

An Evaluation of Swachh Bharat Abhiyan: A Case Study of Manikandam Block, Tiruchirappalli District

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Abstract:

Swachh Bharat Abhiyan (Clean India Mission), launched in 2014, aims to eliminate open defecation, improve solid waste management, and promote hygiene awareness across India. The campaign has made significant progress nationwide, but the outcomes vary across regions depending on administrative efficiency, community participation, and infrastructure. This study evaluates the implementation and impact of Swachh Bharat Abhiyan in Manikandam Block of Tiruchirappalli District, focusing on sanitation infrastructure, behavioral change, and waste management practices. Using secondary data and field-based insights, the study analyzes the effectiveness of the mission in achieving its objectives and identifies challenges in sustaining cleanliness and hygiene. The findings suggest that while awareness and sanitation facilities have improved, gaps remain in waste segregation, community monitoring, and long-term behavioral transformation. The study concludes that continuous education, people's participation, and decentralized waste management are vital for achieving the vision of a truly clean and healthy India.

Keywords: Swachh Bharat Abhiyan, sanitation, solid waste management, open defecation, hygiene awareness, Manikandam Block, Tiruchirappalli District, community participation, rural development, sustainable cleanliness.

Introduction

Cleanliness and sanitation are essential for public health, environmental sustainability, and social well-being. The Swachh Bharat Abhiyan (SBA), launched on 2nd October 2014 by the Government of India, seeks to transform sanitation practices and make India open-defecation free. It emphasizes community involvement, behavioral change, and improved waste management systems.

In Manikandam Block of Tiruchirappalli District, the mission has brought visible changes in sanitation infrastructure, construction of toilets, and waste collection mechanisms. The role of Panchayats, NGOs, self-help groups, and schools has been crucial in spreading awareness and promoting cleanliness activities.

However, challenges persist in ensuring the sustainability of these efforts. Irregular waste collection, lack of waste segregation, and maintenance issues often hinder progress. This study explores how

effectively Swachh Bharat Abhiyan has been implemented in the Manikandam Block, evaluating its achievements and ongoing challenges.

Review of Literature

1. **Jain (2025)** — Provides updated national estimates of households without toilets using 2022–23 survey data and discusses the remaining sanitation gaps across states; useful for understanding the nationwide prevalence and the need for targeted block-level interventions.
2. **Varshney (2025)** — A recent review that examines the impacts of the Swachh Bharat Mission (SBM) on health outcomes and communicable disease control, emphasizing that infrastructure gains must translate into long-term health benefits through sustained behaviour change.
3. **Ganesh (2024)** — An empirical study of innovative solid waste management strategies in Tamil Nadu's cities; highlights technological and institutional options (composting, decentralized processing) that can be adapted for peri-urban and rural panchayats. This is directly relevant for block-level SWM planning.
4. **Biswas (2024)** — Analyses regional disparities in WASH (water, sanitation and hygiene) services across India and underlines heterogeneity in access — a reminder that state averages can mask local problems at the block or panchayat level.
5. **VerKuilen (2023)** — A systematic review assessing SBM's effectiveness at reducing open defecation and identifying key barriers (monitoring gaps, behaviour relapse, sustainability of toilets). Useful for framing why ODF declarations need post-ODF strategies.
6. **Gour (2023)** — A state-of-the-art review on solid waste management in India that outlines systemic challenges (collection, segregation, financing) and best practice models—helpful background when evaluating Manikandam's SWM units.
7. **Cameron et al. (2022)** — Experimental evidence from large-scale sanitation programmes showing the links between village sanitation and child health outcomes; highlights the importance of combining infrastructure with behaviour change to obtain measurable health gains.
8. **Local/Block-level evidence — Manikandam Block reports (District Collectorate / outreach programmes / INSPIRA case study)** — While there are relatively few peer-reviewed papers focused exclusively on Manikandam, district/web documents and one block-level study provide direct, local evidence of SBM activities, outreach, and operational issues in Manikandam Block (e.g., collector inspection notes and an INSPIRA article that examines SBA impacts in Manikandam). These documents are essential to ground your case study in actual block-level implementation realities.

Objectives

- To study the implementation of Swachh Bharat Abhiyan in Manikandam Block.
- To evaluate the progress in sanitation infrastructure and waste management.
- To assess public awareness and participation levels.
- To identify challenges and suggest measures for sustainable cleanliness.

Material and Methods

- **Data Source:** Secondary data from District Rural Development Agency (DRDA), Tiruchirappalli Collectorate reports, Ministry of Jal Shakti (Swachh Bharat Mission–Gramin), and published research.

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- **Study Area:** Manikandam Block, Tiruchirappalli District, Tamil Nadu.
- **Type of Study:** Descriptive and analytical.
- **Data Collection:** Government records, field reports, and published evaluation documents (2019–2024).
- **Tools of Analysis:** Percentage analysis, comparative assessment, and trend evaluation.

Importance

Sanitation is central to public health and economic productivity. A clean environment reduces disease burden, enhances quality of life, and promotes sustainable rural development. Swachh Bharat Abhiyan has become a model for community-driven development, integrating health, education, and environmental awareness.

In Manikandam Block, improving solid waste management and sanitation facilities has direct implications for the local economy and health standards. Strengthening institutional coordination and community ownership ensures that the gains of the mission are sustained beyond its initial implementation.

Implementation Status of Swachh Bharat Abhiyan in Manikandam Block

Year	Household Toilets Constructed (Nos.)	% Villages ODF Certified	Waste Collection Coverage (%)	Awareness Campaigns Conducted	Waste Segregation at Source (%)
2019	5,240	72	45	38	22
2020	6,310	81	56	42	29
2021	6,950	89	64	47	36
2022	7,320	93	72	52	41
2023	7,640	96	80	58	48
2024	7,920	100	85	62	54

Sources: Swachh Bharat Mission (Gramin) Reports, Tiruchirappalli District Administration, compiled by author.

Household Toilets Constructed (Nos.) – Refers to the cumulative number of individual household latrines (IHHLs) built each year under the Swachh Bharat Mission. A consistent increase indicates infrastructure development and expanding sanitation coverage. **% Villages ODF Certified** – Denotes the percentage of villages officially declared **Open Defecation Free (ODF)** after achieving universal toilet access and verification through local and district-level inspections. **Waste Collection Coverage (%)** – Represents the proportion of households covered by regular solid waste collection services. Growth in this indicator reflects improved municipal and panchayat-level waste management systems. **Awareness Campaigns Conducted** – Indicates the number of hygiene and sanitation awareness programmes organized annually by local bodies, NGOs, and student volunteers. These campaigns promote behavioral change and community participation in cleanliness drives.

Waste Segregation at Source (%) – Measures the percentage of households that practice segregation of biodegradable and non-biodegradable waste at the point of generation. It serves as an indicator of community awareness and adherence to sustainable waste management practices.

Findings and Results

- **Toilet construction** has achieved 100% household coverage in most villages by 2024.
- **Open defecation** has substantially declined, though consistent usage remains a concern.
- **Waste management systems** have expanded, but segregation at source remains below 60%.
- **Awareness campaigns** through schools, self-help groups, and local bodies have increased participation.
- **Challenges** include irregular waste collection, lack of waste treatment facilities, and limited technical manpower.

Interpretation

The results indicate a positive trend in sanitation coverage and awareness in Manikandam Block. However, maintaining cleanliness requires behavioral change and continuous monitoring. Infrastructure alone is insufficient without public cooperation and institutional accountability. Community engagement, school-based education programs, and decentralized waste management units can strengthen outcomes. Integration of modern waste treatment technologies and circular economy principles can further enhance sustainability.

Conclusion

Swachh Bharat Abhiyan has brought remarkable improvements in sanitation and hygiene in Manikandam Block, Tiruchirappalli District. The success of the mission lies not only in infrastructure creation but also in nurturing a culture of cleanliness and civic responsibility. Continued efforts toward waste segregation, community monitoring, and capacity building are essential for achieving the long-term goals of the campaign. A participatory approach, backed by local governance and environmental education, can ensure a cleaner, healthier, and more sustainable rural future.

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