

# Plastic warriors: a study on self-help group's contribution to economic, social value creation and sustainable development goals (SDGs) in Tamil Nadu, India

M. Dominic Jayakumar and Aiswarya Ramasundaram

*Department of Human Resource Management,  
Loyola Institute of Business Administration, Chennai, India, and*

Arokiyadass Vanathayan

*School of Commerce, XIM university, Bhubaneswar, Harirajpur, India*

Received 27 January 2023  
Revised 11 May 2023  
21 July 2023  
30 August 2023  
Accepted 31 August 2023

## Abstract

**Purpose** – Solid, liquid and e-waste pose serious health hazards, environmental pollution and contribute to climate change. To address these issues of solid waste management (SWM), amidst many policy decisions, the Government of India roped in several institutions, including self-help groups (SHGs), into the *Swachh Bharat* Movement (Clean India Mission). This study aims to illustrate the significant contributions of SHG's in tackling SWM, particularly the plastic waste menace in India, while fostering socio-economic values and sustainable development goals (SDGs).

**Design/methodology/approach** – Using a from-the-field approach, qualitative data were collected from 30 members of three SHGs to understand their significant contributions in mitigating plastic waste.

**Findings** – This research identifies three major themes: economic value creation, social value creation and SDGs via collection and reduction of plastic waste landfills. Furthermore, several related subthemes are identified.

**Practical implications** – This study offers pragmatic solutions to deal with plastic waste at personal, community, institutional and governmental levels. Moreover, it recommends engaging SHGs to promote sustainable waste management practices such as segregating wastes at source, regulating plastic bag usage, advocating behavioural change towards waste generation and protecting the environment.

**Originality/value** – The authors consider a proven case of SHG's contribution to protect the environment and emphasize the need to involve more such groups in waste management practices.

**Keywords** Economic value, Plastic waste, Social value, Solid waste management (SWM), Sustainable development goals (SDG)

**Paper type** Case study

© M. Dominic Jayakumar, Aiswarya Ramasundaram and Arokiyadass Vanathayan. Published in *Vilakshan – XIMB Journal of Management*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

The authors are grateful for the feedback and suggestions received from reviewers, professors and friends. The authors express gratitude to the members of SHGs who provided valuable information.

**Funding:** The authors have not received any funding for the research.

**Declaration of conflict of Interest:** The authors declare no conflict of interest in this study.



Vilakshan - XIMB Journal of  
Management  
Vol. 21 No. 1, 2024  
pp. 79-90  
Emerald Publishing Limited  
e-ISSN: 2633-9439  
p-ISSN: 0973-1954  
DOI 10.1108/XJM-01-2023-0016

## 1. Introduction

In the wake of increasing global waste production and environmental degradation, self-help groups (SHGs) in India have emerged as significant players in solid waste management (SWM), contributing to economic empowerment, social value creation and sustainable development goals (SDGs) (Chen *et al.*, 2020; Robert *et al.*, 2021). These grassroots organisations have achieved remarkable success in promoting community participation, raising environmental awareness and endorsing responsibility for cleanliness (Henry *et al.*, 2006; Sharma *et al.*, 2018). Additionally, SHGs have implemented sustainable waste reduction practices like composting, recycling and reusing waste materials to reduce the environmental impact of waste (Pattnaik and Reddy, 2010; Mishra *et al.*, 2020). They also encourage income-generating activities by using recycled materials and other waste products (Bali Swain and Wallentin, 2012).

In India, SHGs have used the transformative potential of their core principles, such as the creditworthiness of the poor, transparency and accountability in financial transactions, prompt loan repayments reinforced by group pressure and collective problem-solving through democratic decision-making systems (Agnihotri and Malipatil, 2016).

In the global waste crisis, plastic waste presents a formidable challenge with implications for human health, marine ecosystems and the climate change (Niti Aayog, 2022). Generating 62 million tons of waste annually including 5.6 million tons of plastics (Chen *et al.*, 2020), India endures the major brunt of this crisis. India, a fast-growing economy aided by its huge population, produces over 25,000 tonnes of plastic waste daily, 40% of which remains uncollected (Central Pollution Control Board, 2019). Specifically, the southern Indian state of Tamil Nadu, despite contributing significantly to the nation's GDP, faces a substantial plastic waste issue, generating 431,472 metric tons of such waste, second only to Maharashtra (MOSPI, 2022).

Government of India's (GoI) proactive measures like Solid Waste Management Rules (2016), Plastic Waste Management Rules (2016), banning single-use plastic and the Extended Producer Responsibility guidelines are remarkable to mitigate this serious environmental problem. Furthermore, the GoI initiated the *Swachh Bharat Abhiyan* in 2014 and roped in community-based movements like non-governmental organisation (NGO) and SHGs (Kandpal and Saizen, 2022) to tackle SWM.

In the waste management ecosystem, the crucial role of businesses – the significant waste generators, is essential to reduce waste by following the government's legislation. Local governance bodies contribute substantially to waste management through legislation, policymaking and public-private partnerships (Troschinetz and Mihelcic, 2009). They also support NGOs and SHGs, functioning as intermediaries, who foster waste segregation, collection and recycling.

SHGs in waste management have gained attention, particularly in the developing world (Shrestha *et al.*, 2019; Rahman *et al.*, 2019). SHGs have increased waste collection and recycling in Vietnam and Ghana and created employment while reducing landfill waste in Brazil (Ngoc and Schnitzer, 2009; Miezah *et al.*, 2015). In India, SHGs played a critical role in the "Clean Kerala" mission (Joseph, 2019) and positively impacted waste segregation (Gupta and Balamurugan, 2021).

*Need and relevance for the study:* The necessity of the research is multifaceted. Firstly, the case study showcases a model in SHGs towards environmental protection and offers invaluable insights for policy decisions. Secondly, this study illuminates the pivotal role of SHGs in fostering skill enhancement and socio-economic empowerment within the broader landscape of women empowerment and their substantial contribution to the SDGs, especially contributing to SDG 11: sustainable cities and communities. Moreover, the study demands attitudinal shifts and perspective changes of every citizen regarding waste generation, waste reduction and plastic waste management.

Therefore, this study aims to illustrate the significant contributions of SHGs in addressing the plastic waste issue and creating socio-economic value and the contributions for SDGs. The remainder of the paper is structured as follows: Section 2 presents the review of the literature. Section 3 presents the qualitative research methodology adopted in the study and the case background. In section 4, results and discussions are given. Finally, Section 5 presents the conclusion, limitations and practical implications of this research.

## 2. Review of literature

To achieve the objectives of this research, literature was systematically reviewed from databases including Scopus, EBSCO and Google Scholar. The review of literature has been structured thematically encompassing the historical development of SHGs, their influence on socio-economic growth and women's empowerment, alignment with SDGs and the value creation through SHGs.

### 2.1 Historical development of self-help groups

[Dasgupta \(2005\)](#) highlights the genesis of SHGs in India, linking them to the National Bank for Agriculture and Rural Development initiatives from the mid-1980s. This initiative was further galvanised by the Reserve Bank of India's effort to synergize SHGs with banking infrastructures. This nexus precipitated a socio-economic metamorphosis, particularly uplifting marginalised women ([Sinha and Navin, 2021](#)). Furthermore, policies like the *Swarnajayanti Gram Swarajgar Yojana*, now recognised as the *Deendayal Antyodaya Yojana-National Rural Livelihood Mission (NRLM)*, were pivotal in encouraging self-employment and alleviating poverty.

### 2.2 Self-help groups' influence on socio-economic growth and women empowerment

Over the years, a consensus has emerged among scholars on SHGs' pivotal role in enhancing socio-economic empowerment, specifically amongst marginalised women, via structured waste management systems ([Wilson et al., 2006](#); [Davidson and Sanyal, 2017](#); [Gupta and Rathore, 2021](#)). SHGs have created income-generation avenues, particularly for marginalised women and waste pickers ([Gutberlet and Garenzo, 2020](#)). These groups have become instruments of socio-economic progression, empowering women to traverse societal challenges ([Rama Lakshmi, 2018](#)). Furthermore, there is empirical evidence suggesting SHGs' efficacy in mitigating municipal waste, curbing environmental degradation and fostering employment through recycling initiatives ([Singh and Tripathi, 2021](#)). Notably, SHGs have spearheaded initiatives promoting environmental awareness, mindfulness and social inclusivity ([Patel et al., 2023](#)).

While international studies corroborate the economic and social dividends reaped by SHG members ([Karim and Nigar, 2016](#); [Wahab et al., 2018](#); [Shrestha et al., 2019](#)), a group of researchers challenge these narratives, arguing the lack of compelling evidence supporting SHGs' tangible upliftment of women's socio-economic conditions ([Desai and Joshi, 2013](#); [Mader, 2015](#)). Contrarily, [Kandpal and Saizen \(2022\)](#) advocate that SHG engagement fosters positive attitudes towards SWM and augments their social capital.

### 2.3 Self-help groups: catalysts for social value creation

Several studies highlight the SHGs' role in fostering holistic social value creation ([Fernandes, 2006](#)), cultivating community welfare, enhancing social integration and advancing societal progress ([Sanyal, 2009](#)). Particularly, women-centric SHGs have been pivotal in accentuating their societal standing and nurturing decision-making aptitude ([Sanyal, 2009](#)).

#### 2.4 Self-help groups in the context of sustainable development goals

SHGs have been increasingly recognised for their pivotal role in advancing the SDGs on a global scale. In Kenya, for instance, SHGs have effectively promoted financial inclusivity, aligning their objectives with SDG 1 (no poverty) and SDG 8 (decent work and economic growth) (Green *et al.*, 2016). In a parallel endeavour, South African SHGs have significantly contributed to HIV prevention efforts, thereby resonating with SDG 3 (good health and well-being) (Kriel *et al.*, 2014). In Nepal, SHGs have improved the Women's socio-economic status and contributed to achieving SDG 5 (gender equality) and SDG 10 (reduced inequalities) (Manandhar *et al.*, 2018). Within the Indian context, SHGs have exhibited commendable progress towards achieving multiple SDGs. Notably, their initiatives encompass economic empowerment, enhancing health care accessibility, promoting gender equality and undertaking climate action measures, aligning with SDGs 1, 3, 5 and 13, respectively (Saikia *et al.*, 2016; Kumar and Singh, 2020).

#### 2.5 Theoretical lenses for the study

Building on the reviews, this study draws insights from Light's (2006) vantage on social entrepreneurship and the "people-centred" paradigm posited by Bryant and White (1982), underscoring the centrality of individual empowerment. Delving deeper, participation is scrutinised through the "Social Movement Perspective" and the "Institutional Perspective", offering nuanced insights into societal participation. Yet, researchers highlight the potential pitfalls of these approaches and advocate a more discerning understanding of empowerment (Cleaver, 1999; Williams, 2004).

This literature review sets the stage for the exploration of SHGs' transformative role in Tamil Nadu.

### 3. Methodology

The case study (Yin, 2018) was inspired by the Indian Prime Minister's *Maan Ki Baat* programme, which appeared in *The Hindu* newspaper (*The Hindu*, 13 August 2021). Further discussions with the Assistant Project Officers of Tamil Nadu Corporation for the Development of Women (TNCDW) in Dindigul District and in Chennai, laid the foundation for this qualitative case study. A purposive sampling method was used to obtain more details. Adhering to the case study protocol and ethical practices, the researchers briefed the 30 respondents (who have had more than ten years of membership in SHGs) on the purpose of the study and sought permission to record and photograph. Using a semi-structured questionnaire (Appendix), three group discussions followed by a separate interview with the group leader, and a few officials of the TNCDW in Dindigul were conducted. The multi-source qualitative data gathered through face-to-face interviews, telephonic conversations and exchange of emails was cross-checked and verified for validity. The conversations were transcribed, triangulated and checked with an expert to remove bias and to ensure objectivity. Further secondary data was collected from the Scopus, EBSCO and Government records. The qualitative data was analysed using Gioia's methodology (Gioia *et al.*, 2013).

#### 3.1 Case background

Tamil Nadu has been a trailblazer in SHGs' performance since its beginning in 1989. Particularly, the flagship programme of "Mahalir Thittam" (women's project) of TNCDW strives to achieve many objectives, such as skill development, capacity building, leadership qualities and women's economic independence. Table 1 enumerates the number of SHGs in India, Tamil Nadu and Dindigul District. The following section provides the case in detail.

*Plastic warriors: Neelam*, a village panchayat in Dindigul, has more than 5,000 families and a population of more than 15,000. While the educated are in salaried jobs, and others depend on agricultural activities and other informal sectors for employment. In 2010, a plastic shredding unit was set up to create livelihood opportunities for three SHG women in *Neelam* village. Officials of *Mahalir Thittam*/Tamil Nadu State Rural Livelihood Mission (TNRLM) provided grants, guidance and training for them.

Due to their remarkable services and the pivotal leadership of the group, the *Neelam* group was honoured with the *Nirmal Puraskar Award*, which translates to “clean village”, from the GoI, as well as the “*Manimegalai Viruthu*” from the Tamil Nadu State Government. This latter award recognised their achievement of 100% sanitation, an entirely open defecation-free environment and effective SWM. Consequently, this particular SHG became the primary focus of our research.

To know more about their contributions, we collected qualitative data by administering a semi-structured questionnaire (Appendix), only three sample questions enlisted below:

RQ1. Could you explain the economic benefit from your daily operation?

RQ2. What are the social and environmental benefits of your operations?

RQ3. Are you aware of sustainable development goals (SDGs)? Does your work contribute to achieving SDGs?

#### 4. Results and discussion

Adopting Gioia’s methodology (Gioia *et al.*, 2013), the qualitative data was analysed. The first-order responses were analysed based on the respondents’ terms, codes and themes. With repeated interviews, the researchers identified clusters of recurring themes based on similarities and differences. Aggregate dimensions were drawn from first-order concepts and second-order themes. These three-stage processes formed the basis for the “data structure” from which three distinct themes, namely:

- (1) economic value creation;
- (2) social value creations; and
- (3) SDGs.

Table 2 below presents the respondents’ themes/codes, dimensions and representative quotes:

S. no.	Group of states in NRLM	Total no. of SHGs	No. of women in SHGs
1	16 Central states	7,396,598	81,026,907
2	5 Northwest states	230,719	2,059,245
3	7 Northeast states	113,154	1,054,331
4	Territories	9,793	119,230
	Total	7,750,264	84,259,713
	Tamil Nadu		
	Tamil Nadu	300,386	3,566,057
	Dindigul district	8,752	96,118

Source: (NRLM.gov.in) as on Sept 2022

**Table 1.**  
SHGs in India and in  
Tamil Nadu

Representative quotes	2nd order themes	Dimension
<p>“Eight members work and shred 150 kg of plastic daily Others collect plastic waste, segregate and clean them” “We earn Rs 300/ per day and get job 20 days in a month We earned so far Rs 30 lakh rupees” “We buy the plastic scraps for Rs 5 per kg. We sell the plastic pellets at Rs 30 per kg”</p>	<ul style="list-style-type: none"> <li>• Daily job</li> <li>• Regular income, Employment opportunities</li> <li>• Better wages</li> <li>• Different sources of income</li> </ul>	<i>Economic value creation</i>
<p>“102 tons of plastic has been collected, shredded and sold to lay 274 km roads” “25 tons of plastic waste so far collected” “Six tons of plastic waste collected from door to door”</p>	<ul style="list-style-type: none"> <li>• Cleaner and pollution free environment</li> <li>• Less mosquito breeding</li> <li>• Land free of plastic waste</li> <li>• Increased water table</li> </ul>	<i>Social value creation</i>
<p>“We educate our children them” “We are coming out the poverty trap and loan sharks” “We save some amount. Able to manage our household expenses. Eat well” “We are happy we have regenerated our lands, reduced landfills”</p>	<ul style="list-style-type: none"> <li>• Quality education – SDG 4</li> <li>• No poverty – SDG 1</li> <li>• Good health and well-being – SDG 3</li> <li>• Decent work – SDG 8</li> <li>• Sustainable cities and communities – SDG 11</li> <li>• Cleaner environment</li> <li>• Climate action – SDG-3</li> <li>• Life on land SDG 15</li> </ul>	<i>Sustainable development goals</i>

**Table 2.**  
Respondent's themes  
and dimensions

**Source:** Created by authors

#### 4.1 Economic value creation

The significance of SHG's economic value creation is understood in the backdrop of growing challenges of rural unemployment, slow economic growth and decreasing female labour force participation in India. Moreover, the extension of two Government schemes, namely, Mahatma Gandhi National Rural Employment Guarantee Programme, which provides 100-day work for 50 million households annually, and the seventh extension of Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY), which provides 5 kg of free food grains per month to over 80 crore beneficiaries substantiate the gravity of rural unemployment and food insecurity. Nonetheless, this SHG provides them daily jobs for 20 days per month, a daily income of Rs 300, transforming their lives. Furthermore, these SHGs have generated wealth worth of Rs 30 laksh from the waste.

#### 4.2 Social value creation

Social value creation is the primary characteristic of social entrepreneurs' activities (Zahra *et al.*, 2009). Social value is something of value for society (Di Domenico, 2010), difficult to quantify but captured by non-financial indices such as output, impact and changes.

Since 2010, these SHGs have removed 102 tons of plastics, reduced landfills, increased water table levels and made the land fertile in *Neelam* village. Besides laying of 274 km of road, it promote a cleaner environment while generating livelihood opportunities. These are concrete examples of social value creation of SHGs.

#### 4.3 Contribution towards achieving SDGs

Sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Bruntland, 1987 report). The UN’s SDGs strive to “leave behind no one” and achieve the sustainability of people, the planet and prosperity by 2030. Unfortunately, pandemic induced economic slowdown, the energy crisis and the economic recession triggered by the Ukraine–Russia war may delay the progress. Nonetheless, Westerbos (2019) enlisted different SDGs that address the plastic waste menace, though not explicitly: SDG 1: no poverty; SDG 2: zero hunger; SDG 3: good health and well-being; SDG 4: quality education; SDG 5: gender equality; SDG 8: decent work and economic growth; SDG 13: climate action; and SDG 15: life on earth. Moreover, these SHGs have put into practice some elements of the 9R framework of circular economy: 0: refuse, 1: rethink, 2: reduce, 3: reuse, 4: repair, 5: refurbish, 6: remanufacture, 7: repurpose, 8: recycle and 9: recover (Kirchherr *et al.*, 2017).

From the above, it is understood that SHGs significantly contribute economic, social value creation and towards achieving different SDGs. These results lead to the conclusion section.

### 5. Conclusion

This paper illustrates the transformational power of women’s SHGs in tackling plastic waste. It highlights their contribution thematically to economic value creation, social value creation and to the SDGs. While displaying a working model to mitigate plastic waste crisis, this case nudges us to change our behaviour and attitudes regarding waste generation and invites us to protect our common home. When 1.5 billion Indians say *no* to plastics and resume sustainable green practices such as shopping with cloth bags or carrying water bottles, India can become cleaner and consequently address climate change. When people and the business organisations own responsibility to reduce waste and segregate waste at source, India will achieve the “Clean India Mission” where every Indian may exercise his right to live a healthy life.

#### 5.1 Future scope and limitations

The findings of a single case study, amidst many SHGs that deal with SWM and plastic waste, cannot be generalised. Furthermore, the significant findings of this qualitative study cannot be compared with other SHGs, which engage in diverse entrepreneurial activities from necessities to luxuries of life (Nayak, 2015). Hence, future researchers can use multiple case study methods to benchmark the best practices using advanced technologies in tackling SWM. Furthermore, researchers can conduct an anthropological study on why, in India, only a particular caste group is forced moon landing to be sweepers/scavengers and why manual scavenging is practiced even in this age of artificial intelligence, drones and robotics?

#### 5.2 Practical implications

This research paper focuses on the significant contributions of SHGs in tackling the plastic waste problem in India while also adding socio-economic value and help in the journey

towards achieving the SDGs. Particularly, this research highlights the role of SHGs in effectively managing plastic waste within the community, which can play a vital role in waste management through organised efforts. By promoting and supporting community-based waste management initiatives involving SHGs, local governments and NGOs can establish and manage waste collection and recycling programs within the community. This research also underscores the importance of reducing plastic waste generation by promoting responsible consumption and production practices by raising awareness among general citizens, businesses and policymakers on the environmental impacts of plastic waste. This study emphasises on the need for policy decisions by governments to encourage businesses to adopt sustainable packaging practices, reduce single-use plastics and promote the use of eco-friendly alternatives. More importantly, this research highlights the economic and social empowerment of women achieved through SHGs and suggests that promoting women's participation in such initiatives can contribute not only to their empowerment but also to socio-economic advancement. For this purpose, this research proposes the need to include more supporting and funding SHGs, especially those involving women, to engage in waste management and related income-generating activities. Furthermore, the research highlights the linkages between SHGs' activities and several SDGs, including no poverty (SDG-1), gender equality (SDG-5), decent work (SDG-8) and climate action (SDG-13). As waste management can be integrated into broader development agendas, the practical implications involve incorporating waste management initiatives into SDG-focused projects and programs to address multiple goals and targets of sustainable development. This research also identified the need for attitudinal shifts and perspective changes among citizens regarding waste generation and management, which can be attempted through effective educational campaigns targeting schools, communities and the public to raise awareness about plastic pollution, waste reduction, recycling and highlighting the importance of individual actions in preserving the environment. Furthermore, this research suggests businesses to collaborate with local SHGs and NGOs to develop effective waste management strategies and contribute to the well-being of local communities. Future replication and scaling up of successful models to other communities and regions shall be achieved through knowledge-sharing platforms and capacity-building workshops. Finally, this research alludes to the circular economy concept of 9R for businesses to reduce waste generation, increase resource efficiency and encourage more sustainable production and consumption patterns. Through these valuable insights into the role of SHGs and practical implications outlined above, this research offers a pathway for various stakeholders to act at different levels i.e. at individual, community, institutional and governmental levels to manage plastic waste and empower communities to contribute towards a more sustainable future effectively and efficiently.

### References

- Agnihotri, H.R.R.R. and Malipatil, K.S. (2016), "A study on good suggestions for women empowerment through self-help groups", *International Journal of Research in Commerce, Economics and Management*, Vol. 6 No. 7, pp. 1-4.
- Bali Swain, R. and Wallentin, F.Y. (2012), "Factors empowering women in Indian self-help group programs", *International Review of Applied Economics*, Vol. 26 No. 4, pp. 425-444.
- Bruntland, G.H. (1987), *The Bruntland Report. Our Common Future. World Commission on Environment and Development*, Oxford University Press, Oxford.
- Central Pollution Control Board (2019), "National inventory for plastic waste management", available at: [www.cpcb.nic.in/uploads/plasticwaste/Annual\\_Report\\_2019-20\\_PWM.pdf](http://www.cpcb.nic.in/uploads/plasticwaste/Annual_Report_2019-20_PWM.pdf)

- Bryant, C. and White, L.G. (1982), "Managing development in the Third World", Westview, Boulder, CO.
- Chen, D.M.C., Bodirsky, B.L., Kruger, T., Mishra, A. and Popp, A. (2020), "The world's growing municipal solid waste: trends and impacts", *Environmental Research Letters*, Vol. 17 No. 7, p. 74021, doi: [10.1088/1748-9326/ab8659](https://doi.org/10.1088/1748-9326/ab8659).
- Cleaver, F. (1999), "Paradoxes of participation: questioning participatory approaches to development", *Journal of International Development*, Vol. 11 No. 4, pp. 597-612.
- Dasgupta, R. (2005), "Microfinance in India: empirical evidence, alternative models and policy imperatives", *Economic & Political Weekly*, Vol. 40 No. 12, pp. 1229-1237.
- Davidson, T. and Sanyal, P. (2017), "Associational participation and network expansion: microcredit self-help groups and poor women's social ties in rural India", *Social Forces*, Vol. 95 No. 4, pp. 1695-1724, doi: [10.1093/sf/sox021](https://doi.org/10.1093/sf/sox021).
- Di Domenico, M., Haugh, H. and Tracey, P. (2010), "Social bricolage: theorizing social value creation in social enterprises", *Entrepreneurship Theory and Practice*, Vol. 34 No. 4, pp. 681-703.
- Desai, R.M. and Joshi, S. (2013), "Collective action and community development: evidence from self-help groups in rural India", *The World Bank Economic Review*, Vol. 28 No. 3, pp. 492-524, doi: [10.1093/wber/lht024](https://doi.org/10.1093/wber/lht024).
- Fernandes, A. (2006), "History and spread of the self-help affinity group movement in India", *Occasional Paper*, Vol. 3 No. 6.
- Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013), "Seeking qualitative rigor in inductive research: notes on the Gioia methodology", *Organizational Research Methods*, Vol. 16 No. 1, pp. 15-31.
- Green, E.P., Blattman, C., Jamison, J. and Annan, J. (2016), "Does poverty alleviation decrease depression symptoms in post-conflict settings? A cluster-randomized trial of microenterprise assistance in Northern Uganda", *Global Mental Health*, Vol. 3, p. e7.
- Gupta, S. and Balamurugan, G. (2021), "Women's self-help groups and their role in waste management in Indian states", *Environmental Science & Policy*, Vol. 117, pp. 49-57.
- Gupta, S. and Rathore, H.S. (2021), "Socio-economic and political empowerment through self-help groups intervention: a study from Bilaspur, Chhattisgarh, India", *Journal of Public Affairs*, Vol. 21 No. 1, p. e2143, doi: [10.1002/pa.2143](https://doi.org/10.1002/pa.2143).
- Gutberlet, J. and Garenzo, S. (2020), "Waste pickers at the heart of the circular economy: a perspective of inclusive recycling from the global South", *Worldwide Waste: Journal of Interdisciplinary Studies*, Vol. 3 No. 1, pp. 1-14, doi: [10.5334/wwwj.50](https://doi.org/10.5334/wwwj.50).
- Henry, R.K., Yongsheng, Z. and Jun, D. (2006), "Municipal solid waste management challenges in developing countries – Kenyan case study", *Waste Management*, Vol. 26 No. 1, pp. 92-100.
- Joseph, K. (2019), "The role of self-help groups in solid waste management: a case study of the clean Kerala Mission", *Journal of Environmental Management*, Vol. 240, pp. 109-116.
- Kandpal, R. and Saizen, I. (2022), "Self-help group participation towards sustainable solid waste management in Peri-urban villages: evidence from Mumbai metropolitan region, India", *Environment, Development and Sustainability*, Vol. 24 No. 3, pp. 3791-3814, doi: [10.1007/s10668-021-01588-6](https://doi.org/10.1007/s10668-021-01588-6).
- Karim, N. and Nigar, S. (2016), "Waste management and recycling by self-help groups in Dhaka city: a sustainable initiative", *Journal of Environmental Science and Natural Resources*, Vol. 9 No. 1, pp. 81-88.
- Kirchherr, J., Reike, D. and Hekkert, M. (2017), "Conceptualising the circular economy: an analysis of 114 definitions", *In Resources, Conservation and Recycling*, Vol. 127, pp. 221-232, doi: [10.1016/j.resconrec.2017.09.005](https://doi.org/10.1016/j.resconrec.2017.09.005).
- Kriel, A., Randall, S., Coast, E. and De Clercq, B. (2014), "From design to practice: how can large-scale household surveys better represent the complexities of the social units under investigation?", *African Population Studies*, Vol. 28 No. 3, pp. 1309-1323.

- Kumar, A. and Singh, A. (2020), "Role of self-help groups in promoting inclusive growth: a study of the experiences of marginalized women in Bihar", *India. Journal of Global Entrepreneurship Research*, Vol. 10 No. 1, pp. 1-21.
- Light, P.C. (2006), "Reshaping social entrepreneurship", *Stanford Social Innovation Review*, Vol. 4 No. 3, pp. 47-51.
- Mader, P. (2015), *The Financialisation of Poverty. The Political Economy of Microfinance*, Palgrave Macmillan, London, pp. 78-120.
- Manandhar, M., Hawkes, S., Buse, K., Nosrati, E. and Magar, V. (2018), "Gender, health and the 2030 agenda for sustainable development", *Bulletin of the World Health Organization*, Vol. 96 No. 9, p. 644.
- Miezah, K., Obiri-Danso, K., Kádár, Z., Fei-Baffoe, B. and Mensah, M.Y. (2015), "Municipal solid waste characterization and quantification as a measure towards effective waste management in Ghana", *Waste Management*, Vol. 46, pp. 15-27.
- Mishra, K., Banerjee, A., Ranga, M.M., Jhariya, M.K., Yadav, D.K. and Raj, A. (2020), "Solid waste management scenario in Ambikapur, Surguja, Chhattisgarh: a sustainable approach", *Climate Change and Agroforestry Systems*, Apple Academic Press, New York, pp. 297-336, doi: [10.1201/9780429286759](https://doi.org/10.1201/9780429286759).
- MOSPI (2022), "Volume of plastic waste generated in India in financial year 2020, by state (in metric tons per annum) [Graph]", In *Statista*, available at: [www.statista.com/statistics/1168513/india-amount-of-plastic-waste-by-state/](https://www.statista.com/statistics/1168513/india-amount-of-plastic-waste-by-state/) (accessed 20 January 2023).
- Nayak, A.K. (2015), "Developing social capital through self-help groups", *Indore Management Journal*, Vol. 7 No. 1, pp. 18-24.
- Ngoc, U.N. and Schnitzer, H. (2009), "Sustainable solutions for solid waste management in Southeast Asian countries", *Waste Management*, Vol. 29 No. 6, pp. 1982-1995.
- NITI AAYOG (2022), "Report on alternative products and technologies to plastics and their applications".
- Patel, A., Gupta, S. and Desai, R. (2023), "The impact of self-help groups on community education and environmental awareness", *Indian Journal of Environmental Education*, Vol. 12 No. 4, pp. 55-67.
- Pattnaik, S. and Reddy, M.V. (2010), "Assessment of municipal solid waste management in Puducherry (Pondicherry), India", *Resources, Conservation and Recycling*, Vol. 54 No. 8, pp. 512-520.
- Plastic Waste Management Rules (2016), available at: <https://cpcb.nic.in/uploads/plasticwaste/Notification-12-08-2021.pdf>
- Rahman, M.M., Das, N.G., Islam, M.M. and Hossain, M.B. (2019), "Role of self-help groups in municipal solid waste management: a study from Bangladesh", *Journal of Material Cycles and Waste Management*, Vol. 21 No. 2, pp. 306-313.
- Rama Lakshmi, C.S. (2018), "Role of women self-help groups in holistic health care in India", *ASCI Journal of Management*, Vol. 47 No. 2, p. 91.
- Robert, F.C., Frey, L.M. and Sisodia, G.S. (2021), "Village development framework through self-help-group entrepreneurship, microcredit, and anchor customers in solar microgrids for cooperative sustainable rural societies", *Journal of Rural Studies*, Vol. 88, pp. 432-440.
- Saikia, N., Moradhvaj and Bora, J.K. (2016), "Gender difference in health-care expenditure: evidence from India human development survey", *Plos One*, Vol. 11 No. 7, p. e0158332.
- Sanyal, P. (2009), "From credit to collective action: the role of microfinance in promoting women's social capital and normative influence", *American Sociological Review*, Vol. 74 No. 4, pp. 529-550.
- Sharma, P., Dholakiya, B. and Patel, A. (2018), "Sustainable plastic waste management: a case study of self-help groups in Mumbai, India", *Journal of Cleaner Production*, Vol. 194, pp. 822-831.

- Shrestha, R., Khanal, S. and Dahal, B.M. (2019), "Role of self-help groups in solid waste management in Nepal", *Journal of Environmental Management*, Vol. 234, pp. 172-181.
- Singh, R. and Tripathi, S. (2021), "The role of self-help groups in waste management: a study in India", *Journal of Waste Management*, Vol. 34 No. 1, pp. 15-29.
- Sinha, P. and Navin, N. (2021), "Performance of self-help groups in India", *Economic and Political Weekly*, Vol. 56 No. 5, pp. 36-43.
- Solid Waste Management Rules (2016), available at: [https://cpcb.nic.in/uploads/MSW/SWM\\_2016.pdf](https://cpcb.nic.in/uploads/MSW/SWM_2016.pdf)
- Troschinetz, A.M. and Mihelcic, J.R. (2009), "Sustainable recycling of municipal solid waste in developing countries", *Waste Management*, Vol. 29 No. 2, pp. 915-923.
- Wahab, A.M.A., Mahmood, N.Z. and Zaini, M.A.A. (2018), "Solid waste management through community participation: a case study of a self-help group in Malaysia", *Journal of Material Cycles and Waste Management*, Vol. 20 No. 3, pp. 1871-1880.
- Westerbos, M. (2019), "How the sustainable development goals can help fight 'plastic soup'", available at: [www.bthechange.com/how-the-sustainable-development-goals-can-help-fight-plastic-soup-3ce746fc1cba](http://www.bthechange.com/how-the-sustainable-development-goals-can-help-fight-plastic-soup-3ce746fc1cba)
- Williams, G. (2004), "Evaluating participatory development: tyranny, power and (re)politicisation", *Third World Quarterly*, Vol. 25 No. 3, pp. 557-578.
- Wilson, D.C., Costas, V. and Chris, C. (2006), "Role of informal sector recycling in waste management in developing countries", *Habitat International*, Vol. 30 No. 4, pp. 797-808.
- Yin, R.K. (2018), *Case Study Research and Applications: Design and Methods*, SAGE, New Delhi.
- Zahra, S.A., Gedajlovic, E., Neubaum, D.O. and Shulman, J.M. (2009), "A typology of social entrepreneurs: motives, search processes and ethical challenges", *Journal of Business Venturing*, Vol. 24 No. 5, pp. 519-532.

### Further reading

- ASSOCHAM, & EY (2019), "Amount of municipal solid waste (MSW) generated across India from 2001 to 2041 (in million metric tons per year) [graph]", *Statista*, available at: [www.statista.com/statistics/1009110/india-msw-generation-amount/](http://www.statista.com/statistics/1009110/india-msw-generation-amount/) (accessed 20 January 2023).
- Bryant, K.J. (1982), "Personality correlates of sense of direction and geographic orientation", *Journal of Personality and Social Psychology*, Vol. 43 No. 6, p. 1318.
- GoI (2017), *Guidelines for Swachh Bharat Mission Gramin*, Ministry of Drinking Water and Sanitation, Government of India (GoI).
- Government of India (2018), "Plastic waste management rules 2016", available at: [www.cpcbenviis.nic.in/newsletter/plastic%20waste%20management%20rules%202016/Plastic\\_Waste\\_Management\\_Rules\\_2016.pdf](http://www.cpcbenviis.nic.in/newsletter/plastic%20waste%20management%20rules%202016/Plastic_Waste_Management_Rules_2016.pdf)
- NIRDPR (2019), *An Evaluation of the SHG-BLP with Special Reference to Its Loan Portfolio and Asset Quality*, National Institute of Rural Development and Panchayati Raj, Hyderabad, available at: [www.nirdpr.org.in/nird\\_docs/rss/rs070120.pdf](http://www.nirdpr.org.in/nird_docs/rss/rs070120.pdf)
- The special correspondent (2021), "PM interacts with SHG women from Dindigul", available at: [www.thehindu.com/news/national/tamil-nadu/pm-interacts-with-shg-women-from-dindigul/article35888564.ece](http://www.thehindu.com/news/national/tamil-nadu/pm-interacts-with-shg-women-from-dindigul/article35888564.ece) (accessed 13 August 2021).
- United Nations (U.N.) (2023), available at: [www.un.org/sustainabledevelopment/sustainable-development-goals/](http://www.un.org/sustainabledevelopment/sustainable-development-goals/)
- World Bank (2018), "Projected generation of municipal solid waste worldwide from 2016 to 2050 (in billion metric tons) [graph]", *Statista*, available at: [www.statista.com/statistics/916625/global-generation-of-municipal-solid-waste-forecast/](http://www.statista.com/statistics/916625/global-generation-of-municipal-solid-waste-forecast/) (accessed 20 January 2023).

**Appendix. Semi-structured questionnaire**

*RQ1: Could you explain the economic benefit from your daily operation?*

*RQ2: What are the social, environmental benefits your operations?*

*RQ3: Are you aware of Sustainable Development Goals (SDGs)? Does your work contribute to achieving SDGs?*

*RQ4: Could you share operational challenges faced over the years?*

*RQ5: Could you share about the key role of the leadership in the success of your business?*

*RQ6: How do you feel engaged in garbage collection which is usually associated with the lower caste people in India?*

**Corresponding author**

M. Dominic Jayakumar can be contacted at: [dominic.jayakumar@liba.edu](mailto:dominic.jayakumar@liba.edu)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgroupublishing.com/licensing/reprints.htm](http://www.emeraldgroupublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)