

SANITATION

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PRESENTATION FLOW

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SANITATION : THE CONCEPT

- **Sanitation** is the **hygienic** means of promoting health through prevention of human contact with the **hazards of wastes**.
- **Hazards** can be physical, microbiological, biological or chemical agents of disease.
- **Wastes** that can cause health problems are human and animal feces, solid wastes, domestic wastewater (sewage, sullage, greywater), industrial wastes and agricultural wastes.
- **Hygienic** means of prevention can be by using engineering solutions (e.g. sewerage and wastewater treatment), simple technologies (e.g. latrines, septic tanks), or even by personal hygiene practices (e.g. simple hand washing with soap).



WORLD SANITATION CONDITIONS

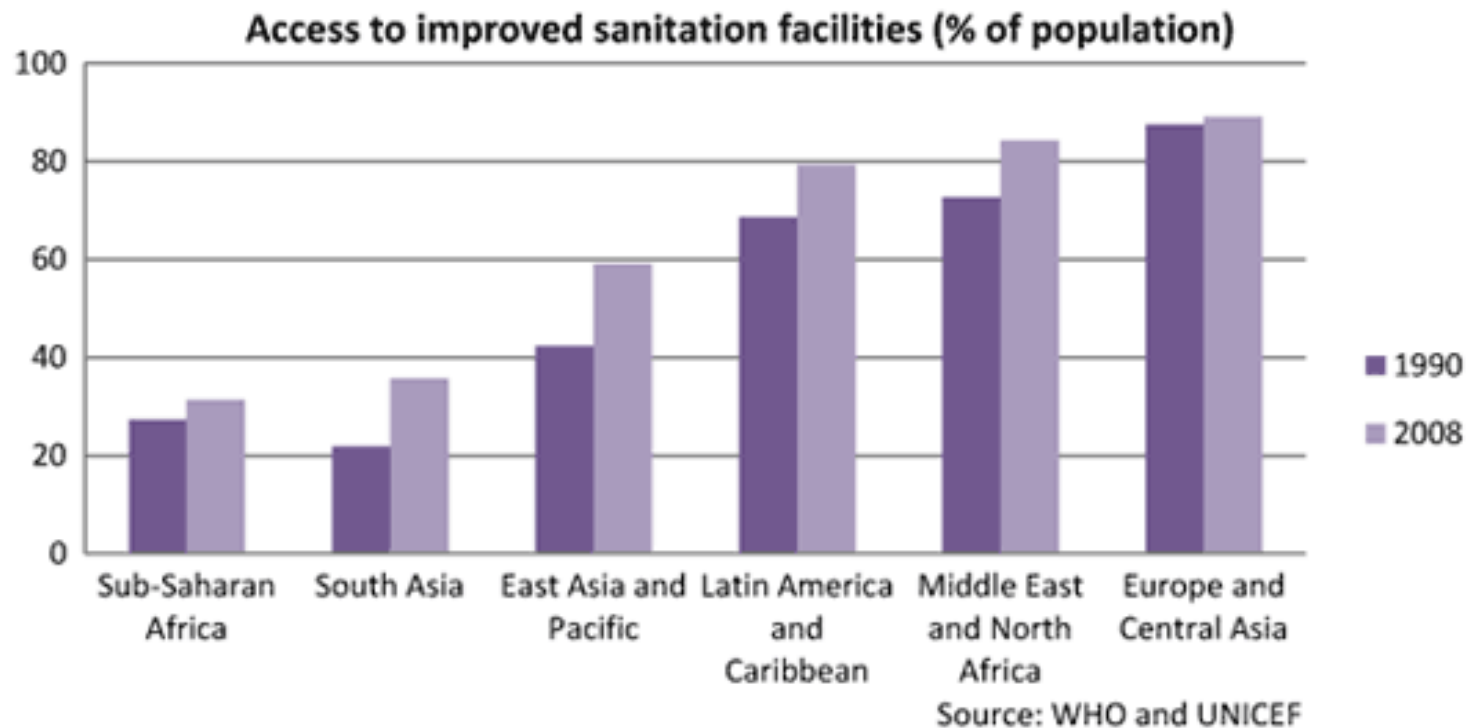
- In 2008, 87% of the world's population had some form of improved water supply, while 61% (4.1 billion) had access to basic sanitation facilities.
- Inadequate sanitation, hygiene or access to water increases the incidence of diarrheal diseases as well as death.
- The highest proportion of deaths as well as the highest absolute numbers occurs in countries with high mortality patterns, such as in Africa and parts of South-East Asia. Most diarrheal deaths in the world (88%) are caused by unsafe water, sanitation or hygiene.
- In 2008, 2.6 billion people – 40 percent of the world's population -- had no access to improved sanitation facilities.



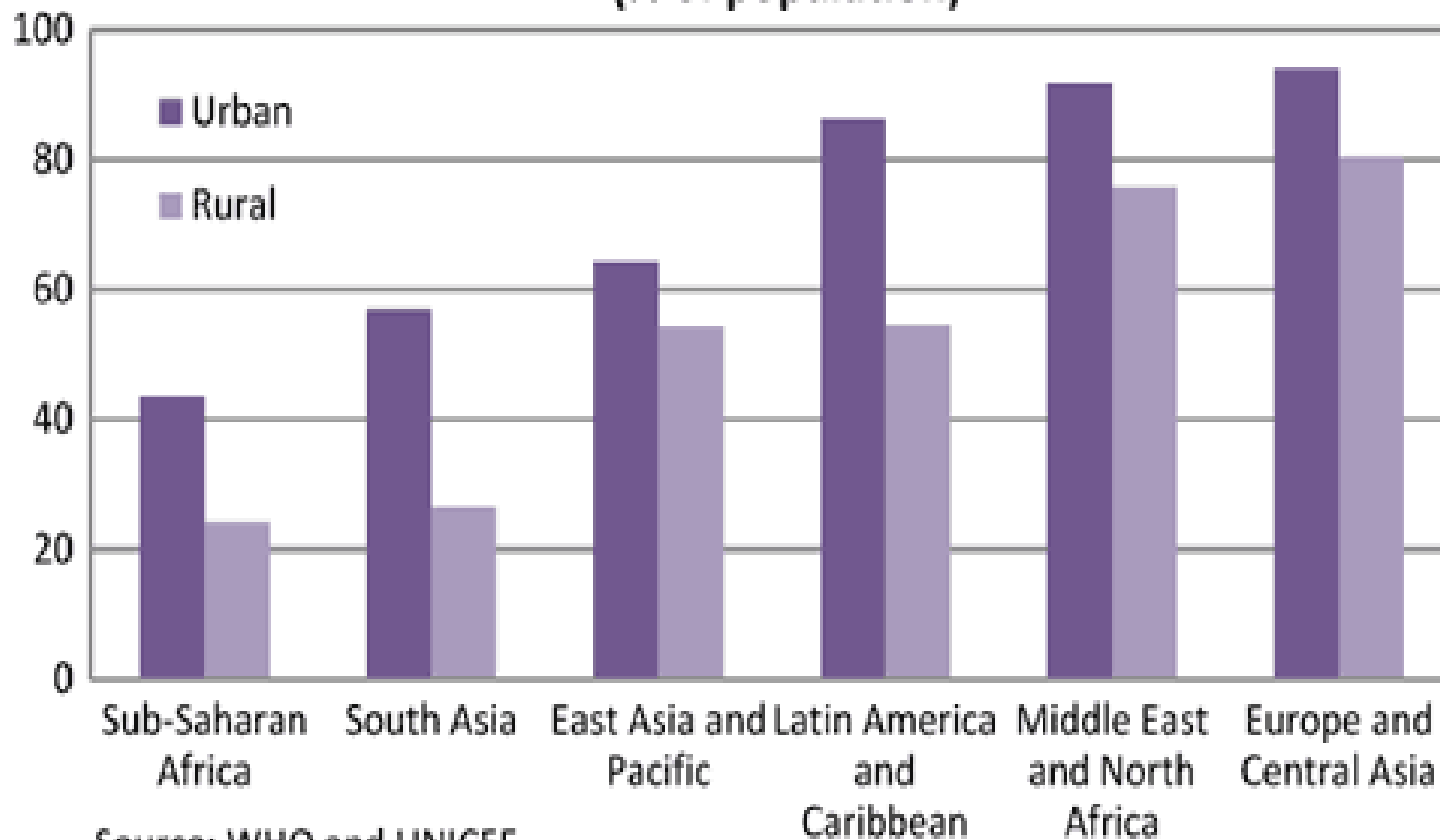
- Every year, 1.5 million children die due to diarrhea caused by the combined effects of inadequate sanitation, unsafe water supply, and poor personal hygiene.
- The Millennium Development Goal (MDG) by World Health Organization's target is to reduce by half the proportion of people without access to basic sanitation by 2015. Progress has been slow and, at the current rate, the world will miss the MDG target.



- The percent of population with access to improved sanitation has increased.
- But the number of people living without access increased due to slow progress and population growth.



Access to improved sanitation facilities, urban/rural difference, 2008 (% of population)

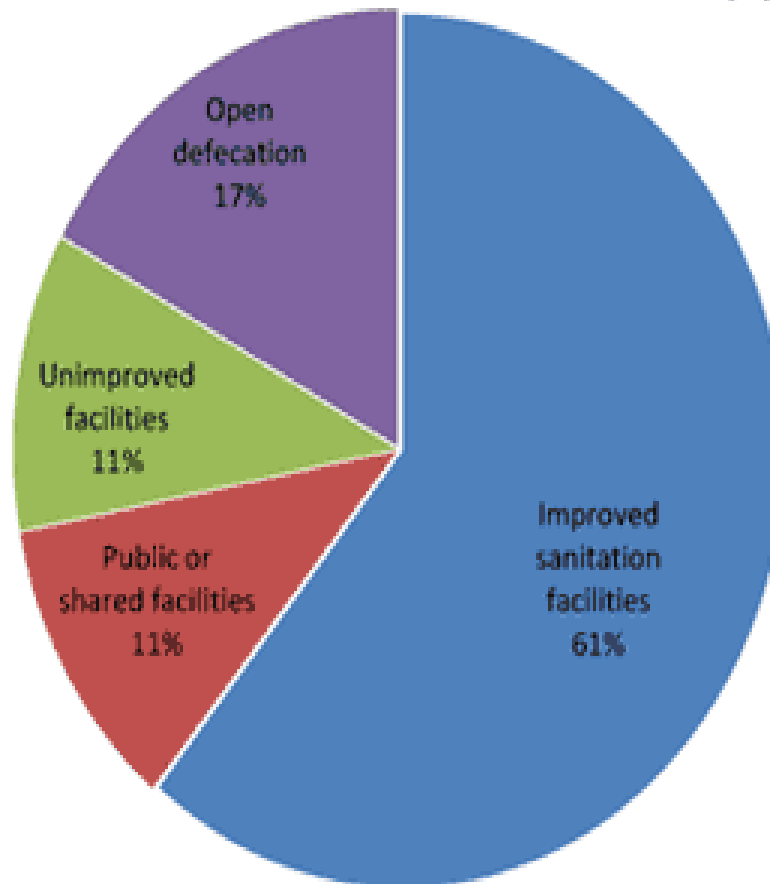


Source: WHO and UNICEF



- **Forty percent of people do not have improved sanitation facilities in developing countries**

Distribution of sanitation facilities in 2008 (%)



Source: WHO and UNICEF



SANITATION IN INDIA

Rural

- Open Defecation is a huge problem in rural areas.
- Though it has reduced but the practice has not completely vanished.
- Lack of priority to safe confinement and disposal of human excreta poses significant health risks manifest in the sanitation challenge facing the nation today.
- It is estimated that 1 in every 10 deaths in India in villages, is linked to poor sanitation and hygiene.
- Diarrhea, a preventable disease, is the largest killer and accounts for every 20th death.



- Around 4,50,000 deaths were linked to diarrhea alone in 2006, of which 88% were deaths of children below five (WSP Economics of Sanitation Initiative 2010).
- Prevalence of child under-nutrition in India (47 % according to National Family Health Survey III, 2005-06) is among the highest in the world.
- Studies shown that the education of children, especially the girl child, is also significantly impacted by poor sanitation.
- Girls are often forced to miss school or even drop out of education due to lack of sanitation facilities in their schools.



- Another impact of poor sanitation and the resultant illnesses is the loss of productivity of the family members
- It is also known that lack of adequate sanitation leads to significant losses for the country.
- The adverse economic impacts of inadequate sanitation in India as reported in the study based on published details like sanitation coverage, child mortality etc. as of the year 2006 was of the order of Rs. 2.4 Lakh crore (US\$ 53.8billion), or Rs. 2,180 (US\$ 48) per person.
- This works out to 6.4% of Gross Domestic Product (WSP Economics of Sanitation Initiative 2010).

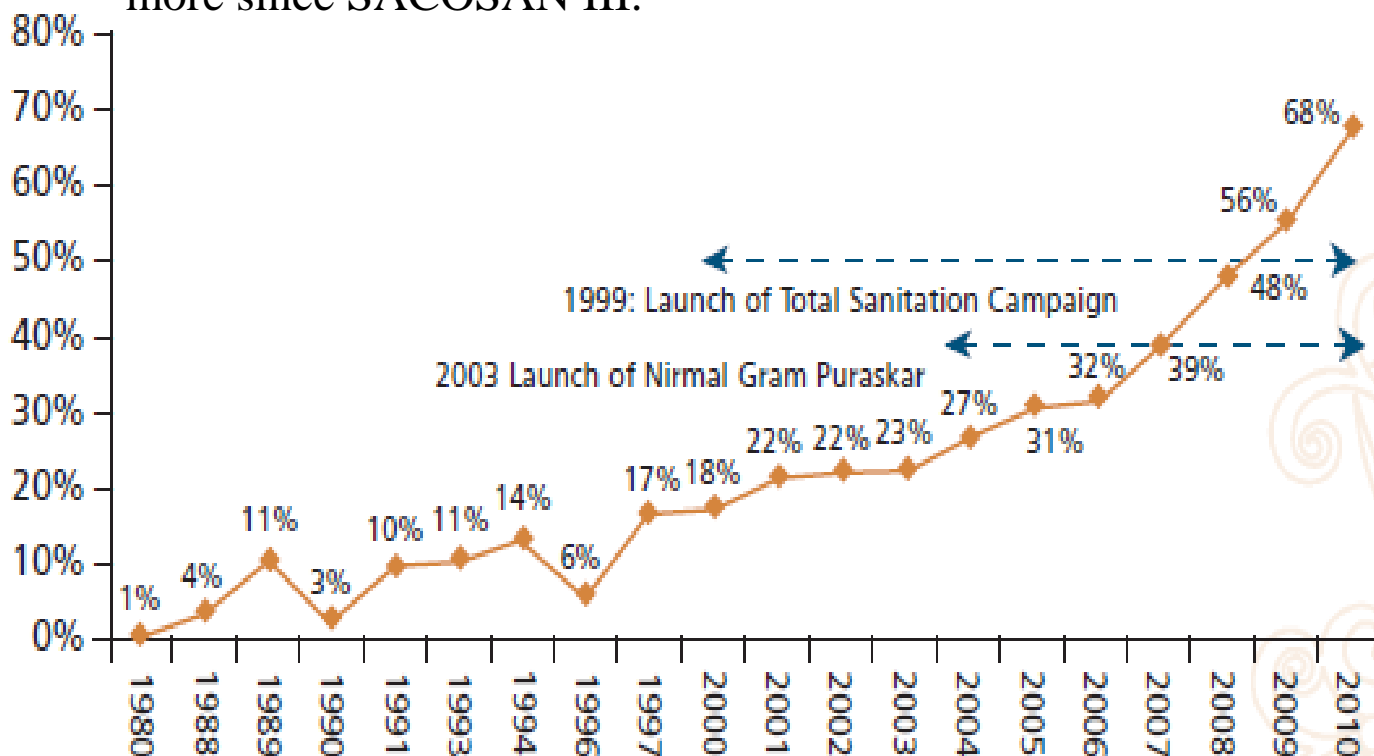


National Level Sanitation Performance

- India has shown high country commitment to sanitation with increased support to India's rural sanitation flagship programme Total Sanitation Campaign (TCS).
- The national Five-year Plan Documents and Annual Plans and Budgets at the national and state levels recognize the rural sanitation vision and plans; and allocate considerable resources toward their achievement.
- After sluggish progress throughout the eighties and nineties, rural sanitation coverage received a boost with the implementation of the TSC.




- The individual household latrine coverage has nearly tripled from just 21.9% at national level as reported by the Census in 2001 to around 68% in 2010, according to the latest data reported by districts to the Department of Drinking Water and Sanitation through on line monitoring system.
- This translates to 493 million rural people having access to sanitation, 88 million more since SACOSAN III.



Source: Government of India, Department of Drinking Water and Sanitation <http://ddws.nic.in>. Accessed January 2011.

Financing

- The rural sanitation sector has continued to receive increasing budgetary support. The TSC annual budget has increased to Rs. 16,500 Million, up from an annual budget of Rs. 12,000 Million in 2008.
 - This only indicates the 65% of total outlay on rural sanitation sector from the Central Government, the balance being contributed by State Governments and beneficiary households and communities.
 - A project based approach with total project outlay of **Rs.200 billion** has been adopted clearly identifying financing requirements for achieving the project objectives.
 - Further, as per the sanitation strategy 2012-22, an additional financial outlay of **Rs.470 billion** has been identified to be utilized over a decade to achieve the objectives of cent per cent rural sanitation.
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Monitoring and Sustaining Change

- Rural sanitation programme has a comprehensive system of monitoring the implementation and impact of the Programmes including utilization of funds, through Periodical Progress Reports, Performance Review Committee meetings, Area Officer's Scheme, District Level Monitoring and Vigilance and Monitoring Committees at the State/District Level. Besides, the programme adopts a five-pronged strategy consisting of
 - Creation of awareness about the schemes,
 - Transparency,
 - People's participation,
 - Accountability / social audit and
 - Strict vigilance and monitoring at all levels.



Urban

- The JMP 2010 revised estimates for 2008 were 18% urban Indian population defecating in the open and 7% using unimproved toilets i.e. about 75% population having access to sanitation – 51% individual toilets and 24% sharing toilets.
- The National Sample Survey (NSS, 65th Round, Govt. of India, July 2008-June 2009) estimated that 77% households have septic tank/flush latrines, 8% pit latrines, 1.6% service latrines, 1% other latrines, and 11% without any latrines.
- About 58% households have latrines for own exclusive use (individual), 24% households use shared, and 6.5% use community/public latrines (balance 11% without any access).



- About 30 million urban residents (base population from Census 2001) were without access to toilets, and another 7 million using service and other (unimproved) toilets. Accounting for population growth, about 40 million urban residents are likely to be without access to toilets in 2011.
- The proportion of households without access to any toilets has declined to 11%, although a high proportion of households are dependant on shared and community/public latrines.
- The situation in urban slums is worrisome – non-notified slums bearing the brunt of neglect. The percentage of notified and non-notified slums without latrines was 17% and 51% respectively.
- In respect of septic latrines, the availability was 66% and 35%, and for underground sewerage, the availability was 30% and 15% respectively. In urban India, safe disposal of human excreta is the biggest challenge.



Nirmal Shahar Puraskar

- In order to promote urban sanitation and recognize excellence in performance in this area, Government of India has instituted the “Nirmal Shahar Puraskar” a bi-annual exercise that recognizes sanitation initiatives of cities.
- The award is based on the premise that improved public health and environmental standards are the two outcomes that cities must seek to ensure quality of life for urban citizens, and that a periodic assessment of performance of cities that is made public will lead to greater public awareness and competition amongst cities.
- The award scheme is recognition of the city for the management of human excreta, treatment and recycle of wastewater, solid waste management, storm water drainage, operation and maintenance of the sanitation and storm water infrastructure and improvements in water quality and health.

NIRMAL GRAM PURASKAR

Particulars	Population	Incentive (Rs in lakhs)
Village Panchayat	Less than 1,000	0.50
	1,000 to 1,999	1.00
	2,000 to 4,999	2.00
	5,000 to 9,999	4.00
	10,000 and above	5.00
Block	Upto 50,000	10.00
	50,001 and above	20.00
District	Upto 10 lakhs	30.00
	Above 10 lakhs	50.00



Financing Urban Sanitation

- Under the framework provided by India's urban flagship JNNURM, cities are supposed to propose their investment requirements based on their City Development Plans.
- Therefore, it is up to the cities to accord priority to sanitation and based on plans there about; seek funding from the Union Government.
- It is reported that of cities' proposed investments under the key urban development scheme sources, 32.67% and 24.47% respectively were intended towards improving urban water and sanitation services.



- While there is no dedicated source of finances for urban sanitation plans, the MoUD is assisting states and cities to source financial assistance from public, donor, and private sources.
- The Thirteenth Finance Commission has recommended devolution of funds (or “awards”) to cities that not only comprise general purpose grants, but also performance grants that are based on cities achieving standards as per MoUD’s benchmarking framework for urban services including sanitation



Role of Government Bodies

- The responsibility for provision of sanitation facilities in India is decentralized and primarily rests with local government bodies – Gram Panchayat in rural areas and municipalities or corporations in urban areas.
- The state and central governments have a facilitating role that takes the form of framing enabling policies/guidelines, providing financial and capacity-building support and monitoring progress.
- In the central government, the Planning Commission, through Five Year Plans, guides investment in the sector by allocating funding for strategic priorities.



- The Solid Wasted Management is the primary responsibility and duty of the municipal authorities.
- State legislation and the local acts that govern municipal authorities include special provisions for collection, transport, and disposal of waste.
- They assign the responsibility for provision of services to the chief executive of the municipal authority.



WORLD BANK

Current Projects

- The World Bank finances a number of projects in urban and rural areas that are fully or partly dedicated to water supply and sanitation.
- In **urban areas** the World Bank supports:
 - The Andhra Pradesh Municipal Development Project (approved in 2009, US\$300 million loan),
 - The Karnataka Municipal Reform Project (approved in 2006, US\$216 million loan),
 - The Third Tamil Nadu Urban Development Project (approved in 2005, US\$300 million loan) and
 - The Karnataka Urban Water Sector Improvement Project (approved in 2004, US\$39.5 million loan).

○ In **Rural Areas** it supports:

- The Andhra Pradesh Rural Water Supply and Sanitation (US\$150 million loan, approved in 2009),
- The Second Karnataka Rural Water Supply and Sanitation Project (approved in 2001, US\$151.6 million loan),
- The Uttaranchal Rural Water Supply and Sanitation Project (approved in 2006, US\$120 million loan) and
- The Punjab Rural Water Supply and Sanitation Project (approved in 2006, US\$154 million loan).



HOW DO YOU MARKET SANITATION?



Market Research	<ul style="list-style-type: none"> • Identify market research expertise • Establish and train the research team • Conduct consumer research • Conduct producer research
Programme aims and objectives	<ul style="list-style-type: none"> • Develop preliminary marketing mix (<i>Product, Price, Place, Promotion</i>)
Product identification and development	<ul style="list-style-type: none"> • Identify and develop marketable sanitation facilities & services (<i>e.g. latrine technologies /options, latrine information service, latrine centre</i>)
Set up supply mechanism	<ul style="list-style-type: none"> • Identify potential suppliers of latrines & other related services • Assess and develop their capacity to provide desired services • Identify and/or set place(s) where consumers can access the sanitation services being marketed (eg toilet centres) • Work with the public sector to establish strategy for disposal of sludge from toilets
Message and material development	<ul style="list-style-type: none"> • Identify partners with expertise for the design and development of marketing concepts • Develop marketing concepts and creative design • Pre-test and refine creative design • Develop promotion strategy
Implement promotion campaign	<ul style="list-style-type: none"> • Produce promotion materials (e.g. posters, flyers, radio jingle, billboard) • Launch a campaign (e.g. road show, launch event) • Run a promotion campaign for about 3 months
Monitor and feedback	<ul style="list-style-type: none"> • Monitor the programme (spread/ response to the campaign, quality of services provided etc) • Feedback and modify the programme as appropriate

STRATEGIC IMPLEMENTATION

- **Creating a demand for safe sanitation services:**

It can be done through social marketing of sanitation and behavior change communication for rural sanitation.

- **Meeting the demand for safe sanitation services:**

Once the demand has been created, ensuring delivery of these services through capacity building of mission and providing a wide range of suitable sanitation technologies.

- **Ensuring sustainability of sanitation infrastructure and behavior:**

Institutional, policy and other measures to ensure sustainability of sanitation infrastructure and behavior.



ROLE OF NGOS

- NGOs have an important role in the implementation of TSC in the rural areas.
 - Their services are required to be utilized not only for bringing about awareness among the rural people for the need of rural sanitation but also ensuring that they actually make use of the sanitary latrines.
 - NGOs may also open and operate Production Centers and Rural Sanitary Marts.
 - Only, dedicated and motivated NGOs should be involved in TSC implementation.`



ALLOCATION OF FUND IN 2010

- The Central, State and Beneficiary/Panchayat contributions are about **Rs.3675.38 crore**, **Rs.1424.09 crore** and **Rs.1140.80 crore** respectively.
- Construction of 499 lakh individual household latrines
- 656690 toilets for Schools
- 36098 Community Sanitary Complexes
- 199033 toilets for Balwadis/Anganwadis and
- 4030 Rural Sanitary Marts/Production Centres.



DATA FOR THE YEAR 2011

Category	Target	Achievement
School Toilets	53,678	39,834
Anganwadi Toilets	27,970	24,132
Sanitary Complex	1,438	1,548
Sanitary Marts	249	194
Total	87,50,423	64,91,883



TOTAL SANITATION CAMPAIGN- (TSC)

Serial No.	Year	Financial Allocation (Rs.in crores)	Physical Allocation (Individual Tiolets)
1	2000 - 01	11.88	16,086
2	2001 - 02	21.40	1,39,751
3	2002 - 03	27.79	2,76,894
4	2003 - 04	45.15	4,51,701
5	2004 - 05	42.59	4,88,205
6	2005 - 06	116.99	6,13,826
7	2006 - 07	84.14	2,15,286
8	2007 - 08	42.13	5,74,109
9	2008 - 09	33.06	3,39,066
10	2009 - 10	244.66	9,78,651
11	2010 - 11	216.49	9,55,122

GUJARAT DATA AS ON 8/03/2012

Components	Project Objective	Project Performance	%age Achievement
IHHL BPL	2046857	1974418	96.46
IHHL APL	3331630	2413869	72.45
IHHL Total	5378487	4388287	81.59
School Toilet	28617	28356	99.09
Sanitary Complex	1671	1765	105.63
Anganwadi	23460	24897	106.13
RSM	168	365	217.26

Share	Approved	Funds Received	Utilization	%age of Utilization against release
GOI	41025.70	28700.04	25751.21	89.73
State Share	15942.19	13496.15	10976.01	81.33
Beneficiaries Share	8953.78	9015.59	8103.86	89.89
Total	65921.67	51211.78	44831.08	87.54

Individual household latrines (IHHL)

Rural Sanitary Marts (RSMs)

10 FACTS ABOUT SANITATION AT WORLD LEVEL



1) Lack of sanitation facilities forces people to defecate in the open, in rivers or near areas where children play or food is prepared. This increases the risk of transmitting disease. The Ganges river in India has 1.1 million litres of raw sewage dumped into it every minute, a startling figure considering that one gram of faeces may contain 10 million viruses, one million bacteria, 1000 parasite cysts and 100 worm eggs.



2) An estimated 2.6 billion people lack access to adequate sanitation globally. If the current trend continues, by 2015 there will be 2.7 billion people without access to basic sanitation. The regions with the lowest coverage are sub-Saharan Africa (31%), southern Asia (36%) and Oceania (53%). Underlying issues that add to the challenge in many countries include a weak infrastructure, an inadequate human resource base and scarce resources to improve the situation.



3) Examples of diseases transmitted through water contaminated by human waste include diarrhoea, cholera, dysentery, typhoid, and hepatitis A. In Africa, 115 people die every hour from diseases linked to poor sanitation, poor hygiene and contaminated water.



4) Health-care facilities need proper sanitation and must practice good hygiene to control infection. Worldwide, between 5% and 30% of patients develop one or more avoidable infections during stays in health-care facilities.



5) Each year more than 200 million people are affected by droughts, floods, tropical storms, earthquakes, forest fires, and other hazards. Sanitation is an essential component in emergency response and rehabilitation efforts to stem the spread of diseases, rebuild basic services in communities and help people return to normal daily activities.



6) Studies show that improved sanitation reduces diarrhoea death rates by a third. Diarrhoea is a major killer and largely preventable: it is responsible for 1.5 million deaths every year, mostly among under-five children living in developing countries.



7) Adequate sanitation encourages children to be at school, particularly girls. Access to latrines raises school attendance rates for children: an increase in girls' enrolment can be attributed to the provision of separate, sanitary facilities.



8) Hygiene education and promotion of hand washing are simple, cost-effective measures that can reduce diarrhoea cases by up to 45%. Even when ideal sanitation is not available, instituting good hygiene practices in communities will lead to better health. Proper hygiene goes hand-in-hand with the use of improved facilities to prevent disease.



9) The economic benefits of sanitation are persuasive. Every US\$1 invested in improved sanitation, translates into an average return of US\$9. Those benefits are experienced specifically by poor children and in the disadvantaged communities that need them most.



10) The Millennium Development Goals target 75% global sanitation coverage by 2015. The cost to reach this milestone is estimated at US\$14 billion annually through the period. Among other health gains, sanitation is estimated to reduce diarrhoea cases by 391 million worldwide each year.



HOW CAN WE HELP?

- Proper education should be provided to people, especially the illiterate and poor people.
- People should be encouraged to keep the city clean.
- Media should be used as a medium to encourage people.
- Government should be questioned.
- Donation towards the betterment of the society.



CONCLUSION

- Providing adequate sanitation will have profound implications for human health and poverty alleviation.
- Access to adequate sanitation literally signifies crossing the most critical barrier to a life of dignity and fulfillment of basic needs.
- Focusing on youth and using education.
- Taking responsibility for the environment.
- Supporting small-scale entrepreneurs.
- Constantly Monitoring progress.



Thank You

