



# From Subsidies to Sustainability

## Microfinance as a Catalyst for Advancing Sanitation in India

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# The state of sanitation in India | A national challenge

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India continues to grapple with severe sanitation challenges, with approximately 15% of its population lacking access to basic sanitation facilities. Reflecting on 2016, an estimated 60% of India's population practiced open defecation<sup>1</sup> (OD), a rate four times higher than the global average (Alexander et al., 2016). Reducing this high prevalence of OD remains crucial for meeting the Sustainable Development Goal (SDG) target 6.2, by 2030 (VerKuilen et al., 2023).

In 2014 the Swachh Bharat Mission<sup>2</sup> (SBM) was launched with the ambitious goal of making India OD free by 2019. The SBM programme provides subsidies to households for constructing toilets, significantly boosting nationwide toilet-building efforts. According to the WHO/UNICEF Joint Monitoring Programme<sup>3</sup> (JMP) data, India experienced the largest decline in OD between 2015 and 2020 in absolute numbers compared to any other country. Despite these efforts, OD rates remain high, particularly among marginalised communities (WHO and UNICEF, 2021).

The fact remains, however, that more than 200 million people in India still lack access to a toilet (World Bank Report, 2023). In 2020, the JMP estimated that 15% of India's population continued to practice OD, with rates ranging from 1% to 70% across different states (WHO and UNICEF, 2021). The National Family Health Survey (NFHS) reported a slightly higher rate, with 19% of the population practicing OD in 2021. However, some studies suggest that these figures may underestimate the true extent of OD. For instance, Vyas et al. (2019) found that individual OD rates were 20 percentage points higher than those reported by the NFHS at the household level.

[1] Open defecation (OD) refers to the practice of defecating or disposing of human feces in fields, forests, bushes, bodies of water, or other open spaces (WHO and UNICEF, 2021).

[2] Swachh Bharat Mission (SBM), Swachh Bharat Abhiyan, or Clean India Mission is a country-wide campaign initiated by the Government of India on 2 October 2014 to eliminate open defecation and improve solid waste management and to create Open Defecation Free (ODF) villages.

[3] The WHO/UNICEF Joint Monitoring Programme (JMP) is the custodian of global data on Water Supply, Sanitation and Hygiene (WASH).

## **Understanding the Swachh Bharat Mission (SBM) subsidy model**

The SBM operates on a reimbursement model, requiring households to initially cover the cost of constructing their own toilets before they can receive financial support. Once households provide the necessary documentation, they are eligible for reimbursement of ₹12,000 (approximately €135). Despite these subsidies easing the process for many, a significant number of rural households still face substantial barriers.

One major challenge is raising the initial capital. The actual cost of building a toilet often exceeds ₹20,000 (around €225), a sum that many families cannot afford. Adding to the challenge, the cost of toilets varies widely, making it difficult for households to secure the necessary funds. On top of that, unlike in neighboring countries like Bangladesh, where inexpensive pit latrines are common, many rural Indian households prefer toilets with large pits or containment chambers (Coffey et al., 2017). These larger structures require less frequent emptying, which helps avoid the need for paying for emptying services. However, such latrines are costlier, and far exceed the ₹12,000 subsidy provided by SBM. As a result, many families resort to informal methods like borrowing from relatives or dipping into personal savings, but these options are not accessible to everyone. SBM reimbursements can sometimes be delayed due to institutional complexities. For example, unclear guidelines on the process and timeframe for disbursement. During this delay, households may be forced to pay high interest to moneylenders, which further discourages them from building toilets.

Another significant issue is the widespread lack of awareness. Many people are not informed about the importance of safe sanitation, the available technologies, or the appropriate toilet designs for their terrain. The scarcity of trained masons who can construct technically sound toilets exacerbates this problem. This information gap disproportionately affects marginalised groups, such as female-headed households, who may struggle to apply for subsidies or navigate the toilet construction process under the SBM. Moreover, in rural areas, many women remain unaware of whom to contact or what documents are needed to apply for toilet construction. Some articles intended to explain the SBM application process fail to provide clear guidance, leaving individuals unprepared to handle the institutional complexities. Additionally, previously constructed sanitation facilities may become non-functional and require major retrofitting due to damage, further complicating the sanitation landscape.

# FINISH Mondial | Bridging gaps and building futures

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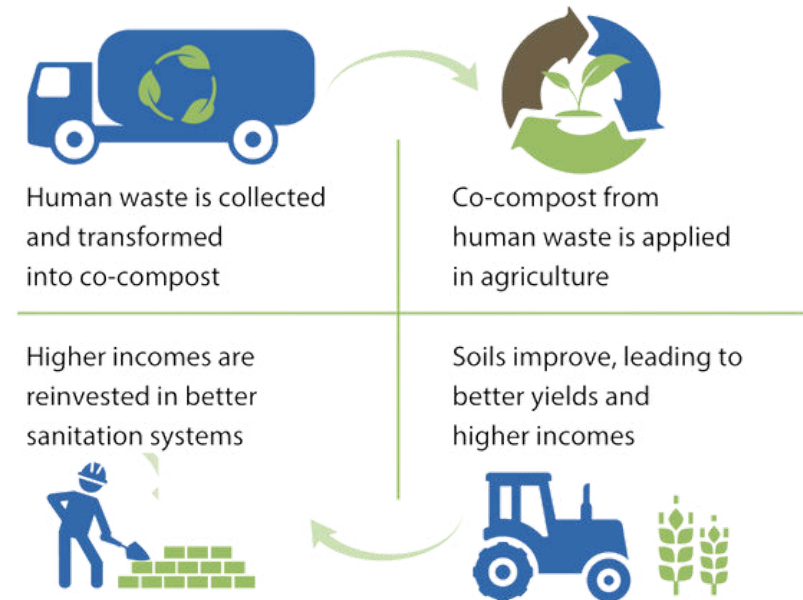
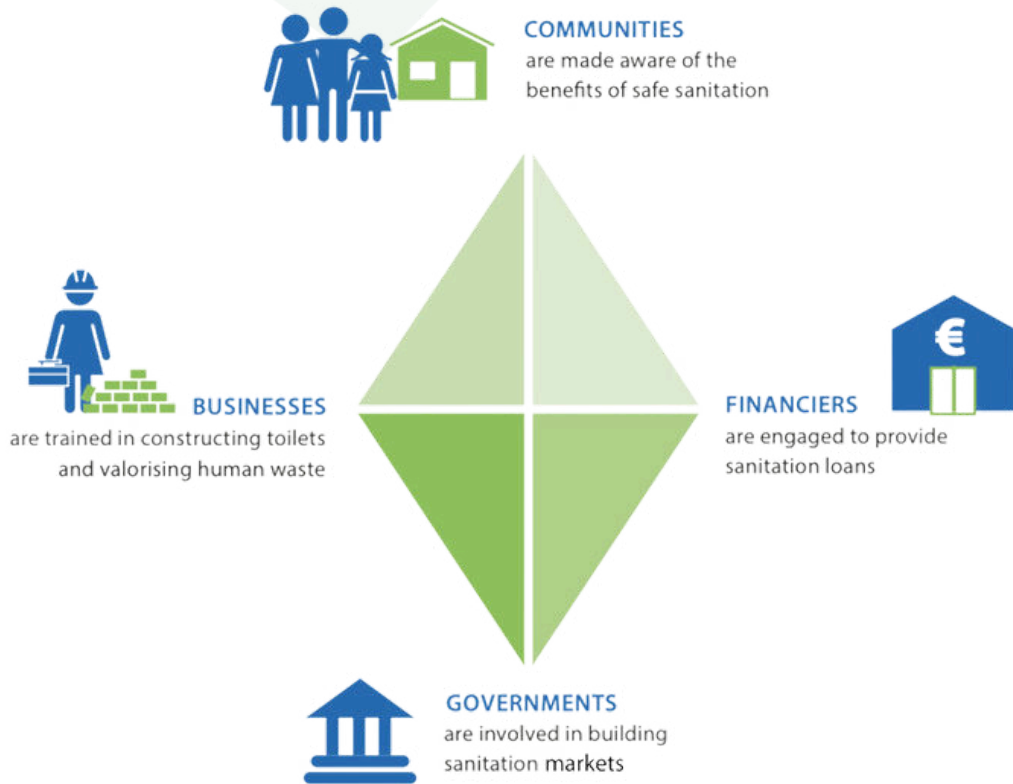
In response to the significant challenges in India's sanitation landscape, WASTE's FINISH Mondial (FM) programme, launched in 2009, has grown into a comprehensive initiative that not only focuses on toilet construction but also tackles the underlying barriers preventing widespread access to sanitation access and usage.

FM employs a market-based sanitation approach that connects households with financial institutions, making it easier for them to raise the initial capital needed to build toilets. By working closely with microfinance institutions (MFIs) and local banks, the programme helps families access affordable loans, reducing their reliance on informal borrowing or dipping into limited personal savings. This approach mitigates the impact of SBM subsidies, ensuring that financial constraints do not prevent households from constructing or retrofitting toilets.

In addition to financial support, FM actively works to bridge the information gap that has long hindered effective sanitation practices. The programme conducts targeted awareness campaigns to generate demand and educate communities about the importance of safe sanitation, the available technologies, and the appropriate design of toilets tailored to specific terrains. Furthermore, within FM, local masons are trained in constructing technically approved toilets, ensuring that households have access to skilled labor for their sanitation needs.

The programme emphasises supporting marginalised groups, including women, the elderly, and people with disabilities. It particularly targets female-headed households, who are the primary borrowers of MFI loans, ensuring they receive the necessary information and support. Since its inception, FM has facilitated the construction of over 2 million toilets, transforming the lives of approximately 10 million people across six countries. The programme has successfully mobilised more than €500 million into the sanitation market in developing regions with its holistic approach—combining financial solutions, education, and technical support with a multi-stakeholder diamond model.

## The Diamond Approach and circular sanitation model



# Microfinance | A catalyst for WASH transformation

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Microfinance has long been a powerful tool for enabling low-income households to manage financial shocks and invest in small-scale enterprises. Traditionally, microfinance has focused on income-generating activities financing small businesses, poultry farming, or cow rearing. However, its potential extends far beyond these conventional applications, particularly in the water, sanitation, and hygiene (WASH) sector. The SBM Gramin (SBM[G]) guidelines, 2018, indicate exploring microfinancing arrangements to provide low-cost financing for household latrine construction, leveraging networks of non-governmental organisations (NGOs) and self-help groups (SHGs) identified by financial institutions like NABARD<sup>1</sup>. This approach is aimed at democratizing sanitation by covering households not eligible for direct SBM(G) incentives or those wishing to build more expensive toilets. The arrangement would combine financial resources, management skills, and outreach capabilities to meet the demand for toilets. The beneficiaries are also encouraged to contribute to the construction of toilets to promote ownership of the system. Sanitation microfinance, for example, does not directly generate income. Instead, it provides loans that help families invest in household sanitation solutions, such as building toilets or installing septic tanks. These investments, while not immediately profitable, lead to long-term savings by reducing medical expenses, reducing unproductive time spent due to non-availability of WASH infrastructure and in tandem increasing productivity.

Microfinance makes sanitation more affordable by enabling households to pay for the construction of toilets in installments spread over time, rather than in one large lump sum payment. This not only eases the financial burden but also ensures that more families can access and maintain proper sanitation facilities. Moreover, at a business level, microfinance supports the growth of sanitation service providers further strengthening the sanitation service chain.

One of the biggest challenges in the WASH sector is the perceived lack of attractiveness of WASH loan portfolios for private financiers. Leigland et al (2016:3) further deliberates that 'private investors tend to view the water sector in emerging markets as not creditworthy'. Water supply and sanitation projects often require long-term repayment periods, and the link to income generation is not always clear.

[1] The National Bank for Agriculture and Rural Development (NABARD) is an All India Financial Institution (AIFI) and an apex Supervisory Body for overall supervision of Regional Rural Banks, State Cooperative Banks and District Central Cooperative Banks in India.



However, programmes like FM have demonstrated through a pragmatic approach that microfinance can play a critical role in improving access to WASH services. FM identifies regions ready for microfinance interventions and partners with financial institutions to provide affordable sanitation loans. These loans are tailored to the specific needs of households and businesses, making it easier for them to invest in WASH solutions. By offering product development training, awareness and sales strategies, and technical assistance, FM helps microfinance partners integrate these loans into their portfolios effectively.

### **Empowering women through microfinance**

In the majority of cases, microfinance institutions (MFIs) choose to extend loans primarily to women. This strategy is based on the belief that women are more reliable borrowers and less likely to divert funds away from their intended purposes. Moreover, by empowering women to manage and invest in household sanitation, microfinance contributes to their economic and social empowerment. Women, who are often the primary water collectors and household managers, benefit directly from improved WASH facilities. With better access to water and sanitation, they save time and effort, which can then be directed toward income-generating activities or other productive pursuits. This, in turn, reinforces the positive cycle of poverty alleviation and community development.

### **The way forward: A sustainable model for WASH financing**

The success of sanitation microfinance hinges on creating awareness of the business case for WASH projects and ensuring that financial products are designed to meet the unique needs of households and small businesses in this sector. FM's approach of partnering with local financial institutions and providing comprehensive support has proven effective in overcoming these challenges. Globally, the impact of microfinance on WASH is becoming increasingly evident. With strategic partnerships and continued innovation, microfinance can bridge the gap in WASH services, helping to achieve the SDGs and transform lives across the world. At FM, our mission is to channel and redeploy financial resources more efficiently, enabling an increasing number of people to meet their water and sanitation needs through demand-driven, market-based services. This approach aims to reduce dependency on continuous subsidies, fostering a self-sustaining model for WASH financing.



## A decade of partnership | The BWDC case study

As part of our ongoing efforts, we designed a study to map the intricate dynamics of long-term impacts stemming from sanitation financing, particularly facilitated by FM in India, with a main focus on the operations conducted through our MFI partner, the Bharathi Women Development Centre (BWDC), based in Tamil Nadu, India. The study intends to draw insightful conclusions regarding the efficacy and enduring impact of the sanitation interventions spearheaded after a minimum of 10 years of intervention.

BWDC has been partnering with FM for over a decade, working closely with our partner Trust of People (TOP) to build their capacity and develop a dedicated WASH portfolio. This collaboration has been pivotal in integrating sanitation into their microfinance services, making a significant impact in the communities they serve.



Bharathi Women  
Development Centre



Participants of the research



## Immersive research | Understanding impact at the grassroots

To accurately capture the impact of our partnership, we conducted an immersive research method. This approach was inspired by the 'Reality Check' method and the Village Immersion Programme from the Indian Institute of Management, which emphasises deep engagement with the community. The data collection for this impact review was conducted between January and February 2024, during which our team of researchers lived with families in the communities served by BWDC. This immersive approach allowed us to gather insights not through pre-designed questionnaires but through lived experiences, open-ended conversations, observations, and participatory research methods. By living alongside these families, our researchers were able to experience daily life in these communities, offering a nuanced understanding of how WASH financing services were integrated into their routines.

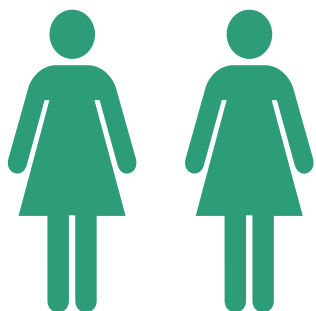
In addition, our researchers interacted with other households, including those from marginalised communities, opinion leaders, front-line workers, and local institutions to gain a holistic view of the community dynamics and the impact of WASH financing. To complement the qualitative insights gained through immersive research, we conducted 100 quantitative household interviews. These interviews were designed to triangulate the findings, providing a more comprehensive understanding of the impact of BWDC's WASH portfolio.



Participants of the research

## Analysis | The impact of microfinance on access to safe sanitation

The findings from this study seem to suggest that the majority of MFI loans have been given to women (97%) and that these loans are instrumental in enabling access to safe sanitation in the communities studied in Thiruvarur region of Tamil Nadu, India. With a 99% repayment rate, these loans have proven to be not only sustainable but also a powerful means of uplifting communities by allowing them to invest in essential sanitation facilities.



**97%**  
**Women**  
**Borrowers**

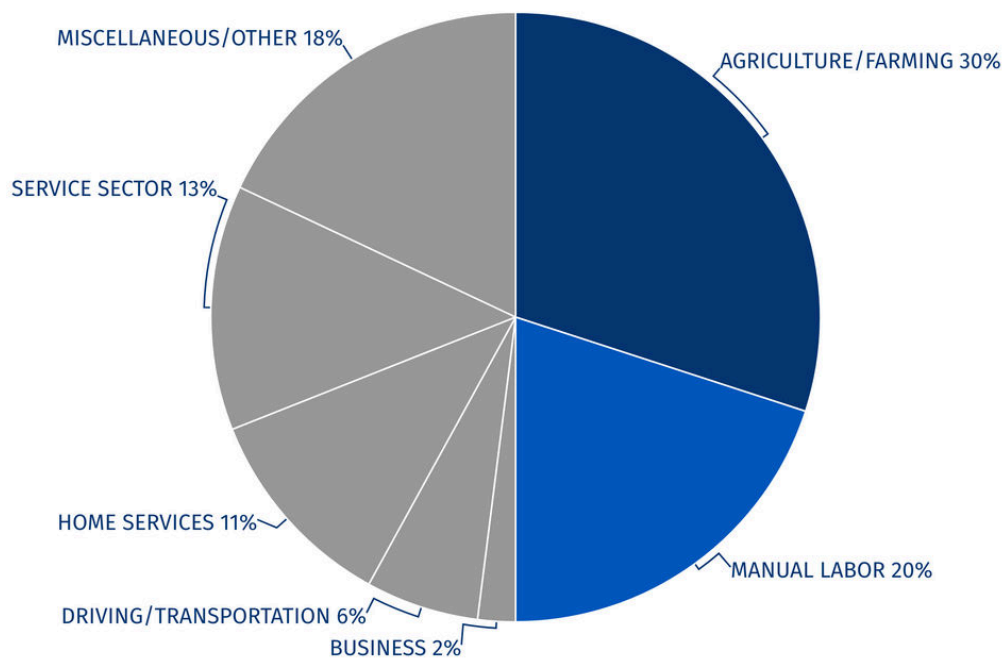


**99%**  
**Repayment**  
**Rate**

The gender distribution of respondents reflects MFIs' focus on women due to their reliability as borrowers. Women, often the primary caregivers in their families, are directly impacted by the lack of proper sanitation facilities. By targeting women, MFIs not only empower them economically but also address gender disparities in health and well-being.

## Inclusive approach

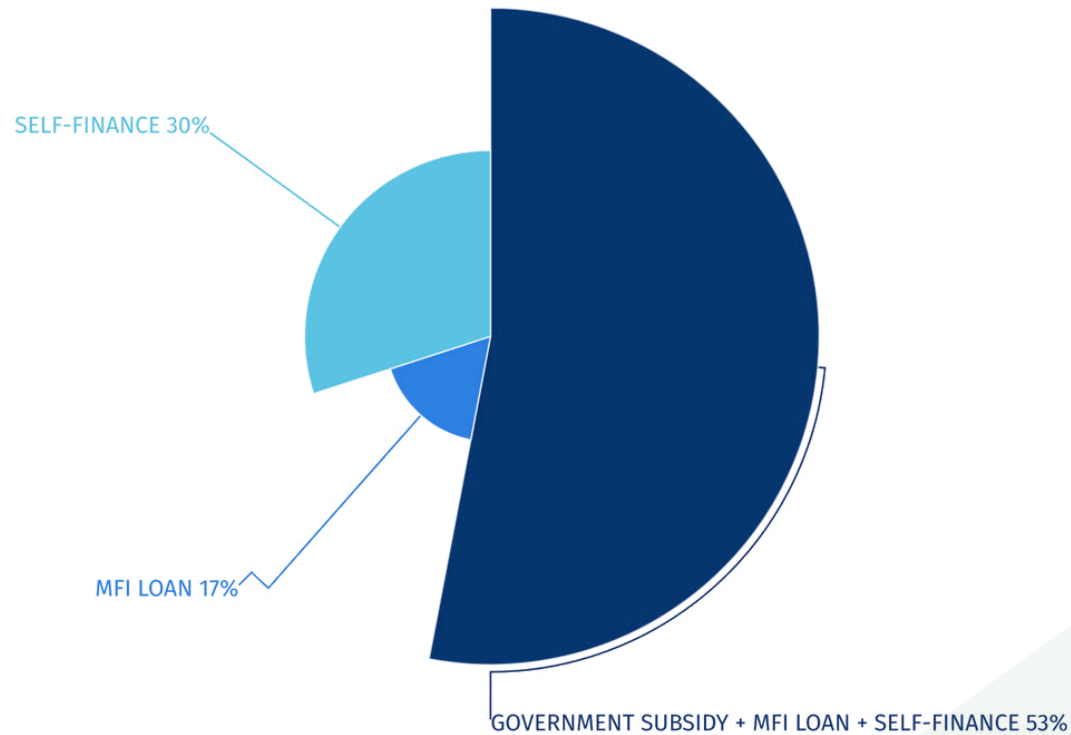
Our intervention successfully reaches a wide spectrum of occupational groups, with agriculture/farming (30%) and construction/manual labor (20%) being the most represented, occupying half of the pie. This broad reach demonstrates that MFI loans are accessible to those in various employment sectors, including those typically excluded from traditional banking services. By providing these loans, we ensure that even the most vulnerable can access essential sanitation facilities, fostering social inclusivity and equity within the community.



Further, the educational background of respondents shows that most household heads have education levels below class 10 and 12. Despite varying educational backgrounds, these households have been able to access and utilise MFI loans effectively. This seems to highlight the importance of tailoring financial products to the specific needs and capacities of the target population. In terms of financial literacy, our findings highlight that the use of microfinance loans as a new form of financial instrument has been widely accepted over the past few years primarily due to awareness spread by MFIs like BWDC and others along with FM facilitation processes.

## Financing methods and the role of subsidies

What was interesting to see was that the majority of respondents (53%) financed their toilets through a combination of government subsidy, MFI loans, and self-financing. This combination approach is particularly effective, as it allows households to use the subsidy to partially offset the loan amount, making it more manageable to repay. While the Swachh Bharat Mission (SBM) subsidy is helpful, it is often insufficient to cover the full cost of a toilet. MFI loans bridge this gap, enabling families to construct toilets that meet their needs and comply with safety standards. This approach also highlights the importance of creating demand for sanitation, as evidenced by the uptake of loans during the early days of the launch of the SBM campaign.





## Story snapshot | building livelihoods through sanitation

In February 2024, a mason we interviewed in Thiruvarur, made a decision that would subtly but steadily improve his family's life. With the support of the SBM subsidy, he built a toilet for his household. But this wasn't just about constructing a facility. It was the start of a broader journey toward improving living standards and creating new economic opportunities.

Over time, through awareness programmes facilitated by FM and local partners, he and his wife learned about financial options that could further support their sanitation needs. The couple opted for a WASH loan of ₹21,000 (around €240) from BWDC, which allowed them to build a twin-pit latrine—a system designed for long-term use and minimal maintenance. Having successfully repaid the WASH loan, he gained confidence in his financial management abilities. Encouraged by this experience, he secured a larger loan of ₹300,000 (€3,400), this time to start a brick manufacturing business. This marked a new chapter in his life, shifting from constructing sanitation facilities to becoming an entrepreneur.

**His journey highlights how access to WASH financing can lay the groundwork for broader economic progress, yet it's a story of small steps rather than dramatic transformations.**



Mason interviewed in Thiruvarur with his sanitation facility



## Quality of construction and long-term sustainability

The study found that toilets financed through MFI loans tend to have better substructures and require less retrofitting compared to those that were self-financed. This can be attributed to the comprehensive approach taken by FM which includes training masons in safe and appropriate toilet technologies. As a result, toilets built with the support of MFI loans are more durable and sustainable, reducing long-term maintenance costs for families. This not only improves the quality of life for borrowers but also ensures that the investment in sanitation infrastructure is sustainable.

Our study also included opening the pit of a twin leach pit sanitation system by a toilet owner in a coastal village as a case study (pictured below). We found that the twin leach pit system was functioning well despite seasonal floodings. One of the pits had filled, and the other is in current use. The sealed chamber after three years had successfully decomposed the faecal sludge and within the next one year can be used as compost.



Local team and beneficiary showcasing the successful opening of a toilet owner's pit including decomposed faecal sludge



## **Broader economic impact**

Interestingly, many respondents who initially took loans for toilet construction now have ongoing loans for other purposes, such as income-generating activities. This indicates that MFI interventions have a ripple effect, enabling families to improve their economic situation over time. By providing access to sanitation loans, MFIs are not only addressing immediate health and hygiene needs but also fostering broader economic development. The ability to take out subsequent loans for other purposes reflects the growing aspirations of these communities and the trust they have in the MFI system.

In a typical village studied, which is approximately 40 kilometers from the town of Thiruvavur, MFIs have been active since 2014. Before MFI involvement, financial emergencies were often met by pawn brokers, a system that had significant limitations, particularly for households lacking substantial wealth such as land or jewelry. MFIs have since provided a much-needed financial safety net, especially for those engaged in daily wage work, the most common profession in the village. The introduction of WASH products to the MFI portfolio four years ago has further supported this progress. Many households initially financed their toilets using a combination of government subsidies and self-financing, supplemented in some cases by MFI loans. The gap between the subsidy and the actual construction cost was often bridged by these loans, highlighting the crucial role of microfinance in sanitation development.

## **Economic improvement and financial inclusion**

Discussions with villagers seem to suggest that an overall socio-economic transformation has happened in the past 10-15 years, largely attributed to the introduction of MFI loans. Our narrative explores how these loans have not only provided a crucial economic safety net but have also catalysed broader economic improvements and empowered women in the community.

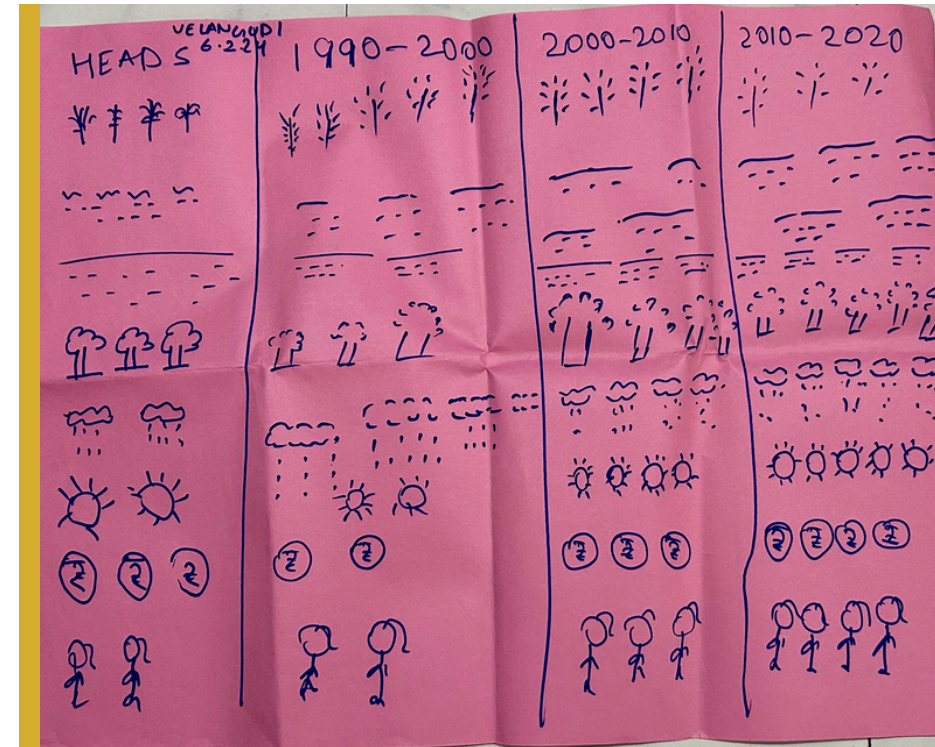
## Economic safety net and improved standards of living

The availability of MFI loans has significantly enhanced villager's economic stability.

**"The loans have been a lifeline," shares Meera, a local household head.**

Before MFIs, villagers had to rely on pawn brokers, often leading to financial strain. Since the MFIs started their intervention in the village around 8-10 years back, households have benefited from access to loans not only for sanitation but also for essential needs and emergencies. This financial support has translated into increased consumer spending, particularly on two-wheelers and home improvements, reflecting a higher standard of living.

Our Participatory Rural Appraisal (PRA) exercises confirm these observations. In these sessions, villagers mapped changes in various activities over the decades. The results, particularly in the economic wealth section, indicate a noticeable improvement from 2010 to 2020—years coinciding with intensified MFI interventions. The increase in the "coins" (second last row in image) representing economic wealth during this period underscores the positive impact of microfinance on the village's overall economic development.



Output from PRA activity in Thiruvarur

## **Empowering women and enhancing opportunities**

Another significant highlight of the MFI intervention is its role in empowering women. The loans have facilitated investments in sanitation, such as modern toilets, which have improved living conditions and health. The PRA exercise also highlighted advancements in opportunities for women, including increased access to education, improved safety, and greater participation in household decision-making. From 2010 to 2020, there was a marked increase in these areas, also reflecting the effectiveness of our gender and social inclusion initiatives.

**"Access to loans has enabled many of us to start businesses and contribute to household incomes," says Priya, a village entrepreneur.**

The integration of MFI loans into the village's financial landscape has led to substantial economic improvements. For example, the ability to access financial resources has provided a safety net during emergencies, stimulated consumer spending, and empowered women. As Aruna, a village leader, notes,

**"The support from MFIs has been transformative. While challenges remain, the progress we've made is a testament to the positive impact of these interventions."**

The immersive research also highlighted some challenges, particularly the biases in loan distribution. While MFI loans have provided significant benefits, there is a disparity in the loan amounts and interest rates offered, often favoring households who have been an earlier or regular client. Financially weaker households or non-regular clients are typically offered smaller loans, which may limit their ability to make substantial investments in sanitation or other areas. This issue points to the need for more equitable loan distribution practices to ensure that all community members can benefit equally from microfinance services.

# Conclusion

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The triangulation of quantitative data with qualitative insights from immersive research solidifies the conclusion that microfinance has been a critical enabler in improving access to sanitation in Tamil Nadu and in broader Indian context. By offering tailored financial products and combining them with capacity-building initiatives, MFIs have made it possible for even the most marginalised communities to construct and maintain safe sanitation facilities. The success of this approach is evident in the high repayment rates, the improved quality of toilets, and the broader economic benefits that have emerged as a result of these loans.

This study highlights the potential of microfinance to drive social and economic change, particularly in the area of sanitation, and sets a precedent for future interventions aimed at achieving universal access to safe water and sanitation.

## **FINISH Mondial**

This research was carried as part of the FINISH Mondial (FM) programme. FM is a programme led by the consortium of WASTE and Amref Flying Doctors and is funded by the Ministry of Foreign Affairs, Netherlands (DGIS).

## **Want to find out more?**

The full BWDC report will be available soon and available at [waste.nl](http://waste.nl) and [finishmondial.org](http://finishmondial.org)

## **Acknowledgements**

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# References

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Alexander, K., Allton, C., Felsman, C., Hahn, M., Okegbe, T., Palmer, D., et al. (2016). Ending open defecation in India: Insights on implementation and behavior change for Swachh Bharat Abhiyan. New Jersey: Princeton University.

Coffey, D., Spears, D., & Vyas, S. (2017). Switching to sanitation: understanding latrine adoption in a representative panel of rural Indian households. *Social Science & Medicine*, 188, 41-50.

Government of India (2018). Guidelines for swachh bharat mission  
[https://jalshaktiddws.gov.in/sites/default/files/SBM\(G\)\\_Guidelines.pdf](https://jalshaktiddws.gov.in/sites/default/files/SBM(G)_Guidelines.pdf).

Government of India (2022). Swachh bharat mission: About SBM. <https://swachhbharatmission.gov.in/sbmcms/index.htm>.

Leigland J., Trémolet S., & Ikeda J. 2016 Achieving Universal Access to Water and Sanitation by 2030: The Role of Blended Finance. *Water Global Practice: Discussion Paper*. World Bank, Washington, DC

VerKuilan, A., Sprouse, L., Beardsley, R., Lebu, S., Salzberg, A., & Manga, M. (2023). Effectiveness of the Swachh Bharat Mission and barriers to ending open defecation in India: a systematic review. *Frontiers in Environmental Science*, 11, 1141825

Vyas, S., Srivastav, N., Mary, D., Goel, N., Srinivasan, S., Tannirkulam, A., et al. (2019). Measuring open defecation in India using survey questions: Evidence from a randomised survey experiment. *BMJ open* 9 (9), e030152. doi:10.1136/bmjopen-2019-030152

WHO and UNICEF (2021). Progress on household drinking water, sanitation, and hygiene: 2000-2020, five years into the SDGs. Switzerland: WHO and UNICEF Joint Monitoring Programme.



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