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Inter-Regional Variations of Swachh Bharat Mission in Tamil Nadu: An Exploratory Analysis

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Abstract: *The Quality of Life of people attributed with well settled sanitation and hygiene ensure for social and economic development of society. Cleanliness is indispensable to our modern notion of social perfection, which is related to hygiene and diseases prevention. Sanitation in India has always been the central issue as cleanliness is the most important for physical wellbeing and a healthy environment. The values of cleanliness, therefore, have a social and cultural dimension beyond the requirements of hygiene for practical purposes. However, it continues to be inadequate despite of the longstanding efforts by the various levels of the government and communities to improve the coverage. The United Nations has made universal access to water and sanitation one of its main Sustainable Development Goals (SDGs), considering it essential for improved health, well-being and dignity. Sanitation such as personal hygiene, home sanitation, waste water disposal, garbage disposal and excreta disposal to improve the quality of life of people and the privacy and dignity of women. In 2014, Prime Minister of India launched a nation-wide campaign in the form of Swachh Bharat Abhiyan with the aim to achieve universal sanitation coverage and eradicate the practice of open defecation in India by 2019.to be completed on October 2, 2019 in general and to promote cleanliness and hygiene in a wholistic manner; This paper has its core objective as to analyse the performance of Swachh Bharat Mission in Tamil Nadu and however, the specific objectives are to analyse the region wise distribution of the coverage of SBM and its achievement; to bring out the financial allocations to SBM; to know the various specific schemes enunciated to reach total sanitation in the state and to suggest possible solutions to strengthen the SBM to improve further the quality of sanitation The present study has been based only on Secondary Data relating to the Region wise coverage of SBM, construction and renovation of Individual Household Toilets and Community Toilets, Government measures on sanitations, etc.., have been gathered from various official documents, Annual Reports of Water and Sanitation, Tamil Nadu-An Economic Appraisal, Hand Book of Statistics, selected web sites, etc. This paper concludes that since poor sanitation creates serious negative externalities, creating public health hazards and jeopardizing economic development for all, though Governments have a critical role to play as Sanitation is a public good in need of public funding that will allow everyone to benefit from improved health as well as social and economic development.*

Rationale

"Cleanliness is Indispensable to our Modern Notion of Social Perfection" (Jacob Burckhardt) which is related to hygiene and diseases prevention in a society. Mahatma Gandhi said "Sanitation is more important than independence". He made cleanliness and sanitation an integral part of Gandhian way of living. His dream was total sanitation for all. He use to emphasize that cleanliness is most important for physical wellbeing and a healthy environment. Sanitation and drinking water in India has always been the central issue. Without proper sanitation we can't keep our surroundings clean and prevent ourselves from diseases. Around 1989, David Strachan put forth the "Hygiene Hypothesis" in the British Medical Journal that environmental microbes play a useful role in developing the immune system; the fewer germs people are exposed to in early childhood, the more likely they are to experience health problems in childhood and as adults. The valuation of cleanliness, therefore, has a social and cultural dimension beyond the requirements of hygiene for practical purposes. However, it continues to be inadequate despite of the longstanding efforts by the various levels of the government and communities to improve the coverage. The rural sanitation programme in India was introduced in 1954 as a part of First Five Year Plan of Government of India. The 1981 census revealed that rural sanitation coverage was only 1%. The government has begun giving emphasis on rural sanitation after declaration of International Decade for Drinking water and Sanitation during 1981-90. In 2015, 40% population has access to improved

Recognizing the depth of this problem, the United Nations has made universal access to water and sanitation one of its main Sustainable Development Goals (SDGs), considering it essential for improved health, well-being and dignity (WaterAid Canada, 2019) . Globally, around 2 billion people lack access to improved sanitation (Sommer, Ferron, Cavill, & House, 2015) and around 701 million people still practice open defecation (Saleem, Burdett, & Heaslip, 2019), there is a global effort to end open defecation by 2030 by providing universal access to adequate and equitable sanitation and hygiene (United Nations 2016). India has one of the highest numbers of people in the world defecating in the open (530 million) with a sanitation coverage of only 38.70 per cent in 2014

India began its journey of cleanliness with the efforts of Mahatma Gandhi, the Father of our nation initiated a massive awareness program on hygiene and sanitation which inspired many more leaders to follow his footsteps. India has run sanitation programmes for decades, Central Rural Sanitation Program in 1986 which included expanded aspects of sanitation such as personal hygiene, home sanitation, waste water disposal, garbage disposal and excreta disposal to improve the quality of life of rural people and the privacy and dignity of women. Unfortunately, it could only achieve low success because of minimal community participation. The failure of the Central Rural Sanitation Program led to its restructuring into India's Total Sanitation Campaign (TSC) in 1991, which was later renamed as Nirmal Bharat Abhiyan (NBA) in 2012. According to the reports tabled in Parliament in 2015 by the Comptroller and Auditor General (CAG) based on the audit covering the TSC and NBA between 2009 and 2014, there were planning level weaknesses in the implementation of TSC and later NBA. The report stressed the need for an improvement of overall governance at the grassroots level else, more deployment of resources would not have a significant impact. Furthermore, it was suggested that implementation

must be based on realistic planning and backed by large-scale Information-Education-Communication campaigns to bring about behavioural changes in the target population. It was in this context that the sanitation program was revamped into the Swachh Bharat Mission in 2014. In 2014, Prime Minister launched a nation-wide campaign in the form of Swachh Bharat Abhiyan to achieve the dream of Clean India as a tribute to Mahatma Gandhi on his 150th birth anniversary with the aim to achieve universal sanitation coverage and eradicate the practice of open defecation in rural India by 2019.to be completed on October 2, 2019 in general and to promote cleanliness and hygiene in a wholistic manner; to reduce the incidence of open defecation; to bring improvement in the quality of life in rural areas; to encourage the concept of sustainable sanitation practices; to create awareness about health and hygiene; to help India reach to India Sustainable Development Goal 6; to encourage cost-effective sanitation efforts.; to develop community managed sanitation systems ; to focusing on scientific Solid & Liquid Waste Management systems.; and to create a positive impact on gender and promote social inclusion specifically. Moreover, the SBMG emphasized a community-based approach with a focus on raising awareness and encouraging collective behavior change, and thus generating demand for toilets in rural areas. It also provided an incentive of Rs. 12,000 to eligible households for the construction and use of toilets

The SBM, consisting Swachch Bharat Abhiyan- Gramin focuses on improving the ambit of rural sanitation coverage and eliminating the practice of open defecation. The scheme also focuses on improving the management of solid and liquid wastes; and Swachch Bharat Abhiyan- Urban aims to ensure three-fold objectives within its scope. First of all, it envisages reducing the number of households engaging in the practice of open defecation. The second objective is to convert pit latrines into sanitary latrines. The third objective of the Clean India Mission is to halt the construction of any new unsanitary toilets.

The program uses a multi-dimensional approach to achieve the goals of sanitation and hygiene.viz, *Community Participation- people's participation is kept as the main focus of the initiative; Promoting Behavior Change-the provision of reward and incentives to the best performing entity is a healthy way to generate positive effort; Flexibility in Choice - the scheme offers flexibility to the beneficiaries for upgrading their toilets according to their requirements and financial condition; Use of Technology - Integrating the element of rising Information technology power has been one of the peculiar features of this program; Extensive Use of Social Media and New-age Technology is what makes this program a success; Capacity Building - the scheme integrates the cleanliness framework right from the grass-root level to the district level. This holistic chain of development helps the scheme helps in building the capacity of the community in an effective manner; All-round Engagement - Inculcating every part of the resource base from Swachh Bharat Kosh to the organization's Corporate Social Responsibility is a leading driver behind the massive reach of the program.*

Under the SBM, there was a dramatic expansion in engagement from these actors and sectors. This was largely driven by the consistent focus and attention from the highest levels of government and political leadership in the country. Initiatives were no longer restricted to the government or civil society, but other actors of importance also lent their voice to this issue.

The Survekshan was launched under the Swachh Bharat Abhiyan to conduct annual survey of cleanliness and sanitation in cities and towns across India. carried out by the Quality Council of India. The first survey was undertaken in 2016 and covered 73 cities. But the latest Swachh Survekshan 2019 covered 4,237 cities in a record time of 28 days. Indore has been bagging the first place for 3 years. The top 20 cities in the 2019 survey are- Indore, Mysuru, Ahmedabad, Navi Mumbai, Tirupati, Rajkot, Vijayawada, Ghaziabad, Surat, Mul, Ambikapur, Ujjain, NDMC, Karhad, Lonavala, Vita, Dewas, Bhilai, Shahganj, and Panhala.

The government has also come out with ODF+ and ODF++ status to declare a location's sanitation standard. National sanitation coverage rose to 65% in 2017 as compared to the low-figure of 38.7% in 2014. In August 2018, this figure touched the soaring 90%.

By 25 September 2019, 35 states/Union Territories with 699 districts and 5.99 lakh villages were declared Open Defecation Free (ODF).

As of March 2020, the program, run by the Ministry of Jal Shakti's Department of Drinking Water and Sanitation, has helped with the construction of over 100 million toilets. As a result, more than 600 thousand villages have declared themselves open defecation free (ODF) across 706 districts. According to the National Annual Rural Sanitation Survey (NARSS 2019-2020), the usage of these toilets is found to be over 95%.

Swachh Bharat Mission- Grameen (SBM-G) Phase-I has been fairly successful in changing behaviours to adopt the practice of safe sanitation and the construction of over 100 million toilets and with over 6 lakh villages in 706 districts of 36 states, Union Territories (UTs) declaring themselves open defecation free (ODF). The SBM-G Phase-II which will be implemented from 2020-2021 to 2024-2025, will aim at sustaining the gains made in the first phase of the programme since 2014 in terms of toilet access and usage, ensuring that no one is left behind and effective management of solid and liquid waste in the villages9 . The Phase-II of the programme will focus on Open Defecation Free Plus (ODF Plus), which includes ODF sustainability and Solid and Liquid Waste Management (SLWM). SBM-G Phase-I is often recognized as the largest behaviour change programme in the world10 . Based on the learnings of Phase-I of the programme, continuing behaviour change communication (BCC) will be pivotal to ensure ODF sustainability. Till recently, behavioural change is being motivated through mass media and interpersonal messages communicated by celebrities, who are creating awareness about the ill-effects of open defecation.

The State, Tamil Nadu has have given a new thrust to the Sanitation front towards declaring the state as an 'Open Defecation Free State', by strengthening institutional arrangements for implementation, ensuring availability of funds, provision of infrastructure and also through sustained IEC campaigns. All the Integrated Women Sanitary Complexes in rural areas have been renovated and efforts are on to ensure continuous usage and maintenance through the Habitation level user groups. 'Clean Village Campaign' for promotion of clean environment and sanitation in rural areas has been reintroduced. Effective disposal of solid and liquid wastes, ban on use of plastics with due emphasis on water conservation and rain water harvesting structures will be part of the campaign. Sanitation security is an integral part of health security. Tamil Nadu is committed to achieve

Open Defecation Free status efforts have been taken to ensure that each household has access to sanitation facilities. Today the concept of sanitation is expanded to include, personal hygiene, home sanitation, safe drinking water, garbage and excreta management, safe disposal of waste water and menstrual hygiene management. In addition, measures to have mosquito-free, fly-free, clean and healthy habitations through participatory and eco-friendly solid and liquid waste management have also been taken. The inadequacy of proper sanitation facilities in many of our cities and towns, and lack of proper maintenance of public and community toilets contributes to the continuation of the practice of open defecation. A policy for achieving Open Defecation Free Status in the urban areas formulated that will ensure provision of sanitation facilities through UGSS, increased public conveniences to ensure that the health of the urban population in the state is protected and at the same time, pollution of land and water resources in the State is mitigated. In this context, the present paper attempts **to study the Regional Variations in the Performance of Swachh Bharat Mission, if any, in Tamil Nadu**.

Objectives

The core objective of this paper is to study the performance of Swachh Bharat Mission in Tamil Nadu and however, the specific objectives are to analyse the region wise distribution of the coverage of SBM and its achievement; to bring out the financial allocations to SBM; to know the various specific schemes enunciated to reach total sanitation in the state and to suggest possible solutions to strengthen the SBM to improve further the quality of sanitation in the state.

Materials and Methods

The present study has been based on only Secondary Data. The secondary data relating to the Region wise coverage of SBM, construction and renovation of Individual Household Toilets and Community Toilets, Government measures on sanitations, etc.., have been gathered from various official documents, Annual Reports of Water and Sanitation, Tamil Nadu-An Economic Appraisal, Hand Book of Statistics, selected web sites, etc. For analytical purpose, the State has been divided into Four Regions viz *Northern Region - consisting of Ariyalur, Chengalpattu, Cuddalore, Kallakurichi, Kanchipuram, Perambalur, Ranipet ,Tirupathur, Tiruvallur, Tiruvannamalai, vellore,and Villupuram; Southern Region - consisting of Dindigal, Kanyakumari, Madurai, Pudukkottai, Ramanathapuram, Sivagangai, Tenkasi, Theni, Thoothukudi, Tiruchurappalli, Tirunelveli and Virudhunagar; Western Region- consisting of Coimbatore, Dharmapuri, Erode, Karur, Krishnagiri, Namakkal, Nilgiris, Salem and Tiruppur; and Eastern Region –consisting of Thanjavour, Nagappattinam and Tiruvarur.*

Analysis and Discussions

Some of the major observations made on the basis of the data analysis are given here to have an exposure on the performance of SBM in the state. There are many countries that have been successful in making rapid progress in sanitation coverage, transforming lives, the environment and the economy within a generation. With strong political leadership, sufficient resources and a 'whole-of-government', multi-stakeholder approach,

governments can quickly transform sanitation and find ways to put the last first. In the 1960s and 1970s, Malaysia, the Republic of Korea, Singapore and Thailand produced rapid and remarkable results to achieve total sanitation coverage. More recently, India has created a mass movement which has dramatically reduced and almost eliminated the undignified and dangerous practice of open defecation, which disproportionately affects the rural poor. Since 2000, Cambodia and Ethiopia reduced open defecation by more than 50 percentage points, and Cambodia, Indonesia, the Lao People's Democratic Republic and Nepal increased the use of at least basic sanitation services by more than 40 percentage points. Governments in many other countries are helping individuals and communities move up the sanitation ladder towards universal access to safely managed sanitation services – by mobilizing communities, strengthening markets and service providers, deploying a range of funding and financing mechanisms to build resilient sanitation services that make better use of scarce resources, recycling waste for economic and environmental benefits, and building the circular economy.

The region wise coverage of SBM in the state implies that among the four regions of the state, the highest number of Gram Panchayats covered under SBM is registered in the Northern region that is 4867 GPs followed by the Southern Region (4004 GPs) the Western Region (2201 GPs) and only 1453 Gram Panchayats are covered in the Eastern Region. Similarly, the total number of toilets constructed was also proportionately related to the number of Gram Panchayats. Further it is noted that in the Northern Region, the highest coverage is registered in the district Thiruvanamallai (860 GPs) and the lowest coverage is registered at Peraballur district (121 GPs). The Ramanathapuram district stands first (429 GPs) and the Kanniyakumari stands the last (95 GPs) among the districts of Southern Region in the case of SBM coverage. In the Western region, the highest coverage is registered to Salem district (385 GPs) and the lowest is that is only 35 GPs are covered in the Nilgiris district.

It is also calculated that the average number of GPs covered under SBM for the Northern Region is 406 with 62% of the variation and it is 485 with 52.28% of the variation, 334 with 48.2% of the variation and 245 with 51% of the variation for the Eastern Region, Southern Region and Western Region respectively.

Table 1. Region Wise Distribution of Coverage of SBM in Tamil Nadu

Northern Region

Sl.No	District	No of GPs	Total No of Toilets
1	Ariyalur	201	1,25,495
2	Chengalpattu	359	NA
3	Cuddalore	683	2,71,550
4	Kallakurichi	412	NA
5	Kanchipuram	274	2,05,059
6	Perambalur	121	67,319
7	Ranipet	308	NA
8	Tirupathur	226	NA
9	Tiruvallur	526	1,57,896
10	Tiruvannamalai	860	2,19,824
11	vellore	209	2,90,014
12	Villupuram	688	3,64,899
	Total	4867	

Mean	405.58	33659.5
SD	250.39	21288.13
CV	61.74	63.25

Eastern Region

Sl.No	District	No of GPs	Total No of Toilets
1	Nagapattinam	434	1,70,090
2	Thanjavur	589	2,30,258
3	Tiruvarur	430	1,02,725
4	Total	1453	5,03,073
	Mean	484.83	167691
	SD	253.22	52092.75
	CV	52.28	31.06

Western Region

Sl.No	District	No of GPs	Total No of Toilets
1	Coimbatore	228	99,875
2	Dharmapuri	251	1,80,479
3	Erode	225	1,38,584
4	Karur	157	89,619
5	Krishnagiri	333	2,28,765
6	Namakkal	322	1,47,846
7	Nilgiris	35	36,533
8	Salem	385	2,57,773
9	Tiruppur	265	1,37,227
Mean		244.56	75342.33
SD		124.75	39766.56
CV		51.012	52.781

Southern Region

Sl.No	District	No of GPs	Total No of Toilets
1	Dindigal	306	2,01,204
2	Kanyakumari	95	6.082
3	Madurai	420	1,65,671
4	Pudukkottai	497	1,32,597
5	Ramanathapuram	429	NA
6	Sivagangai	445	1,20,310
7	Tenkasi	230	NA
8	Theni	130	51,342
9	Thoothukudi	403	MA
10	Tiruchurappalli	404	1,43,425
11	Tirunelveli	195	1,97,692
12	Virudhunagar	450	1,19,264
Mean		333.66	25674.04
SD		160.94	16235.55
CV		48.23	63.23

Eradication of Open Defecation

The Government is determined to make Tamil Nadu an Open Defecation Free State. Public hygiene, sanitation and human dignity are affected by the open defecation. To achieve this objective, Town Panchayats have undertaken a massive programme of construction of community toilets, repairs to existing toilets, and an effective IEC campaign has been conducted. During the survey conducted by Town Panchayats open defecation has been noticed at 1095 locations.

Out of which 1985 new sanitary complexes have been constructed and 697 sanitary complexes have been renovated and put into use. Remaining 214 New sanitary complex works are under progress. Out of 1095 identified Open defecation places, 1010 places are now totally free from open defecation due to construction of the community toilets.

Construction of 2,29,853 Individual House Hold Latrines, conversion of 7794 numbers of insanitary Latrines into sanitary Latrines and construction of Community Toilet with 10,734 seats are fixed as a mission target for Town Panchayat with the Government of Tamil Nadu grant dovetailing with Swachh Bharath Mission.

Out of 528 Town Panchayats, proposal for 384 Town Panchayats have been sent to MoHUDA (Ministry of housing and Urban Affairs) for declaration of Open Defection Free towns, out of which 60 Town Panchayats consisting of Kancheepuram, Coimbatore, Cuddalore, Erode, Dindugal, Kanyakumari, Ramanathapuram, Salem, Madurai, Thoothukudi, Sivagangai, Tirunelveli, Vellore and Villupuram Districts have been declared as ODF Town Panchayats. Remaining 324 Town Panchayats are to be inspected by MoHUDA.

In respect of balance 144 Town Panchayats, action is under progress to declare the above towns as open defection free.

In respect of Town Panchayats, 2nd State High Powered Committee has approved the targets for the Mission period (2014-15 to 2018-19) as 360577 for construction of Individual Household Latrines (IHHL), 7794 for Conversion of Insanitary latrine and 28868 seats for construction of Community Toilets.

For the year 2016-17, targets have been revised as 125000 for construction of Individual Household Latrines and 2619 seats for construction of Community Toilets.

So far, 67608 Individual Household Toilets, 6755 conversion of insanitary latrines and 5151 seats of Community Toilets have been completed.

The Government of Tamilnadu has enunciated a number of schemes for the provisions of sanitation services through the construction of new toilets and renovation of toilets over the period of time. It is observed from the table 3 that in the year 2011-12 under the ODFTs there were 52 new toilets constructed and 75 toilets were renovated at the cost of Rs 5.53 crores; under IUDM scheme 80 new toilet were constructed at the cost Rs 6.04 crores. In the year 2012=13 under the ODFTS there were 160 new toilets constructed and 221 toilets were renovated at the cost of Rs 22.60 crores; under NABARD scheme about 376 toilets were constructed at the cost of Rs 45.20 crores : In the year 2013-14 under the ODFTS 174 new toilets were constructed at the cost of RS 22.60 crores , through the government funds 77 toilets were constructed at the cost Rs 10 crores and through the

general fund 401 toilets were renovated at the cost of Rs 8.01 crores in the state. It is also found that in the year 2014-15 under ODFTS 183 new toilets were constructed at the cost of Rs 22.60 crores. After that in every year continuously under the SBM the community toilets were also being constructed. In the case of Community toilets, in the year 2015-16 about 432 toilets, in 2016-17 about 320 units and 2017-18 about 345 units were constructed at the cast of Rs 61.40 crore. From this discussion it is observed that through the various schemes totally 2199 new toilets were constructed at the cost of Rs 203.98 crores in the state during the past eight years. (See Table 2)

Table .2.Various Sanitation schemes in Tamil Nadu

SL.NO	Year	Scheme	No of New Toilets	Renovation of Toilets	Projects Cost (crore)
1	2011-12	Open Defecation Free Toilet Scheme	52	75	5.53
2	2011-12	IUDM	80	-	6.04
3	2012-13	Open Defecation Free Toilet Scheme	160	221	22.60
4	2012-13	NABARD (RIDF)Scheme	376	-	45.20
5	2013-14	Open defecation free toilet Scheme	174	-	22.60
6	2013-14	Government Funds	77	-	10.00
7	2013-14	General fund		401	8.01
8	2014-15	Open defecation free toilet Scheme	183	-	22.60
9	2015-16	Swatch Bharath Mission Construction of Community Toilet	432 (2619) (seats)	-	17.02
10	2016-17	Swatch Bharath Mission Construction of Community Toilet	320 (2620) (seats)	-	17.03
11	2017-18	Swatch Bharath Mission Construction of Community Toilet	345 (2791) (seats)		27.35
		Total	**2199**	**697**	**203.98**

Table 3. Amount of Fund Allocated on SBM Distribution

SL.NO	Year	SBM Fund Released (Rs. In Crs)	No of IHHL Constructed	No of CSC Constructed
1	2014-15	205,12	3,80,047	234
2	2015-16	78.94	9,46,386	70
3	2016-17	537.02	11,39,671	30
4	2017-18	865.93	22,06,083	21
5	2018-19	760.99	6,20,766	30
6	Total	2,448.00	52,92,953	385

With regard to amount of fund allocated on SBM to the state during the study period 2014 -15 to 2018-2019, so for aboutRs 2448 crores have been allocated. The amount of allocations has been increase from Rs 205.12 crores in 2014-15 to Rs 760.99 crores in 2018-19, during the study period totally about 385 community sanitation centers have been constructed. It is deplorable fact that that the construction of community sanitation has drastically been reduced i.e from 234 to 30 during the study period. Further it is found that the constructed of IHHL and CSC are not uniformly distributed during the study period.(Refer Table 3)

Conclusion

Sanitation is vital to health and social and economic progress. Safe sanitation is also a human right – essential for the fulfillment of child rights and the achievement of good physical, mental and social well-being – recognized as a distinct right by the General Assembly of the United Nations in 2015. In the same year, Member States committed to the 2030 Agenda for Sustainable Development, including one of the targets of the SDGs: "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations". But, Sanitation suffers from chronic under-prioritization, lack of leadership, underinvestment,lack of capacity and so on. While the majority of countries have national policies and plans to support sanitation, few have allocated adequate human and financial resources to actually implement them. Though there are initiatives such as SBM for the improving the quality of sanitation it is not enough to provide the sustainable, resilient, safely managed services that will bring about substantive benefits to health, the economy and the environment. Since sanitation as basic rights of everyone, there would be a paradigm shift in the approach to sanitation from shame and disgust to pride and dignity. Social marketing and brand ambassadors for sustainable sanitation promotion would be initiated. The adoption of good sanitation practices would become an indicator of economic well being.

Though Governments have a critical role to play as Sanitation is a public good in need of public funding that will allow everyone to benefit from improved health as well as social and economic development. Since poor sanitation creates serious negative externalities, creating public health hazards and jeopardizing economic development for all, conversely, good sanitation generates economic benefits to the society. Regulation throughout the sanitation chain is crucial to ensure that the benefits are realized by everyone, it is the responsibility of each and every one of the society to revitalize the scheme like Swatch Bharath Mission which may require a combined activities including public health officials, grassroots organization, private sector and Government.

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