

Embedding the Sustainable Development Goals in MSMEs: Employee Perception on Adoption of Sustainable Development

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Abstract

Sustainable development Goals in MSME organizations is combining the components of environmentally, socially and economically responsible practices into their business operations. The integration of such components helps the MSME Organizations to contribute for the Global Sustainability also equally sustaining their long-term growth and resilience. The Research focuses to deeply understanding the adoption of Sustainable Development Goals in MSME Organizations also looks into the perception of employee working in towards it. The Research sample size is 188 employees working in Chennai and Coimbatore based MSME Organizations. Statistical Data Analysis Tools of Simple Percentage Analysis, Descriptive Statistics, Cluster Analysis, One-way ANNOVA and Chi-square was applied with the help of IBM SPSS Statistics 21 and Excel. The findings of the research shows that there is a neutral level of adoption of Sustainable Development Goals in MSME Organizations and employees possess balanced perception towards the Sustainable Development Goals in MSME Organization. The type of MSME unit significantly influences the adoption of Sustainable Development Goals (SDGs) within the organization.

Keywords: Sustainable Development Goals (SDGs), Employee Perception, MSME Organization

Introduction

MSME organization is a business unit classified as Micro, Small or Medium Enterprise. These business unit are defined and regulated under the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 in India, governed by Ministry of Micro, Small and Medium Enterprises is the ministry in the Government of India. It is the apex executive body for the formulation and administration of rules, regulations and laws relating to micro, small and medium enterprises in India. MSMEs increases the entrepreneurship by designing an environment which is feasible for potential entrepreneurs to start and grow their own businesses. It has layers of opportunities and win-win environment such as accessible entry in view of low capital investment, High employment generation, application of innovation, adoption of new technologies and business models. Government schemes and training programs further enhance entrepreneurial skills and technological capabilities. MSMEs are classified based on their investment and Annual Turnover w.e.f 1st July 2020

Category	Investment	Annual Turnover
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Micro Enterprise	Upto Rs 1 Crore	Upto Rs 5 Crore
Small Enterprise	Upto Rs 10 Crore	Upto Rs 50 Crore
Macro Enterprise	Upto Rs 50 Crore	Upto Rs 250 Crore

MSME Organizations is the important part of Indian economy as it contributes 30% to India's GDP, 40% of India's Exports and most importantly generates employment to million people. The growth of MSME sector is reflected in turning around from small or micro enterprise to medium enterprise. MSME has a supportive ecosystem backed by government initiatives aims to empower new generation of entrepreneurs and drives India's Socio economic progress.

Sustainable Development Goals (SDGs) are also known as Global Goals has 17 goals adopted by all United Nations member states in 2015 as part of the 2030 agenda for Sustainable Development, it aims to address and resolve the global challenges. The Goals was planned to achieve by 2030, broken down into give categories of Finance, Technology, Capacity Building, Trade and System issues.

THE SUSTAINABLE DEVELOPMENT GOALS



Source: Sustainable Development Goals- UN Website

The Sustainable Development Goals, 2015 are:

1. No Poverty
2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice, and Strong Institutions

17. Partnerships for the Goals

Successful sustainable development agenda requires the perfect integration of Governments, Private Sectors and Civil Society. These partnerships are built based on principles and values, shared vision and shared goals that place people and the planet at the center, are needed at the global, regional, national and local level. Sustainable Development Goals aim to built long-term investment to empower sectors and companies backed up with more adaptable infrastructure for better environment. In India, NITI Aayog is the Nodal Institution for achieving the Sustainable Development Goals in the country. The SDG India Index Report, released by NITI Aayog, monitors the performance of all States and UTs, benchmarking them based on their overall achievements across various goals. Achieving SDG is most crucial for component to India, integrating in every Industry and Sectors makes is high feasible for its achievement. MSME drives towards the economic- progress and Sustainable Development Goals drives towards environmental progress, integrating together brings synergy effect to the progress. As the MSME Organizations is one of the backbones of economic progression in India, it is very important understand the feasibility, resilience and environmental prospective of the such organizations. Sustainable Development Goals is an international agenda which every country aims to accomplish by 2030, integrating such goals to MSME organization may result in huge adoption and accomplishment. NITI Aayog has developed SDG India Index to measure and track the India' progress towards the adoption of Sustainable Development Goals. This index plays a crucial role in translating global SDG targets into actionable and localized indicators, thereby enabling Indian states and Union Territories to align their development priorities with the global agenda. The SDG India Index not only acts as a comprehensive dashboard to assess progress but also fosters a competitive spirit among states and UTs, encouraging them to innovate and implement sustainable development initiatives at the grassroots level. It serves as a critical policy and monitoring tool, helping policymakers identify priority areas, mobilize resources and assess the effectiveness of ongoing efforts. The Sustainable Development Goals performance and adoption in MSME organizations also contributes to SDG India Index, which indeed represents India in better position on Sustainable Development Goals accomplishments. Their cumulative contribution can significantly enhance India's overall SDG performance, putting the nation in a stronger position on global sustainable development rankings. This study aims to explore the extent to which MSME organizations are adopting the Sustainable Development Goals (SDGs), with a particular focus on understanding employee perceptions towards it.

Objectives

- ❖ To Examine and Identify significant constructs on the Adoption of Sustainable Development Goals in MSME Organizations.
- ❖ To Determine the Employee typology based on their Perception towards the Sustainable Development Goals in MSME Organizations.
- ❖ To Investigate the differences in employee's demographic differences towards their perception of Sustainable Development Goals in MSME Organizations.
- ❖ To Understand the association between the type of MSME Unit and adoption level of Sustainable Development Goals in MSME.

Hypothesis Of The Study

H₁: There is a significant difference between the Age Group of employees with respect to their Perception towards the Sustainable Development Goals in MSME Organizations.

H₁: There is Significant Association between the type of MSME Unit and adoption level of Sustainable Development Goals in MSME.

Review Of Literature

Roy Noah Archer and Mardiana (2025) utilized the qualitative approach of case study method to analyse the implementation of Global Reporting Initiative (GRI) and the achievement of Sustainable Development Goals (SDGs) by Micro, Small, and Medium Enterprises (MSMEs). Scoring method of Data analyses of 12 MSMEs in Java Island declares that majority of the MSMEs understand the importance of Sustainability but it's limited in its implementation due to energy efficiency, waste management and cost pressures. **Fitria Ayu Lestari Niu and Priscilia Christina Sumendap (2024)** describes the role of financing of Bank Syariah Indonesia for MSMEs as way towards reaching the Sustainable Development Goals using secondary data of financial statements and other supporting documents. The study reveals that Bank Syariah Indonesia significantly contributes to achieving the Sustainable Development Goals by supporting MSME growth through inclusive, responsible and productive sharia-based financing. **Ivan Widjaja et al. (2024)** explored the integrated application of agility strategies and risk management to enhance SME performance and resilience, ultimately contributing to the achievement of global SDGs. The study employed secondary data of Systematic Literature Review (SLR). The findings of the study explains that merging agility strategies with risk management improves SMEs capacity to adapt quickly, seize opportunities, and manage a range of business risks effectively, also supporting Sustainable Development Goals. **Miss Dolmita Shailendra (2024)** highlighted the role of MSME in advancing Sustainable Development Goals in India. The research provides specific ways to progress in Sustainable Development Goals including poverty alleviation, gender equality, clean energy and responsible consumption. The research confirms that, despite notable challenges, the Sustainable Development Goals are being widely adopted in MSMEs in India. **Retno Purwani Setyaningrum et al. (2024)** investigated the relationship patterns of digital business based on training, empowerment of MSME actors, digital self-efficacy and digital innovation in creative MSMEs for the achievement of SDGs in MSMEs in West Java and Banten Provinces, Indonesia. The sample size of the research is 207 MSMEs in West Java and Banten Provinces. The study reveals that digital based training has positive impact on MSME actors and empowerment of MSME players has significant positive impact on digital innovation and digital self-efficacy. **Julia Kurniasih et al. (2023)** explains the overview of the systematic approach, issues overcome by MSME and their behavior towards Sustainable development in MSME. The study evaluated various perfective using case study method of analysis specifically from steel industry, agro-industry, craft industry, tourism industry, plastic molding, manufacturing, cosmetics and digital companies. The study concluded that the system dynamics approach enables MSMEs to effectively model and address sustainability challenges, enhancing their contribution to socio-economic and environmental goals. **Tulus T.H. Tambunan (2023)** illuminated the crucial role of MSMEs towards achieving the Sustainable Development Goals in Indonesia employing secondary data. The conclusion of the study indicates that there is potential for achieving Sustainable Development Goals within MSMEs;

however, due to a lack of resources, their contribution remains limited. **Toran Lal Verma and Dr. D.K. Nema (2019)** determined the concept of sustainable development and explored the role of Micro, Small and Medium Enterprises in achieving Sustainable Development Goals formulated by the United Nations. The study provided suggestions on policy approach, awareness campaign, Green MSMEs, Incentives and benefits. The study concluded addressing the importance of SDG adoption by MSMEs also its challenges.

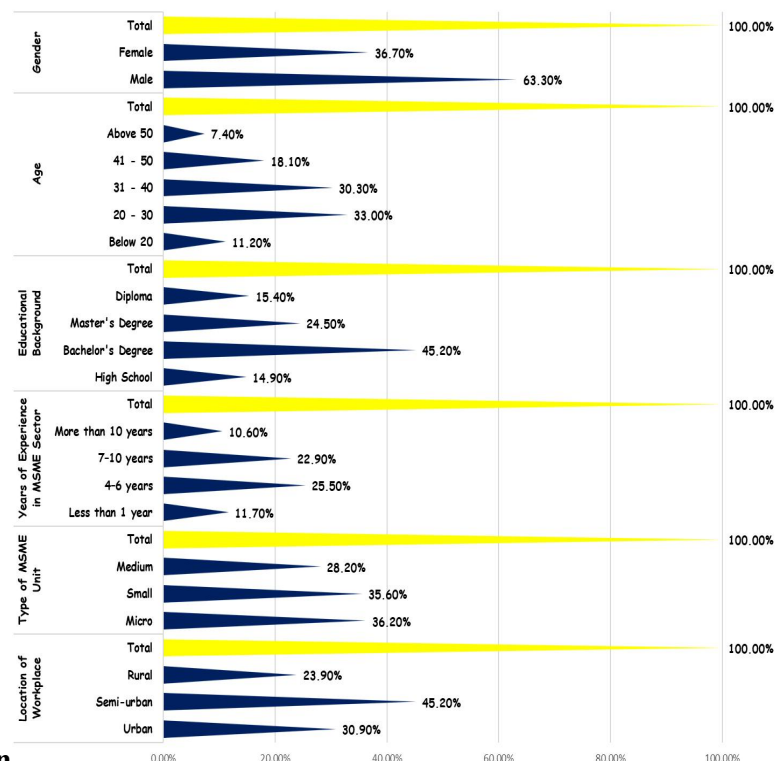
Research Methodology

The research concentrated on understanding the adoption of Sustainable Development Goals in MSME Organizations and employee perception towards the of Sustainable Development Goals in their work operations. Employee working in MSME organization working in Chennai and Coimbatore makes up the population. Primary data was collected through structured questionnaire from 188 employing using purposive sampling and secondary data was adopted from various e-resources such as ResearchGate, google-scholar and shodhganga.

Tools Used For The Study

- Simple Percentage Analysis
- Descriptive Statistics
- Cluster Analysis
- One-way ANNOVA
- Chi-square

DEMOGRAPHIC PROFILE OF THE RESPONDENTS



Data Analysis And Interpretation

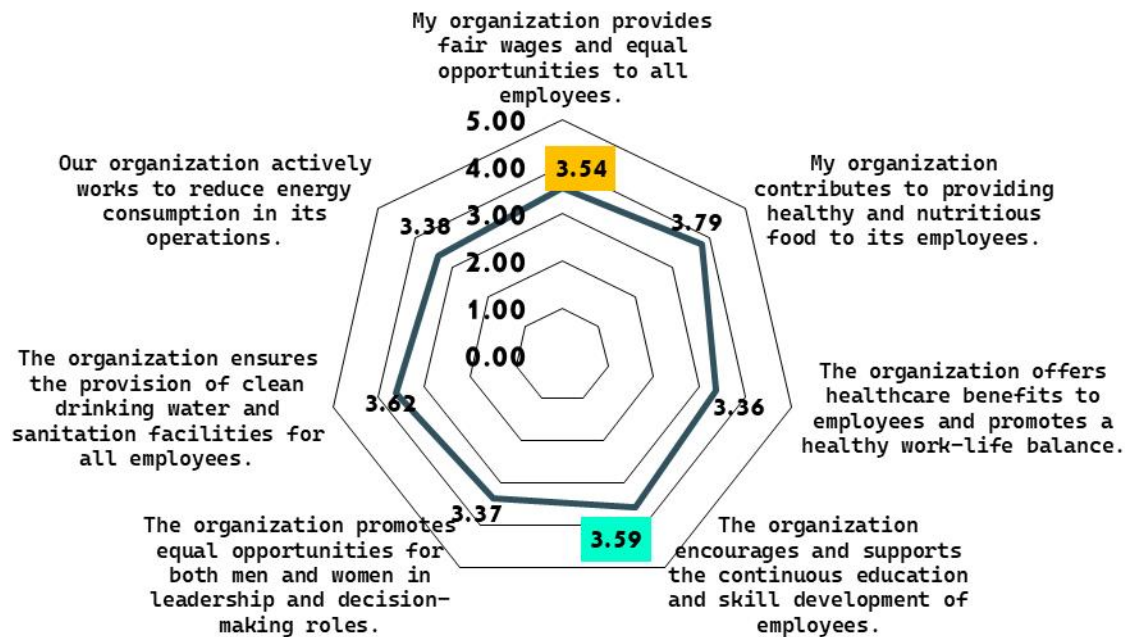
Source: Primary Data

The demographic analysis of the study reveals that male respondents constitute 63.30% of the workforce in MSME organizations. The majority of employees fall within the age groups of 20–30 and 31–40, representing 33% and 30.30%, respectively. Most of these employees hold a Bachelor's degree as their highest qualification. Around 25.50% work for in MSME organizations for 4 to 6 years and 22.90% for 7 to 10 years. Employees are almost equally distributed between small and micro enterprises, at 36.20% and 35.60% respectively. Semi-urban location accounts at 45.20%, serving as prime location for MSME Organizations.

TABLE 1: Descriptive Statistics Adoption of Sustainable Development Goals in MSME Organizations

Adoption Of Sustainable Development Goals in MSME Organizations	Mean	Std. Deviation
My organization provides fair wages and equal opportunities to all employees.	3.54	1.031
My organization contributes to providing healthy and nutritious food to its employees.	3.79	0.690
The organization offers healthcare benefits to employees and promotes a healthy work-life balance.	3.36	0.805
The organization encourages and supports the continuous education and skill development of employees.	3.59	0.845
The organization promotes equal opportunities for both men and women in leadership and decision-making roles.	3.37	0.800
The organization ensures the provision of clean drinking water and sanitation facilities for all employees.	3.62	0.789
Our organization actively works to reduce energy consumption in its operations.	3.38	0.788
The organization supports fair labor practices and ensures safe working conditions.	3.51	0.749
The Organization encourages innovative practices and technology adoption to improve business processes.	3.36	0.799
The organization's operations are designed to minimize environmental impacts on local communities.	3.55	0.842

Source: Computed Data



Source: Computed Data

The above descriptive analyses highlights that most of the employee working in MSME organization has given strong agreement to the adoption sustainable development of the given statement of “My organization contributes to providing healthy and nutritious food to its employees” accounting at mean score of 3.79 and also of 3.62 mean score for “The organization ensures the provision of clean drinking water and sanitation facilities for all employees”. Most MSME organizations have begun integrating Sustainable Development Goals (SDGs) into their operations, as reflected by employee agreement with this statement, resulting in mean scores ranging from 3.36 to 3.72.

TABLE 2
Cluster Analysis of Employee Perception towards the Sustainable Development Goals in MSME Organizations

Statements	Cluster Mean		ANOVA	
	1	2	F	Sig.
	N= 97	N= 91		
I am aware of the UN Sustainable Development Goals (SDGs).	3.10	3.71	23.049	< 0.001**
I understand how my role contributes to achieving sustainability goals.	3.15	4.08	130.00	< 0.001**
I believe sustainability development goals is essential for business growth.	3.18	3.77	28.482	< 0.001**
My organization sets clear sustainability goals and communicates them to employees	3.03	4.12	155.831	< 0.001**
I feel proud working in an organization that adopts sustainable practices.	3.10	3.68	27.358	< 0.001**

My organization provides training on SDGs and sustainability on the work operations	3.09	4.18	161.696	< 0.001**
I support the idea of integrating SDGs into daily work processes	3.18	3.75	24.801	< 0.001**
There is open communication in my workplace about progress and challenges related to sustainability efforts.	2.96	4.23	282.666	< 0.001**
Average of Mean Scores	3.10	3.94		

Source: Computed Data

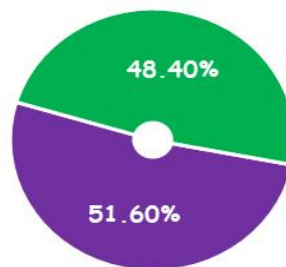
Based on the analysis, the statements are identified into two cluster groups and employee perception towards the Sustainable Development Goals in MSME Organizations is significant.

TABLE 3
Cluster Analysis of the Employee Perception towards the Sustainable Development Goals in MSME Organizations

Clusters	Frequency	Percentage
1	97	51.6%
2	91	48.4%
Total	188	100%

Source: Computed Data

**CLUSTER GROUP OF THE RESPONDENTS BASED EMPLOYEE
PERCEPTION TOWARDS THE SUSTAINABLE DEVELOPMENT
GOALS IN MSME ORGANIZATIONS**



■ Passive employees ■ Proactive employees

Source: Computed Data

There are two groups in the employee perception towards the Sustainable Development Goals in MSME Organizations out of which the first cluster groups hold 51.6% of respondents who neutrally propose to the adoption of the Sustainable Development Goals in MSME Organizations. This cluster group has an average mean score of 3.10, indicating a neutral stance, neither agreeing nor disagreeing. First cluster group can be named as passive employees, as they are not possessing active involvement to the adoption of Sustainable Development Goals. The second cluster group accounts 48.4% of the respondents with average mean score of 3.94, possessing

strong involvement towards the adoption of Sustainable Development Goals. This cluster group is known as proactive employees as they have strong knowledge and awareness about the Sustainable Development Goals in the MSME Organizations.

TABLE 4
One-Way ANOVA for significant difference among Age Group with respect to Employee Perception towards the Sustainable Development Goals in MSME Organizations

Age Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Below 20	21	1.95	1.024	.223	1.49	2.42
20-30	62	2.16	.995	.126	1.91	2.41
31-40	57	1.53	.889	.118	1.29	1.76
41-50	34	1.41	.821	.141	1.13	1.70
Above 50	14	1.71	.994	.266	1.14	2.29
Total	188	1.78	.977	.071	1.64	1.92

Source: Computed Data

Age Group		Sum of Squares	df	Mean Square	F	Sig.
Employee Perception towards the Sustainable Development Goals in MSME Organizations	Between Groups	17.975	4	4.494	5.119	.001
	Within Groups	160.642	183	.878		
	Total	178.617	187			

Source: Computed Data

Since the p value is less than 1% level of significance, null hypothesis is not accepted with regard to the Employee Perception towards the Sustainable Development Goals in MSME Organizations. There is significance difference among age group of the employee with regard to the perception of the towards the Sustainable Development Goals in MSME Organizations because difference age group employee perceives the changes differently.

TABLE 5
Association between the type of MSME Unit and adoption level of Sustainable Development Goals in MSME

Type of MSME Unit	Adoption level of Sustainable Development Goals in MSME			Total	Chi- Square Value (p value)
	Low	Medium	High		
Micro	21	36	11	68	7.646 (0.016)
Small	17	34	16	67	
Medium	11	22	20	53	
Total	49	92	47	188	

Source: Computed Data

The table above shows a cross-tabulation of type of MSME unit of Micro, Small and Medium with Adoption level of Sustainable Development Goals in MSME. Among 68 micro MSME Unit, 21 has low level adoption, 36 Medium level adoption and 22 high level adoption. With regard to 67 Small MSME Unit, 17 has low level adoption, 34 Medium level adoption and 16 high level adoption and in case of 53 Medium MSME Unit, 11 unit adopts low level, 22 units adopts medium level and 20 adopts high level of Sustainable Development Goals. According to Chi-square values of 7.646 and $p = 0.016$ at the 5% level, there is a significant association between the type of MSME Unit and adoption level of Sustainable Development Goals in MSME Units.

MAJOR FINDINGS

1. The demographic analysis of the study reveals that, male employee has majorly occupied the MSME organization at 63.30%, most of the employee fall in the group of 20-30 and 31-40. 45.20% of the respondents secured with Bachelor's degree. The employees significantly possess 4 to 6 years and 7 to 10 years of experience in MSME organizations distributed in both small and micro enterprises located majorly in semi- urban location.
2. The employees working in MSME organizations have given neutral to near agreement to the statements of “My organization contributes to providing healthy and nutritious food to its employees” and “The organization ensures the provision of clean drinking water and sanitation facilities for all employees” with mean scores of 3.79 and 3.62 respectively, towards the adoption of Sustainable Development Goals in their organization.
3. Cluster analysis identified two group, namely passive and proactive employees constituting 51.6% and 48.4% with average cluster mean score of 3.10 and 3.94 respectively and highlights the significance of the employee perception towards the sustainable goals in MSME organizations.
4. One-Way ANNOVA statistical data analysis declares that there is significance difference among age group of the employee with regard to the perception of the towards the Sustainable Development Goals in MSME Organizations at 1% level of significance since p-value is <0.001 .
5. Cross-tabulation of the type of MSME Unit and adoption level of Sustainable Development Goals in MSME displays that Among 68 micro MSME Unit, 21 has low level adoption, 36 Medium level adoption and 22 high level adoption. With regard to 67 Small MSME Unit, 17 has low level adoption, 34 Medium level adoption and 16 high level adoption and in case of 53 Medium MSME Unit, 11 unit adopts low level, 22 units adopts medium level and 20 adopts high level of Sustainable Development Goals. The Chi-square value of 7.646 ($p = 0.016$) advocates a significant association between the type of MSME Unit and adoption level of Sustainable Development Goals in MSME Units.

Limitation Of The Study

- The study exclusively focusses on understanding the adoption and employee perceptions of Sustainable Development Goals in MSME Organizations.
- The data collection was limited only to the cities of Chennai and Coimbatore.
- Department and Position of the employees were not included in the study.

Suggestions Of The Study

- There is adoption of Sustainable Development Goals in MSME Organizations, but significant adoption was to be overlooked with adequate infrastructure. So, The infrastructure of the organizations can be improved.
- There is lack transparency for employee for adoption Sustainable Development Goals in MSME Organizations, information related to such an initiative can be communicated using different modes.
- Integrating Corporate Social Responsibility (CSR) activities with the adoption of Sustainable Development Goals can enhance environmental progress.

Conclusion

The Sustainable Development Goals (SDGs) are an international agenda that every country in the world is committed to achieving. Progress toward these goals can begin with small steps, gradually leading to larger actions. These steps should start at the primary level of operations ranging from local initiatives to international efforts. Incorporating the Sustainable Development Goals (SDGs) into MSME organizations represents one of the small but crucial steps toward achieving the overall agenda. As MSME organizations possess an important role in Indian Economy, integrating the Sustainable Development Goals (SDGs) to its operation can results in great accomplishment. The results of the study reveals that there is neutral adoption of Sustainable Development Goals (SDGs) in the MSME organizations and employees working in MSME organizations has balanced perception towards Sustainable Development Goals (SDGs). The type of MSME unit plays vital role in adoption of Sustainable Development Goals (SDGs) in their organization.

Research For Further Scope

- The research can also be elongated from the perspective of MSME entrepreneurs on adoption of Sustainable Development Goals.
- Both Corporate Social Responsibility (CSR) and Sustainable Development Goals can be studies together from the employee perspective.
- Employee involvement and employee engagement can be included in the further study on adoption of Sustainable Development Goals.
- The population of the study can be extended to other cities and states of India.

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