



# Socio-Economic Dimension of Sanitation Practices at Rural Households: An Empirical Study in Karnataka

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## Abstract

This paper attempts to study how **socio-economic** factors affect **sanitation practices** at rural households and the role of government in **Karnataka** state. “Sanitation is more important than independence” quoted by Mahatma Gandhi, this implies that proper sanitation and hygiene are essential for personal well-being and socio-economic development of the country. Because of lack of proper sanitation, communicable diseases spread causing considerable loss and disabilities to human resources. Considering this, the international community has set the provision of sanitation as part of the Millennium Development Goals, aiming to reduce the number of those without adequate sanitation facilities to half by the year 2015. To achieve this, various strategies are designed by the Government of India and the state governments. It is observed that the strategies involving nongovernment organisations are more effective than the ones involving exclusively the state in promotion of sanitation.

The demand for fundamental services such as drinking water and sanitation has become a significant challenge, especially providing eco-friendly sanitation services to millions of people. To aid the effective implementation of sanitation schemes in the country with such challenges, it is necessary for the governing bodies to have structured regulations, defined roles and responsibilities, clearly defined waste management process, financial viability and monitoring of systems. Rural Drinking Water and Sanitation Department (RDWSD), Government of Karnataka is striving to achieve SDG 6 ‘Ensure access to water and sanitation for all’ and SDG 12 “Ensure sustainable consumption and production patterns”. As a part of implementation SBM (G), RDWSD has notified “Karnataka State Rural Sanitation and Waste Management Policy, Strategy and Model Bye-laws for SLWM-2020”. This is prepared based on SBM-G guidelines, Karnataka Gram Swaraj and Panchayat Raj Act-1993, Environment Protection Act-1986, SWM Rules-2016 and PWM Rules-2016. This was drafted after due

consultations with water and sanitation experts, general public, and various government departments. The policy is strategic vision document to drive systematic implementation of rural sanitation programme. Strategy is a set of technical approaches and processes. Byelaw is a regulatory part for effective execution with special focus on solid and liquid waste management. Karnataka is the first state to come up with such an endeavour in the country.

*Key words: sanitation; social determinants; India; socio-economic; Karnataka; rural households*

## Introduction

Due to lack of proper sanitation, communicable diseases spread causing considerable loss and disabilities to human resources. Considering this, the international community has set the provision of sanitation as part of the Millennium Development Goals, aiming to reduce the number of those without adequate sanitation facilities to half. RDWSD is working towards ODF sustainability and ODF plus. 49,05,655 IHHLs and 2,111 Community Sanitation Complexes were constructed under SBM-G. In addition, with intent of innovation in improving access to and use of safe sanitation services the department has constructed 11,894 toilets in schools and anganwadis using special grants from the World Bank. The department has achieved significant progress in constructing and operationalizing of 1,359 SWM units at GP level. To irradiate the mind-set of the people regarding the SLWM units, they are branded as “Swaccha Sankeerna”. These units are modernised with sanitary pad incinerators with a special aid from World Bank. RDWSD is taking up model ‘Material Recovery Facilities (MRF)’ in four geo locations to complete the loop in sanitation value chain. In the LWM, grey water management is taken up in all the GPs under SBM (G), additional works are being mobilised through MGNREGS grants. Black water is being managed through promotion of twin pits which also helps to eliminate human intervention in FSM. For the safe treatment of faecal sludge, sixteen FSSM plants are being built as models in different geo locations. SHGs have been extensively trained to operate and maintain the infrastructure and system at the Swachha Sankeerna as revenue generating model.

To aid to the implementation of byelaws in the field and address the sanitation and water related issues, the department has set up a Call Center (PARIHARA) with a dedicated phone number 9480985555. Citizens can register their queries and get it redressed within set timeframe. Because of lack of proper sanitation, communicable diseases spread causing considerable loss and disabilities to human resources. Considering this, the international community has set the provision of sanitation as part of the Millennium Development Goals, aiming to reduce the number of those without adequate sanitation facilities to half by the year 2015. To achieve this, various strategies are designed by the Government of India and the state governments. It is observed that the strategies involving nongovernment organisations are more effective than the ones involving exclusively the state in promotion of sanitation.

SBMG was implemented on 2 October 2014, with an objective of making the villages open defecation free. On World Toilet Day 19th November 2018, Rural Karnataka was declared Open Defecation Free

- Organizing various programs in Karnataka, to maintain ODF sustainability
- ODF Plus Cell is installed at the state level for ODF Sustainability
- Each district will have 5 consultants, as per the guidelines for the successful implementation of the project
- IEC Cell has been set up in the State Office for the better implementation of information, education and communication programs
- With an objective to ensure ODF sustainability in rural areas, sanitation policy, strategy and bylaws were implemented
- In order to facilitate women and girls, at select women's hostels and high schools in the state, steps have been taken to install incinerators for the scientific disposal of menstrual pads.

Washing of hands is the first step towards personal hygiene. Various activities have been conducted in schools to make children aware of its importance. Washing hands before and after toilet usage & consumption of food are few important steps in personal hygiene. The 7 steps of hand washing using soaps were introduced in schools in the form of charts and posters to promote healthy hand washing practice.

Most women in rural Karnataka have health issues due to poor menstrual health management. One of the main verticals of SBM (G) is Menstrual Hygiene Management (MHM) where the focus is on improving the standard of living of rural women by making them aware of healthy menstrual practices. The fundamentals of MHM are the usage of properly washed and sun dried cloth, usage of sanitary pads, proper disposal of menstrual waste and breaking taboos surrounding menstruation. Incinerators are being implemented in schools in order to dispose the menstrual waste in a scientific way.

### **Objective:**

This paper intends to explore and analyze emphasis is placed on promoting good **hygiene practices** in the **rural households** with constructing lavatories, safe drinking water and other health sanitary best practice by government action mainly in **Karnataka** . Also study **Socio-Economic** factors that are crucial to style these goals to reality

### **Rural Sanitation in Karnataka: Socio-Economic factors**

Open Defecation has been a common issue especially in rural India. Historically, it wasn't considered a shame or looked at from a sanitary perspective. Over the past few decades, Karnataka has seen the implementation of various sanitation projects under centrally sponsored schemes, externally aided programs and Government of Karnataka sponsored programs such as Nirmal Grama Yojane, Swachha Grama Yojane, etc. According to the Baseline Survey of 2012, out of 70.32 lakh rural households in Karnataka, 35% households had toilets, while the majority 65% were without toilets. To achieve the desired goal of accelerating sanitation coverage across rural India, "Swachh

Bharat Mission” was launched on 2nd October 2014 by the Government of India. From 2nd October 2014 to 19th November 2018, 48 lakh Individual Household Latrines (IHHLs) were constructed across the state.

### **Swachh Bharat Mission (Gramin)**

With an objective to give more focus towards rural sanitation, central government rewarded scheme Sampoorna Swachhata Andolan was implemented from 2005 to March 2012, and Nirmal Bharat Abhiyan was implemented from April 2012 to 2nd October 2014 in all 30 districts of the state. Later Nirmal Bharat Abhiyan was renamed and restructured as Swachh Bharat Mission (SBM) Gramin, and was implemented on 2nd October 2014. Phase 1 of SBM Gramin prevailed from 2014 to 2020. Now, SBMG Karnataka Phase 2 is in process.

Every household, school and anganwadi should have a toilet and it should be accessible. Everyone must use toilets instead of open defecation. It should be maintained well. Roads and lanes must be clean. Solid-liquid waste management is also one of the main objectives of this mission. Overall, SBMG Karnataka is working towards implementing activities to bring in total sanitation in all villages.

### **Purposes of SBM (G) Karnataka:**

To bring awareness amongst rural people on the need for sanitation through hygiene awareness and health education

To create the necessity for cleaner environment

To encourage all rural households to construct and use toilets

Promote personal hygiene, cleanliness at household level and community cleanliness and thereby improve the quality of life of rural people

Establishment of sanitary facilities in all schools and anganwadis in the villages and bringing in sanitation practices among children.

The main objective of the Swachh Bharat Mission Gramin Karnataka Program is to achieve total sanitation in the entire rural environment by encouraging proper waste disposal and management at the village and community level.

Phase 1:

Rural India have never considered Open Defecation as embarrassing or a wrong practice. Over the past few decades several personal hygiene and sanitation oriented schemes have been introduced which have improved the awareness towards the same in rural people.

Defecating in the open leads to many fatal diseases. It causes mortalities of children within 5 years old, contamination of ground water and water bodies, financial loss due to health problems and affects the dignity of a person. Swachh Bharat Mission (SBM) Gramin was launched on 2nd October 2014 to eradicate open defecation, and to dispose human excreta in a safe and scientific way by encouraging the use of toilet and personal hygiene.

SBM Karnataka Phase-1 was aiming at making Rural Karnataka open defecation free. This scheme was implemented between 2nd October 2014 to 2019, with the aim to bring behavioral change in people, eradicating manual scavenging and other related goals. On 19th October 2018, Rural Karnataka was declared Open Defecation free. During SBM Phase-1, construction of 1283 Solid Waste Management Units were approved, out of which 470 units are functional. During this period, construction of 1675 community toilets were approved out of which 1191 community sanitary complexes are constructed and functional.

Phase 2:

Swachh Bharat Mission (SBM) Gramin Phase-2 is effective from 2020-21 to 2024-25. In this period, emphasis is given on ODF Sustainability and Solid-Liquid Waste Management. Along with these, focus is also given on retrofitting of existing toilets, construction of twin pit toilets, personal hygiene, hand washing and menstrual hygiene management. Under LOB and NOLB, 4,20,116 toilets have been constructed. The number of IHHLs in the state as on 7th November 2020 is 48,82,772. Awareness is being created to encourage every person in the household to use toilets every time. Importance is also given for proper waste management at village and encouraging communities for the segregation at source. FSTPs are being constructed for liquid waste management, and construction of GobharDhan units are in progress.

## **Major Components:**

### **Individual Toilets:**

Under this scheme, every BPL households, SC / ST households belonging to restricted APL sector, small and micro families, landless families, differently-abled families and household headed by women can construct individual toilets with a subsidy of Rs.12000/- which consists of Rs.7200/- from central government and Rs.4800/- from state government. The SC/ST family can get a benefit of Rs.15000/- where the state government provides an

additional Rs.3000/- under SCP/TSP. Focus is also given for the construction of Community Toilets wherever needed.

### **Community Toilet:**

Sustainability of ODF is the main objective of SBMG Phase-2. Central Ministry of Jal Shakti has instructed to construct community toilets if there is no availability of space to build individual toilets, and where there are maximum of 35 households. In the state, 905 community toilets are in use (as on August 2020), and the construction of 1862 community sanitary complexes are in progress. SBM (G) compensates up to 70% of the total fund and the remaining 30% can be covered under the 15th finance commission.

### **Solid - Liquid Waste Management (SLWM):**

More stress is given on the solid liquid waste management in rural areas to achieve total sanitation. The central government gives funds to SLWM units based on the number of households. With effect from 1st April 2012, Rs.45 per capita for GPs which have a population of more than 5000, and Rs.60 per capita for the Gram Panchayats which have a population of less than 5000 for the construction of SWM units. For construction of a liquid waste management unit, an amount of Rs.660 per capita for GPs with population more than 5000, and Rs.280 for GPs with population less than 5000. The ratio is 60:40, out of which Swachh Bharat Mission provides 60% and the state government provides 40% of the funds. Apart from this, funds from 15th finance commission can also be utilized.

### **Involvement of Community-Based Organisations and Women**

The local Community-Based Organisations (CBO) have repository infusion and could help in efficient delivery of services. Based on this concept, multilateral (World Bank) and bilateral (DANIDA) assisted programmes involved Community-Based Organisations (CBO) such as Village Water Supply and Sanitation Committee (VWSC) in all stages of implementation of the projects and maintenance during 1990s. The committees consist of both elected and selected members from the local bodies (GPs) and the community, respectively. The non-elected members are eminent personal in the village, served in education and health departments. Similarly women are given due weight while constituting the committee, considering their role in hygiene maintenance at the household-level. From the constituted group, a small executive committee was formed to monitor day-to-day activities and the secretarial assistance is obtained from local government (GPs). These CBO will have their own by-laws for effective function and carry out assigned task at various stages, such as planning, implementation and operation and maintenance of

assets created under the programme. Similarly, state-sponsored programmes such as NGY, SGY, the Nirmal Grama Yojana Committee and Swachha Grama Yojana Committee were formed. These CBOs are considered as an extended arm of the GP, under section 61A of Karnataka Panchayat Act. Women have been given priority in the CBOs by reserving a proportion of seats to them; considering their important role in maintaining household hygiene and their success in taking care of hand pump in different states (World Bank, 1998). The women Self Help Groups (SHG) has been very successful in maintenance of sanitation services such as cleaning the roads and drainages in Bijapur of Karnataka (Lathamala, 1996). Similar successes were observed in Tamil Nadu and Andhra Pradesh in managing Integrated Sanitary Complex scheme. In addition to this, they play a significant role in motivating others around to use and adopt more hygienic practices and create demand for sanitation facilities within the village.

### **Household latrines vis-à-vis Group latrines programmes**

As mentioned earlier, under CRSP, IHLs were given priority. After the reforms in TSC programme, priority was given for setting up sanitary complexes in a place acceptable for both men and women. The prescribed unit cost is up to Rs 2 lakh, shared by GOI, State Government and the community in the ratio of 60:20:20. However, the community contribution can be made by the local governance from its budget (GOI, CSRS 2002). This approach directly provides subsidy to communities rather than individuals. Though many households are inclined positively to have IHL, the scarcity of space, the traditional taboos (Veerashekhara, 1999) have become a constraint for construction of IHL. To overcome such constraints, the integrated Community Latrines Complex (ICLC) becomes a substitute. The maintenance cost of the community sanitary complexes has to be met by the Panchayats/voluntary organisations/charitable trusts/Self Help Groups and not the committee set up by local government. Bank sponsored IRWSS programme is based on this concept. At the beginning of the project, the communitybased organisation VWSC will estimate the demand for the environmental sanitation services and sources of investment, through PRA exercises. The expected investment for sanitation has to be met by both community as well as the State in the ratio of 30:70, respectively. The work in the village is tendered once the VWSC mobilises 25 per cent of the agreed amount. If the VWSC mobilises higher the agreed amount, then the state will release additional grant to match it. Thus, the capability of the VWSC is the deterministic factor to take up the integrated sanitary work in covering the village. However, under State-sponsored programmes, such as NGY and SGY, the subsidy programme is continued in some form or the other. In these programmes, the subsidy is based on individual household economy. The households below poverty line (BPL) are provided relatively higher subsidy compared to others. The subsidy component is felt necessary, under SGY, to promote sanitation services such as drainage, soak pits, etc. But, this incentive is being misused, because of the joint family structure. In a joint family, the ration cards are obtained by individual families and the subsidy is obtained using individual ration cards, recording the same IHL. For instance, in Kemblihanahalli of Bangalore Rural District, subsidy is claimed by 31 families against to 18 latrines constructed (Veerashekhara, 1999). Under demand-driven approach, one cannot but cite the success of Midnapur project in West Bengal, which changed the mindset of household on open defecation. The

project, aimed at changing of the habit of open defecation without provision of subsidy (World Bank, 1998). The emphasis was on defining a process and direction, which set the pace for achieving the physical targets of the programme. Project planners sought to create awareness and presented a range of technical options. Subsequent arrangements were made for producing, delivering and installing hardware and for administrative and accounting requirements. 127 villages and 3 gram Panchayats were covered under the IHL and declared 'Sanitation Villages' and 'Sanitation Gram Panchayats', respectively. The success of the project demonstrates that with proper guidelines and processes, even the poor can finance their own latrines and subsidy may not be necessary component. This approach was replicated in Maharashtra with small modification as 'Total Sanitation Campaign' in the name of Sant Gadge Baba Clean Village Sanitation Campaign (SGBVSC). These programmes are creating an atmosphere, which motivates people to become the driving force in sanitation efforts, while promoting new habits that could be sustained thereafter, without much financial support.

As mentioned earlier, the individual latrine programmes have replaced integrated programmes and Swacha Grama Yojana (SGY), in Karnataka (2001) is also a part of it. This programme includes five main components 1. Paving of internal roads in the village; 2. Constructing sewage systems and storm water drains; 3. Shifting manure pits from residential areas to compost yards; 4. Providing smokeless chulhas; and 5. Providing latrines for households, communities and schools. This programme has been named as Pancha Sutras in order to create a sense of ownership. The GP and community share 10 per cent of the total cost and take up following activities: q All households, which have minimum space, shall construct household latrine. q All new houses shall have an attached household latrine, including reconstructed houses. q Houses constructed by the state under 'Ashraya' and similar housing schemes shall be constructed with household latrines. q Group latrines with individual ownership. The contract for construction activity shall be awarded after community mobilises the required amount and deposits them in a designated bank account. The construction work is assigned to The Karnataka Land Army to keep the uniformity in standards.

## Conclusion

SBMG Karnataka is being implemented through Panchayat Raj institutions. The implementation of the program on ground-level completely relies on the Gram Panchayat. Based on the extensive consultations with water and sanitation experts, general public and various stakeholders including various government departments RDWSD has been able to draft "Karnataka State Rural Sanitation and Waste Management Policy, Strategy and Model Bye-laws for SLWM-2020". Further, Government order was issued for implementation of Policy and Strategy in all the 6022 GPs on 12th March, 2020 and Bye-laws were published in Gazetteer as per provision of section 316 of Karnataka Panchayath Raj Act on 28th May, 2020.

The Karnataka State Policy on Sanitation and Waste Management drives the objective which includes guiding principles and approach, long term vision, goals and timelines to achieve the goals. It is even tougher in the country where the introduction of new technologies and laws may call into question the traditions and convictions of the

people. State and non-state organisations across the country have realised that existing sanitation management systems cannot help to achieve the intended results. The Karnataka State Rural Sanitation Strategy describes the holistic approach for attaining the objective and includes guidance on technologies for retrofitting of toilets, solid and liquid waste management, financial resource planning, roles and responsibilities of different functionaries, information education and communication (IEC) and behaviour change communication (BCC), capacity building, monitoring and evaluation etc.

## References

1. "sanitation | Definition of sanitation in English by Oxford Dictionaries". Oxford Dictionaries | English. Retrieved 2017-11-17.
2. SuSanA (2008). Towards more sustainable sanitation solutions . Sustainable Sanitation Alliance (SuSanA)
3. "Diarrhoeal disease". World Health Organization. Retrieved 2017-11-17.
4. Gates Foundation (2010). "Water Sanitation Hygiene Fact Sheet 2010" (PDF). Gates Foundation.
5. Paranipe, Nitin (19 September 2017). "The rise of the sanitation economy: how business can help solve a global crisis". Thompson Reuters Foundation News. Retrieved November 13, 2017.
6. Introducing the Sanitation Economy (PDF). Toilet Board Coalition. 2017.
7. World Bank, ILO, WaterAid, and WHO (2019). Health, Safety and Dignity of Sanitation Workers: An Initial Assessment. World Bank, Washington, DC.
8. "Sanitation | JMP". washdata.org. Retrieved 2017-11-17.
9. WHO and UNICEF (2017) Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines. Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), 2017
10. "Urban sanitation facilities vs. rural sanitation facilities". Our World in Data. Retrieved 6 March 2020.
11. PRIA (2019): Lived Realities of Women Sanitation Workers in India: Insights from a Participatory Research Conducted in Three Cities of India. Participatory Research in Asia, New Delhi, India
12. "Sanitation". Health topics. World Health Organization.
13. Sphere Association (2018) The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response, fourth edition, Geneva, Switzerland, 2018. Paracha, Nadeem F. "Why some in Pakistan want to replace Jinnah as the founder of the country with an 8th century Arab". Scroll.in. Retrieved 9 January 2018.
14. Abhay Kumar Singh (2006). Modern World System and Indian Proto-industrialization: Bengal 1650-1800, (Volume 1). Northern Book Centre. ISBN 9788172112011.
15. Richards, John F. (1996). The Mughal Empire. The New Cambridge History of India. 5 (Reprinted ed.). Cambridge University Press. p. 130. ISBN 9780521566032. Retrieved 28 September 2012.

16. Jackson, Roy (2010). *Mawlana Mawdudi and Political Islam: Authority and the Islamic State*. Routledge. ISBN 9781136950360.
17. Logan, William (2006). *Malabar Manual*, Mathrubhumi Books, Calicut. ISBN 978-81-8264-046-7
18. Binita Mehta (2002). *Widows, Pariahs, and Bayadères: India as Spectacle*. Bucknell University Press. pp. 110–111. ISBN 9780838754559.
19. B. N. Pande (1996). *Aurangzeb and Tipu Sultan: Evaluation of Their Religious Policies*. University of Michigan. ISBN 9788185220383.
20. Dunn, Ross E. (2004). *The Adventures of Ibn Battuta: A Muslim Traveler of the Fourteenth Century*. University of California Press. ISBN 978-0520931718.
21. Tharoor, Shashi (2006). *India: From Midnight to the Millennium and Beyond*. Arcade Publishing. ISBN 978-1559708036.
22. Madani, Mohsen Saeidi (1993). *Impact of Hindu Culture on Muslims*. M.D. Publications Pvt. Ltd. p. 1. ISBN 978-8185880150.
23. *Journal of Human Genetics* (8 May 2009). "Diverse genetic origin of Indian Muslims: evidence from autosomal STR loci". *Nature*. Retrieved 14 September 2010.
24. "The mostly South Asian origins of Indian Muslims". *Gene Expression*. Retrieved 6 May 2015.
25. Kashif-ul-Huda (6 May 2007). "Genetically Indian: Story of Indian Muslims". *Radiance Viewsweekly*. Retrieved 18 March 2011.
26. Burton-Page, J., *Hindū*, *Encyclopaedia of Islam*. Edited by: P. Bearman, Th. Bianquis, C. E. Bosworth, E. van Donzel and W. P. Heinrichs. Brill, 2006. Brill Online.
27. *Muslim Caste in Uttar Pradesh (A Study of Culture Contact)*, Ghaus Ansari, Lucknow, 1960, p. 66
28. Singh Sikand, Yoginder. "Caste in Indian Muslim Society". *Hamdard University*. Retrieved 18 October 2006.
29. Aggarwal, Patrap (1978). *Caste and Social Stratification Among Muslims in India*. Manohar.
30. Bhatti, Zarina (1996). "Social Stratification Among Muslims in India". In M N Srinivas (ed.). *Caste: Its Twentieth Century Avatar*. Viking, Penguin Books India. pp. 249–253. ISBN 0-14-025760-8. Archived from the original on 12 March 2007. Retrieved 12 June 2007.
31. "Pasmada Muslim Forum: Caste and Social Hierarchy Among Indian Muslims: M.A.Falahi (Interview)". *Dalitmuslims.com*. 10 August 2008. Archived from the original on 8 July 2011. Retrieved 14 September 2010.
32. Bhanu, B. V. (2004). *People of India: Maharashtra*. ISBN 978-81-7991-101-3. Retrieved 14 September 2010 – via Google Books.
33. Rawlinson, H. G. (1 January 2001). *Ancient and Medieval History of India*. Bharatiya Kala Prakashan. ISBN 9788186050798.
34. *Tuḥfat-al-mujāhidīn: A Historical Epic of the Sixteenth Century*. 2006. ISBN 983-9154-80-X.
35. *Madras District Manuals: South Canara*. Superintendent, Government Press. 1894.