	36356.46	3481.65	3612.44	5341.93	4149.86	1995.1	727.16	
29	Uttarakhand	14010.8	10059.12	2994.35	1053	491.47	477	12.16	79.18	11.44	250.63	10.47	
30	West Bengal	95551.85	46799.88	31327.98	25792.92	15497.51	2097.78	848.53	2531.55	1251.95	407.17	215.83	
	GRAND TOTAL	1878046.03	1146554.17	491378.88	253189.31	177148.91	49374.43	20234.08	23528.91	16219.42	15922.26	5546.79	

(Rs. in Lakhs) SOFT COMPONENT-WISE DETAILS OF APPROVED/EXPENDITURE AS PER INFORMATION RECEIVED UPTO 24-5-2010													
SI.No.	State Name	Total Projects Outlay	IEC		ADMIN		START UP						
			Approv	Exp	Approv	Exp	Approv	Exp					
1	Andhra Pradesh	164613.07	14052.07	2864.67	2044.6	1153.95	61.27	333.2					
2	Arunachal Pradesh	6073.86	601.39	245.11	173.73	47.7	11.35	85.2					
3	Assam	80110.33	5997.87	1114.15	1009.46	340.17	109.96	137.6					
4	Bihar	196711.08	17415.47	2396.71	2106.55	609.07	478.03	635.3					
5	Chhattisgarh	61803.92	7237.67	2325.33	2127.78	510.95	32.47	105.					
6	D & N Haveli	78.64	6.83	0	1.7	0	1.71	1.					
7	Goa	972.92	113.17	2.56	47	0	20	3.					
8	Gujarat	58869.27	5456.35	2346.15	1396.25	1052.51	200.95	232.4					
9	Haryana	21350.38	2608.09	1555.72	851.18	480.18	79.72	113.9					
10	Himachal Pradesh	15041.47	1756.87	998.6	536.66	187.95	39.62	98.9					
11	Jammu & Kashmir	31837.27	3153.36	180.15	976.57	99.8	138.61	20.4					
12	Jharkhand	76801.39	8257.19	1229.28	2305.25	484.74	97.69	94.0					
13	Karnataka	82471.63	7345.92	1829.1	2024.77	502.3	169.87	189.					
14	Kerala	21512.48	2379.12	1321.75	834.99	651.83	161.81	191.9					
15	Madhya Pradesh	150970.22	20826.96	3935.91	6876.38	1657.11	445.65	402.1					
16	Maharashtra	122940.81	14282.39	6677.05	3651.64	2010.96	259.93	275.4					
17	Manipur	9482.3	928.67	309.89	305.46	136.94	8.18	110.5					
18	Meghalaya	11193.33	1224.81	187.42	411.11	68.25	28.99	20.2					
19	Mizoram	3318.41	422.31	355.38	148.57	132.23	53.74	53.7					
20	Nagaland	6811.77	554.95	259.05	192.79	62.63	114	58.9					
21	Orissa	131320.04	14840.75	1603.47	4885.09	1085.82	183.21	230.5					
22	Puducherry	516.78	30	5.4	10	4.5	10	3.2					
23	Punjab	21444.64	2466.34	38.56	842.29	8.38	140.26	9					
24	Rajasthan	79488.97	8534.49	2196.63	2575.13	1031.98	281.64	381.2					
25	Sikkim	2059.79	304.37	119.4	103.82	26.01	34.93	37.					
26	Tamil Nadu	100564	8053.69	2752.92	3387.2	1472.86	224.73	228.2					
27	Tripura	9071.25	882.51	337.6	292.23	115.17	50.39	50.3					
28	Uttar Pradesh	301053.36	33038.95	7163.83	8776.4	2058.23	456.73	561.5					
29	Uttarakhand	14010.8	984.31	231.21	326.13	79.84	45.81	53.7					
30	West Bengal	95551.85	8474.17	2299.56	2224.78	957.75	537.06	518.4					
GRAND TOTAL		1878046.03	192231.04	46882.57	51445.51	17029.8	4478.31	5320.4					

Annexure-III

	State-wise NGP Awarded PRIs Year Wise																			
		2005 2006			2007			2008			2009									
																		<u>Total</u>		Grand
S.No.	<u>State</u>	GP	BP	ZP	GP	BP	ZP	GP	BP	ZP	GP	BP	ZP	GP	BP	ZP	GP	BP	ZP	Total
1	ANDHRA PRADESH				10			143			662	1		272			1087	1		1088
2	ARUNACHAL PRADESH	<u></u>						2			4			8		<u></u>	<u>14</u>	<u> </u>		<u>14</u>
3	ASSAM				1			3			14			6			24			<u>24</u>
4	BIHAR				4			39	1		<u>155</u>						198	1		199
<u>5</u>	CHHATTISGARH				12			90			300			119			521			521
6	<u>GUJARAT</u>	1			<u>4</u>	_=		<u>576</u>			<u>739</u>			350			<u>1670</u>			<u>1670</u>
7	<u>HARYANA</u>							60			798	1		131			989	1		990
8	HIMACHAL PRADESH							22			245	1		253			520	1		521
9	JAMMU AND KASHMIR					<u></u>		<u></u>			<u>12</u>						<u>12</u>			<u>12</u>
<u>10</u>	<u>JHARKHAND</u>					<u></u>		<u>12</u>			142			<u>71</u>			<u>225</u>			<u>225</u>
<u>11</u>	<u>KARNATAKA</u>							121			479	1		245	3		845	4		849
12	KERALA	1			6			220	6		600	84	4	43	15	2	870	105	6	981
<u>13</u>	MADHYA PRADESH				1			190			682			639			1512			1512
<u>14</u>	<u>MAHARASHTRA</u>	13			380	1		1974			4301	2		1720	6		8388	9		8397
<u>15</u>	MANIPUR										_1			1			2			2
<u>16</u>	<u>MEGHALAYA</u>										<u>11</u>			<u>52</u>			63			<u>63</u>
<u>17</u>	<u>MIZORAM</u>							3			8			20			31			31
<u>18</u>	NAGALAND	<u></u>						<u> </u>	_==		8			<u>42</u>		<u></u>	<u>50</u>			<u>50</u>
<u>19</u>	<u>ORISSA</u>				8			33			94			20			155			155
<u>20</u>	<u>PUNJAB</u>										<u>22</u>			<u>74</u>			96			96
<u>21</u>	<u>RAJASTHAN</u>	<u></u>						23	_==		<u>141</u>			<u>43</u>		<u></u>	207			207
22	<u>SIKKIM</u>							27			137		4				164		4	168
<u>23</u>	TAMIL NADU	12	1		119			<u> 296</u>	_==		<u>1474</u>	<u>5</u>		<u> 196</u>		<u></u>	2097	6		2103
<u>24</u>	TRIPURA	1			<u>36</u>			46			30						113			113
<u> 25</u>	UTTAR PRADESH				40			488			598			6			1132	<u></u>		1132
<u> 26</u>	<u>UTTARAKHAND</u>	<u></u>			<u>13</u>			109			160			<u>136</u>		<u></u>	418	<u> </u>		418
27	WEST BENGAL	10	1		126	8		468	7		328	<u>17</u>		109	4	<u></u>	1041	<u>37</u>		1078
Total		38	2		760	9		4945	14		12145	112	8	4556	28	2	22444	165	10	22619