Swachhata - A Way of Life (November 2018)

TOPIC	PAGE NUMBER
Swachhata - A Way of Life	2
On the road to Swachh Bharat	2
Swachhata: Juggernaut of Change	3
Sanitation Revolution : Implementation at Scale	3
Improving Cleanliness of Health Care Facilities	4
A Hygienic Environment for Mother and Child	6
Sanitation Revolution : Cleansing Urban India	7
Sanitation as Everyone's business	9
Sanitation : A Purification Process	10
Staircase to Swaraj	11
Swachh Rail, Swachh Bharat	12

Swachhata - A Way of Life

- For Mahatma Gandhi, cleanliness was not just a thought but a way of life. His concept of cleanliness was not just cleanliness of the body but also of the soul. He wanted to see a Bharat that was not only open defecation free but also had clean body and soul.
- India faces a huge economic loss due to poor hygiene and sanitation. According to the World Bank, India loses 6.4 percent of GDP annually because of this particular reason.
 Prime Minister Narendra Modi launched Swachh Bharat Mission on 15th August, 2014 to build a clean and open defecation free India by 2019.
- Ministry of Drinking Water and Sanitation was the core implementing Ministry. Swachhata Pakhwadas, rallies, awareness campaigns through village panchayats, large scale construction of toilets, solid waste management, monitoring through swachh sarvekshan and star ratings for garbage free cities are gradually bringing about behavioural change.
- Initiatives like Kayakalp, VISHWAS a village based initiative to synergise health, water and sanitation campaign, Bal Swachhata Mission, construction of toilets, provision of clean drinking water facilities in anganwadis and child care institutions have played a major role in taking this mission forward.
- Ministry of Human Resource Development, through its educational institutions, has taken
 upon itself to use this segment to cultivate a culture of cleanliness. Ministries like Railways,
 Rural Development, Petroleum, Housing and Urban Affairs, through their large network of
 trains, railway stations, petrol pumps and smart cities and villages, are working on the
 entire sanitation value chain of water supply, safe disposal and treatment of waste, and
 maintenance of infrastructure in mission mode.

On the road to Swachh Bharat

Waste Management in Ganga -

- Ganga has multiple sources of pollution. About 2953 million litres of sewage generated by 97 towns along the banks enter the river untreated everyday.
- There are untreated effluents from industrial sources, solid waste from the towns and villages along the river banks, agricultural waste, open defecation waste, and polluted tributaries and *nallahs* emptying into the river, all contributing to the load of pollutants.
- Comprehensive cleaning of the river requires infrastructure, systems and practices that can intercept pollutants from each of these sources regularly, and on a sustained basis.

Cleaning the Ganga -

- The National Mission for Clean Ganga that is responsible for implementing the programme was declared as the Authority under Environment Protection Act, 1986, giving it more powers in 2016, and State and District Ganga Committees were established in 2017.
- Rs 20,000 crore allocation for the period 2015-2020 under this programme is the largest provision made in the history of Ganga cleaning so far.
- 240 projects worth Rs 22,238 crore have already been sanctioned which includes sewage infrastructure, ghats and crematoria, riverfront development, river surface cleaning, institutional development, biodiversity conservation, afforestation, and rural sanitation.

Innovative Models -

- Hybrid Annuity Model and One City-One Operator concept has been introduced where all new and existing STPs will be under charge of one private operator, ensuring better upkeep and maintenance.
- STP project coming up in Mathura is a unique one. It has been awarded on HAM mode under One-City, One-Operator Concept.

Swachhata: Juggernaut of Change

Sanitation coverage in India has increased from 38 percent in 2014 to 90 percent in 2019. Over 9 crore toilets have been constructed and more than 4.5 lakh villages have been declared Open Defecation Free (ODF).

The World Health Organisation recently reported that the Swachh Bharat Mission will result in averting more than 300,000 deaths between 2014 and October 2019.

Making Cooking Women Friendly -

- Since the launch of the Pradhan Mantri Ujjwala Yojana (PMUY) on 01.05.2016, more than 5.51 crore LPG connections have been released for women from underprivileged and SC/ ST communities in India.
- The Prime Minister has set a new PMUY target of 8 crore LPG connections by 2020.
- LPG penetration in India from Independence till 2014 was about 54 percent. The LPG penetration at the time of writing in 2018 is 88 percent.

Improving Fuel Efficiency -

- India has followed the regulatory pathway for fuel quality and vehicle emissions standards termed as Bharat Stage (BS) and successfully implemented BS IV norms at petrol pumps all across the country in April 2017.
- Government has taken a bold decision to leapfrog BS IV to BS VI fuel norms directly.

Biofuel policy -

- With an objective of addressing both the environmental pollution from burning of agricultural waste and generating additional income for Indian farmers, the government approved the landmark National Policy on Biofuels in 2018.
- We have already achieved 4 percent ethanol blending in petrol leading to a 7.8 million MT reduction in greenhouse gas emissions and forex savings of \$1520 million from fuel imports, and our target is to reach 10 percent ethanol blending in petrol.

Sanitation Revolution: Implementation at Scale

Until 2014, 600 million people (approximately 60 percent of the world's open defecators) practicing open defecation across the country. Today, India has a rural sanitation coverage of over 95 percent - a percentage that we could not have ever envisaged.

After building a phenomenal 87 million individual household toilets, as many as 5.1 lakh villages, 529 districts and 25 states and UTs are now open defecation free.

Behavioural change -

World Bank support project found that 93 percent of the households surveyed which had toilets used them, confirming the behaviour change focus of the Swachh Bharat Mission.

The key strategy to achieve behaviour change was to use techniques such as the Community Approach to Sanitation (CAS) and Community Led Total Sanitation (CLTS).

The Strategy -

The Swachh Bharat had changed and amplified strategy to address the challenges of -

1. **Scale** - To meet the need to change the behaviour of 600 million people, the SBM today includes 120 million school students, 1 million masons (of which 100,000 are women), 500,000 swachhagrihis, 250,000 Sarpanchs, 700 District Collectors, 400 Zila Swachh Bharat Preraks, 20 prominent brand ambassadors, all led by the Prime Minister of India.

- 2. **Speed** The Prime Minister's clarion call also set a sunset clause, October 2, 2019 to avoid a drip-drip approach, and gave impetus to India's sanitation campaign.
- 3. Stigmas and Myths There were various common myths in rural India regarding sanitation toilets are only required for women and children, having a toilet within the premises of one's home is impure, cleaning the toilet is not one's own duty, and many more. The Darwaza Band Campaign moved beyond access to toilets and communicated the need to use toilets, not just by women and children, but by each and every member of the household.
- 4. **Sustainability** The SBM also maintained its parallel focus on sustaining the jan andolan and the progress being made on the ground.
 - a. <u>ODF-Quality</u> Requires every toilet constructed under the Mission to be geotagged. All villages are subject to a double verification system, which includes self-declaration as well as third party verification.
 - b. <u>ODF-Sustainability</u> Ensures continuous behaviour change communication, to remain much after the achievement of ODF.
 - c. <u>ODF plus (ODF+) SBM</u> goes beyond toilets and works towards clean villages by prioritising solid and liquid waste management practices in ODF villages, as well as prioritisation on rural water supply for ODF villages.

Other initiatives -

Swachhta Pakhwada (All Union Ministries/Departments take up swachhata related activities for a fortnight each, Swachh Iconic Places (a multi-stakeholder initiative focusing on cleaning up 100 places across India that are iconic due to their heritage, religious and/or cultural significance), Swachhtata Action Plan (where 76 Ministries/Departments have earmarked funds worth 5248 crore for their Swachhata Plans) and making villages along the banks of the Ganga river ODF. Swachh Survekshan Grameen 2018 is an independent sanitation survey conducted across 6980 villages in 698 districts of the country.

International surveys -

- Encouragingly, as reported by the WHO, SBM will result in averting over 300,000 deaths related to diarrhoea and protein-energy malnutrition between 2014 and October 2019.
- UNICEF study estimates that in an open defecation free community, the value of time savings and the value of mortality averted, the financial savings for each household is Rs 50,000 per year.

Lessons learnt -

Lessons learnt in the form of importance of the 4 Ps -

- 1. **Political leadership** Leadership from the top is critical.
- 2. **Political funding** Over Rs 1 lakh crores by centre and states to SBM ensures no shortfall in funding.
- 3. **Partnerships** Constant engagement with development partners, NGOs, the private sector, civil society, media etc.
- 4. **People's participation** Sanitation is a jan andolan.

Conclusion -

The SBM is setting an example for the rest of the world to move towards improving sanitation for all and achieving the UN SDG 6 in mission mode and ensuring that behaviour change communication in all its form is the only tool for sustainable change.

Improving Cleanliness of Health Care Facilities

LIXIL Group Corporation, Water, Air & Oxford Economics in their report estimate, that in 2015, lack of access to sanitation cost a loss of around USD 222.9 billion to the global economy.

Key initiatives -

- Ministry of Health and Family Welfare's (MoHFW) Kayakalp initiative began in 2015 with the aim of improving infrastructure upkeep, hygiene and sanitation, and infection control practices in Central Government institutions and public health facilities in all 36 States and UTs.
- National Accreditation Board for Hospitals and Healthcare Providers (NABH) has decided to consider assessment of healthcare facilities in the private sector on the lines of parameters of Kayakalp.
- MoHFW has used the platforms of Village Health Sanitation and Nutrition Committees (VHSNCs) under the National Health Mission and Mahila Arogya Samitis (MAS) under the National Urban Health Mission (NUHM) to promote sanitation in the vulnerable urban communities.
- VISHWAS NHM has launched a new campaign, VISHWAS Village based Initiative to Synergise Health, Water and Sanitation - a year long campaign to be carried out by VHSNCs to build community awareness and develop local champions for action on water, sanitation and health, and create a platform for building synergies between various programmes, such as the Swachh Bharat Mission.

Kayakalp -

- The programme aims at inculcating in public health facilities, a culture of regular assessment and peer review of performance related to hygiene, cleanliness and sanitation.
- Under the scheme, health facilities undertake their own assessment work on improving appearance of the facility, implementation of biomedical waste rules, strengthening of infection control practices and partnering with Local NGO/civil society organisations. 'Swachhata' within the facility and also outside the 'boundary-wall'.
- Assessment of facilities is undertaken on seven broad thematic areas Hospital/facility upkeep, Sanitation and Hygiene, Waste Management, Infection Control, Support Services, Hygiene Promotion, Kayakalp outside the boundary.

Impact of Kayakalp -

- Improvement in the level of cleanliness, hygiene and infection control practices at public health facilities.
- Built a culture of ongoing assessment and peer review of the performance to promote hygiene, cleanliness and sanitation.
- Opportunities and incentives to bolster inter sectoral coordination for the improvement of health systems.

Swachh Swasth Sarvatra -

Swachh Swasth Sarvatra is a joint initiative of Ministry of Health and Family Welfare and Ministry of Drinking Water and Sanitation to achieve better health outcomes through improved sanitation and increase awareness on healthy lifestyles. Its objective is to have more synergy between two complementary programmes - Swachh Bharat Mission (SBM) and Kayakalp.

Three broad objectives of this scheme are -

- 1. Enabling Gram Panchayat to become Open Defecation Free (ODF).
- 2. Strengthening Community Health Centre (CHC) in ODF blocks.
- 3. Build capacity through training in water, sanitation and hygiene (WASH).

Village Health Sanitation and Nutrition Committees (VHSNCs) -

 National Rural Health Mission, since its inception in 2005, created Village Health Sanitation Committees (VHSCs) across all the States, as the platform for community action on health.

- VHSNCs along with community health worker ASHA, were a key component of Communications strategy under National Health Mission.
- Presently, about 5.2 lakh VHSNCs are in place (92 percent VHSNCs formed against the target, of which 97 percent have bank accounts).
- ASHAs play a key role in facilitating VHSNCs work for improving community level awareness and mobilise community for construction and use of toilets.

Mahila Arogya Samitis (MAS) under NUHM -

- Similar to VHSNCs, Mahila Arogya Samiti (MAS) has been established in urban areas under NUHM.
- MAS are groups of about 12 to 20 women in an urban area, in a community of primarily poor and vulnerable sections.
- Presently, about 74000 MAS have been constituted across states, but the programme is still evolving.

Swachhata Hi Sewa Campaign -

It is conducted across all states to conduct sanitation and hygiene related activities at Health Facilities and Community (rural and urban). MoHFW conducts it with the help of states.

Swachhata Pakhwada -

An initiative of MoHFW under which it conducts Sanitation and Hygiene Campaigns at public health facilities and at the community level every year. Each ministry of GOI conducts a Swachhata Pakhwada for a period as assigned in the GOI annual calendar.

A Hygienic Environment for Mother and Child

The concept of 'Sanitation' is a comprehensive one including effective management (collection, treatment and disposal/recovery, reuse, or recycling) of human waste, solid waste (including biodegradable and non-biodegradable refuse/trash/rubbish), waste water, sewage effluents, industrial wastes (such as hospital, chemical, radioactive, plastic or other dangerous).

WASH -

- Water, Sanitation and Hygiene are the three core issues which are grouped together to represent a growing sector. For example, without toilets, water sources become contaminated; without clean water, basic hygiene practices are not possible.
- Today, there are around 2.4 billion people who do not use improved sanitation, and 663 million people who do not have access to improved water sources.
- Everyday, over 800 children die from preventable diseases caused by poor water, and a lack of sanitation and hygiene. Around 564 million people, which is nearly half the population of India, defecate in the open. India accounts for 90 percent of the people in South Asia and 59 percent of the 1.1 billion people in the world who practice open defecation.

Initiatives by Ministry of Women and Child Development -

- To maintain universal sanitation and hygiene at Anganwadi Centres, all States and UTs were directed to conduct activities on various themes like Clean Anganwadis, Clean Surroundings.
- A booklet on Bal Swachhata Mission was also released to all States/UTs regarding conduct
 of various activities relating to cleanliness and sanitation and use of safe drinking water at
 Anganwadi Centres.
- In 2016, the Ministry also initiated action to identify AWCs where toilet and drinking water facilities were required.

- During 2017-18, 70,000 toilets were constructed in the Anganwadi Centres and provision of clean drinking water facilities in the 20,000 Anganwadi Centres were also made.
- Hygiene drives regarding menstruation and distribution of menstrual hygiene products are carried out as rural women have been suffering from menstrual unhygienic practices since a long time.
- For the children specifically, puppet shows, wall paintings and street plays are organised.
- The Ministry has taken a number of initiatives to demonstrate hand washing using WHO techniques during events like POSHAN Maah, Swachhata Hi Sewa Campaign and Swachhata Pakhwadas.
- The Ministry has also initiated POSHAN Abhiyan to reduce the problem of poor nutrition among children by synthesising, generating and mobilising nutritional resources.
- The Ministry has strived to reduce the level of stunting, undernutrition, anemia and low birth weight babies.

Sanitation Revolution: Cleansing Urban India

The Sustainable Development Goals (SDGs) place significant emphasis on sanitation, cleanliness and hygiene. Better sanitation, hygiene and cleanliness helps in effective control of various vector borne diseases, parasite infections and nutritional deficiencies.

As per a UNICEF Report (2011), almost 90 percent of child deaths from diarrheal diseases are directly linked to contaminated water, lack of sanitation or inadequate hygiene. Various studies have established that the problem of solid waste management has been compounded due to high population growth rates and population concentration in urban areas.

Effect of improvement in sanitation -

As per the India Health Report for Nutrition Security in India (PHFI, 2015), the North Eastern State of Mizoram has reported a 13 percentage point decline in stunting (below normal height for the age) and five percentage points decline in underweight children (underweight and short) between 2006 and 2014 due to improved access to sanitation.

Journey so far -

- During the first two years of launch of the Swachh Bharat Mission, the major focus of the government was on putting in place an enabling environment for achieving the Mission objectives - making all statutory towns Open Defecation Free (ODF), along with 100 percent scientific management of municipal solid waste. Today, urban areas of 19 states/ UTs have become ODF.
- Government has now introduced the SBM ODF+ and ODF++ protocols to address the issue of operation and maintenance of community and public toilets, and also the issue of holistic sanitation, including faecal sludge management, so that the ODF outcomes that we have achieved are sustained in the long run.
- Ministry of Housing and Urban Affairs (MoHUA) has partnered with Google to upload and make available on Google Maps all the public and community toilets in the cities.

Solid Waste Management - a Multi Pronged Approach -

- In India, an estimated 65 million tonnes of Municipal Solid Waste is generated annually by around 400 million citizens residing in urban areas. It is estimated that 165 million tonnes of waste will be generated by 2030 and 450 million tonnes by 2050, along with resultant public health and environmental challenges.
- MoHUA has adopted changes to encourage processing of waste to value added products on the one hand, along with Mission initiatives such as Swachh Survekshan to inculcate a healthy competition, and Star Rating for Garbage Free cities to ensure long term sustainability.

 At the time of launch of the Swachh Bharat Mission, 95 lakh tonnes per annum of waste was the treatment capacity via composting, bio-methanation, RDF and waste to energy plants. This has been enhanced substantially in the last 4 years, and approximately 37 percent of the total waste generated is being processed today.

Swachh Survekshan - a Tool for Mission Monitoring and Governance -

- Under the SBM Urban, MoHUA has been conducting the *Swachh Survekshan* an annual survey to rank cities on various sanitation and cleanliness parameters is conducted.
- Swachh Survekshan 2018, which covered 4,203 Urban Local Bodies, was the first ever Pan India Sanitation Survey impacting around 40 crore people, and probably the largest such survey in the World.

Star Rating for Garbage Cities -

- The Ministry has introduced a new innovative initiative for evaluating the Garbage Free status of Cities and awarding the 'Garbage Free City Stars' to the city.
- The Star Rating Initiative, which is a rating protocol based on twelve (12) parameters, follows a SMART framework Single metric, Measurable, Achievable, Rigorous verification mechanism and Targeted towards outcomes and has been devised in a holistic manner covering all aspects of Solid Waste Management viz. Public Cleanliness, Door to Door collection, source segregation, processing, cleanliness of drains and water bodies, plastic waste management, managing construction and demolition waste, etc, which are critical drivers for achieving garbage free cities.

Moving towards a 'Jan Andolan' -

- Through initiatives such as thematic drives with citizen participation, engaging students and self-help groups to be the agents for social behaviour change, engaging swachhagrihis across the country to drive behaviour change, multimedia communication campaigns with messages of 'swachhata', 'swachhata selfie' series on radio that captures best practices in sanitation and solid waste management from across the country and use of various tools and apps for greater citizen participation and engagement there is now a growing appreciation among people that sanitation and cleanliness is not the sole responsibility of the Government, and that each of us are equally responsible for maintaining cleanliness of our surroundings.
- This feeling of 'jan andolan' has been demonstrated by the overwhelming participation of nearly 40 lakh citizens, comprising school children, students, home makers, RWAs, religious leaders, corporate houses and local business people, and celebrities.

Social and Economic Impacts of Swachh Bharat Mission - A Few Examples -

- A recent study by the Indore Municipal Corporation (2017) has found that vector-borne diseases have reduced by 70 percent due to sanitation interventions under Swachh Bharat Mission.
- The Ambikapur model of Solid Liquid Resource Management that is being replicated across multiple cities in the country has provided jobs to thousands of Self-Help Groups (SHGs) women members, with monthly earnings of between Rs 10,000-15,000 per head.
- A back of the envelope calculation reveals that potential value added from solid waste today can be to the tune of more than Rs 20,000 crores (assuming 1 MT of waste generates a value of Rs 3,000), and if properly harnessed and leveraged, can evolve into a trillion-rupee industry and will be a huge contributor to the economy.

Way forward -

At MoHUA, other missions such as Atal Mission for Rejuvenation and Urban Transformation (AMRUT) which addresses the issue of waste water and faecal sludge management, the Smart Cities Mission (SCM) which has Solid Waste Management as one of its development parameters -

are complementing the SBM (Urban)'s efforts in taking forward the mandate of sanitation and waste management.

Conclusion -

A Swachh Environment will lead to a 'Swasth, Swastha, Samarth, and Samriddh' Bharat and pave the way for New India - 2022.

Sanitation as Everyone's business

Swachhata Action Plan (SAP) -

- SAP was launched on 1st April 2017. Under this, ministries and departments mainstream sanitation in their mandates through budgeted and accountable action plans.
- SAP heralds a milestone in government functioning where all wings join hands to deliver the goal of Swachh Bharat, irrespective of their allocated functions.
- SAP performance is reviewed every quarter by a Committee of Secretaries.

Swachhata Pakhwada (SP) -

- Under this, 4-5 Ministries are given 15 days' in a year following pre-decided calendar to carry out countrywide initiatives within their jurisdiction to enhance sanitation.
- During this 15-day process, Ministries report their sanitation activities daily on an online portal.
- In fact, during these 15 days, the concerned Ministry is deemed to be a Swachh Bharat Ministry, Pakhwada performance is reported and monitored at the highest levels.

Swachh Iconic Places (SIP) -

- As part of the Prime Minister's vision, it was decided that places of heritage, with significance for history and culture and centres of pilgrimage marked by high footfall would be taken up to raise them to distinctly higher levels of cleanliness.
- MDWS coordinates with partner ministries like Housing and Urban Affairs, Tourism and Culture as well as with States, Local Bodies, Trusts and Managing Communities that manage the iconic places.
- Several Public Sector Undertakings and private corporates have come forward to support the sanitation action plans to these SIPs financially, technologically and with management skills.

Ganga Grams -

- Ganga Gram is another inter-Ministry project between SBM and the National Mission for Clean Ganga (NMCG).
- The Project is focused on better cleanliness and infrastructure facilities in villages on the banks of river Ganga, through convergence with other departments.
- Ganga Grams aim at renovation of ponds and water sources, promotion of sprinkler irrigation, promotion of tourism, modern crematorium infrastructure, convergence of central and state schemes, proper disposal of waste water, proper disposal of solid waste, water conservation projects, organic farming, horticulture and medicinal plants.

Corporate Partnerships -

To facilitate financial contributions from individuals and corporates, *Swachh Bharat Kosh* was set up which has received a total of Rs 839.3 crores as of March 2018.

Conclusion -

The above narrative seeks to explain that Swachh Bharat Mission, the largest behaviour change programme in the world is not a matter of chance but that a well thought out engagement of all stakeholders holds the key.

Sanitation: A Purification Process

Gandhiji's idea of Swachh Hindustan -

- There is considerably more to Gandhiji's idea of a *Swachh Hindustan* than building toilets and making it free from open defecation free, although it is the first and very important step.
- Gandhiji wanted to see Hindustan Swachh clean and cleansed, body and soul.
- Gandhiji felt extremely hurt the way we all treated communities who were condemned to handle filth and human excreta.
- Jhadoo was not just a symbol of physical cleanliness alone. He established Jhadoo as a symbol of Antyodaya. He clearly led and advised on the journey of welfare from Antyodaya to Sarvodaya.

Insanitation in India -

- Back from South Africa, Gandhiji travelled the length and breadth in India. He witnessed and experienced insanitation, lack of cleanliness, unhygienic environment, dirt and filth throughout the country.
- Gandhiji had decided to travel with the common people in third class in railways and as a
 deck passenger on ships. On his deck travel, he noted 'What was an apology for a
 bathroom which was unbearably dirty and the latrines were stinking stinks'.

Sanitation in Indian Cities -

- Similar was the situation in temples he visited. During his visit to Haridwar and Rishikesh, he noted that people dirtied the roads and the fair banks of Ganges.
- Habitations were no different. When he visited Benaras in 1916, he found that the old proper city was usually a stinking den with the hamlet (mohalla) based easy going habitations that abused existing sanitation laws and civic traditions.
- In educational institutions and the public events such as conferences, Gandhiji for the first time brought up the issue of sanitation and hygiene.

Gandhiji in Action on Sanitation -

- In the rules that he framed for the Ashram in Ahmedabad he wrote that sanitary services were essential as sacred services and yet it was looked down upon in the society, with the result that it was generally neglected and afforded considerable scope for improvement.
- In the prayer meetings that he addressed during late 1947 and January 1948, he, on several occasions, appealed to people to keep the clean and sanitised, and practice good personal hygiene.

Turning the Searchlight Inward -

- Gandhiji's work for improving sanitation and his campaign for removal of untouchability was also an essential component of Satyagraha with self and society. Satyagraha implied process of self-purification. Sanitation and Hygiene were for him important even for embarking on a spiritual journey.
- Cleaning self and environment, for Gandhiji, was the first step in the act or self-purification.
 The second and most important part of self-purification was giving up age old prejudices against the Dalits who were the silent and suffering sanitation workers in the society.
- He wanted that each one of Caste Hindus worked for reparation i.e. removing untouchability and helping improve their welfare.

- The sanitation and hygiene scene in India still needs substantial reform and improvement. We have not yet fully responded to Gandhiji.
- The schemes are reduced to targets, structures and numbers. Gandhi emphasised on sanitation education. What most of us in India require is 'toilet training' and, sanitation and hygiene education.

Conclusion -

It is time to turn the searchlight inwards and improve to pay tribute to Gandhiji and feel responsible to self and society.

Staircase to Swaraj

Truth Realisation -

For Gandhi, sanitation was not just a biological requirement; it was a way of life, an integral part of Truth realisation. His understanding of cleanliness stems from his realisation of the universal oneness of Truth. Gandhi who worshipped Truth as God, saw the Absolute, the all encompassing Truth as Pure and hence equated cleanliness with godliness. He accorded 'sanitation' the status of an essential step to freedom incorporating it into the list of eighteen Constructive Programmes. Gandhi believed, sanitation, cleanliness of inner and outer self are means of God realisation.

Swaraj -

- Addressing the grand audience on the occasion of the inauguration of Banaras Hindu University, he referred to the filth and smothered the Holy city. "No amount of speeches will ever make us fit for self-government (freedom). It is only our conduct that will fit us for it."
- Cleanliness has been a 'swarajya yojana' for him. 'Swaraj is not Poorna Swaraj, until all the
 ordinary amenities of life are guaranteed to every human under it.

An Act of Nation Building -

"One of the chief causes of our poverty is the non-availability of this essential knowledge of hygiene. In this sense, he stated, Swaraj is not 'freeing India merely from the English yoke. . . . but from any yoke whatsoever."

An Act of Sublime Joy -

He deemed cleaning as an act of purification and drew immense joy from it.

<u>Gram-Rajya -</u>

- Gandhi's image of a free village That village may be regarded as reformed, which has
 every kind of village industries to produce each of her requirements, in which nobody is
 illiterate, where the roads are clean, there is a fixed place for evacuation, the wells are
 clean..."
- An ideal Indian village will be so constructed as to lend itself to perfect sanitation.
- "If sanitation in villages can be improved, lakhs of rupees will easily be saved and the condition of people improved to that extent. A sick peasant can never work as hard as a healthy one."

Response to Sanitation Issue -

- A section of Indians known as scavengers or Bhangis were engaged for generations in the task of removing night soil (feces) from the old-style basket-type (dry) latrines.
- Gandhiji was very concerned with the suffering of these people because he felt that, though
 they were considered to be at the bottom of society, they executed the most important tasks
 of organising community sanitation and health.
- Every time he went to Delhi, he either stayed with them in Bhangi colony or visited them.

- Harijan Sevak Sangh established Safai Vidyalaya (Sanitation Institute) in 1963 at the Sabarmati Gandhi Ashram, Ahmedabad, Gujarat, with the purpose of liberating the scavengers from this kind of work.
- The primary objectives of Safai Vidyalayas are upliftment of sweepers and scavengers, upgradation of rural and urban health and sanitation.

Swachh Rail, Swachh Bharat

Steps taken by Railways for Swachh Bharat Campaign -

- 1. Outsourcing of cleanliness of all major stations;
- 2. Improving flooring of platforms to enable mechanised cleaning;
- 3. Providing separate dustbins for different types of waste;
- 4. Employing CCTVs to monitor cleanliness practices;
- 5. Installation of bio-toilets in passenger coaches;
- 6. Development of a "Customer Complaint" Web Portal and Mobile Application to collect continuous Citizen Feedback;
- 7. Introduction of on-board housekeeping services (OBHS), Clean my Coach and Coach Mitra services in nominated trains;
- 8. Employing first of its kind, real time 24X7 public grievance system through Twitter and provision of medical, security and other emergency assistance to passengers.

Cleanliness Drive: Modalities -

- The mechanism of selecting the competent agency through the open, transparent, fair and competitive bidding process has been given impetus through process reforms for service contracts.
- 2. Integrated Housekeeping Contracts have been put up in place at major stations to promote use of mechanised cleaning equipments and quality materials.
- 3. Additional toilets at Railway Stations have been installed including Pay-and-Use toilets. Use of CCTVs for monitoring cleanliness activities at major stations has also been increased.

Effective Customer Engagement -

- Weekly intensive cleanliness drives have been undertaken at various railway stations in rotation by Zonal Railways.
- Charitable Institutions/Social Organisations including voluntary organisations have been associated to undertake cleanliness awareness campaigns.

Bio-Friendly Technology -

- Bio-toilet technology has been developed jointly by Indian Railways and DRDO.
- The efficacy of the bacteria used in the system has been tested by DRDO in conditions like those at Siachen Glacier.
- The biggest advantage of this technology is that the colony of anaerobic bacteria converts human waste mainly into water and biogasses (mainly methane, Carbon Dioxide). The gases escape into the atmosphere and the wastewater is discharged after disinfection on to the track.
- With an aim to provide clean and efficient toilets and to reduce the water consumption in toilets, IR is doing a trial of Bio-Vacuum toilets. This has aircraft type vacuum toilet on the passenger interface and bio-digester tank is fitted beneath the toilet area on the coach. The faecal matter gets digested in the bio-tanks on board.

Solid Waste Management -

To manage solid waste, segregation in three separate streams namely biodegradable (wet waste), non-biodegradable (dry waste) and hazardous waste is required. Railways has taken up a pilot

project for disposal of municipal solid waste generated at railways terminals in an environment-friendly manner including conversion of waste to energy.

Achievements -

The key areas of achievement of cleanliness behind the success stories are as under -

- 1. Reduction of plastic waste through bottle crushing machines.
- 2. Personal hygiene at railway stations through sanitary napkin vending machines.
- 3. Outsourcing of cleanliness at major railway stations.
- 4. Awareness initiatives carried out in schools, NGOs and communities.