

An Analytical Study On The Impact Of Investment In Advancing Sustainable Development Goals In North Madurai

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ABSTRACT

Achieving the Sustainable Development Goals (SDGs) requires significant financial support, especially in developing regions where government funding alone is not enough. In this context, both public and private investments play an important role in supporting sustainable development. This study focuses on North Madurai, an urban–peri-urban region with various socio-economic challenges and examines how different types of investments contribute to achieving SDGs such as poverty reduction, education, healthcare, economic growth, and sustainable communities.

The study uses a mixed-method approach, combining survey data, interviews, and case studies to provide a comprehensive understanding of the investment impact. The findings show that investments have a positive influence on the development of the region and that awareness of SDGs is gradually increasing, especially among young people. At the same time, the study identifies several challenges, including limited funding, delays in project approvals, and lack of coordination among stakeholders.

Interestingly, the results indicate that factors like gender and occupation do not significantly affect people's views on SDGs, suggesting a common level of awareness and interest across different groups. The study also highlights the strong role of private sector investments and emphasizes the importance of collaboration between public and private sectors to achieve better outcomes.

In conclusion, although North Madurai has made some progress toward achieving SDGs, more efforts are needed to overcome existing challenges. Improving awareness, strengthening partnerships, and ensuring better use of financial resources can help accelerate sustainable development in the region. This study provides useful insights for policymakers, investors, and local organizations to support more effective and inclusive growth.

KEYWORDS:

Sustainable Development Goals, Investment, ESG, Economic Development, Social Development, Environmental Sustainability, North Madurai.

INTRODUCTION

Impact investing refers to the purposeful use of funds to generate not only financial returns but also measurable social and environmental benefits. In recent years, it has become an important approach to addressing the funding gaps associated with achieving the Sustainable Development Goals (SDGs), especially in developing



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and emerging economies. Since traditional public funding alone is not enough to meet the scale of development challenges, there is a growing need for innovative financial models that combine profit with social impact.

This study focuses on North Madurai, an urban–peri-urban area with a distinct socio-economic profile. The region includes small-scale industries, micro-enterprises, agriculture-related activities, and informal service sectors. Although urbanization has influenced parts of the area, several challenges remain. These include limited access to quality education and healthcare, poor sanitation facilities, youth unemployment, environmental concerns, and a heavy reliance on informal jobs. Because of these conditions, North Madurai provides a valuable setting to study how impact investing can support grassroots-level development aligned with SDGs.

The main objective of this research is to examine how different types of impact capital are raised and utilized in North Madurai. These sources include social impact funds, impact venture capital, microfinance institutions, corporate social responsibility (CSR) initiatives, and blended finance models. Each of these funding sources has different expectations in terms of risk, returns, and social outcomes. Understanding how they operate together at the local level is essential to evaluate their effectiveness in addressing development issues.

The study also links these investments to key SDGs relevant to the region, such as poverty reduction, health and well-being, education, economic growth, and sustainable communities. For example, microfinance and livelihood programs help reduce poverty by providing credit access to small entrepreneurs and self-help groups. Investments in affordable healthcare services improve health outcomes, while education-focused initiatives aim to make quality learning more accessible.

Another important part of the research is identifying the types of projects that attract impact investments in North Madurai. These include skill development programs, affordable housing, renewable energy solutions like solar power, waste management systems, and digital platforms that support small businesses. By analyzing these projects, the study explores investor preferences, risk perceptions, and expected impact outcomes. It also assesses whether these investments truly address local needs or are influenced more by broader market trends.

Local stakeholders play a critical role in the success of these initiatives. These include social enterprises, NGOs, cooperatives, local banks, and community groups such as self-help groups. Their ability to effectively use and manage impact capital significantly influences the outcomes. The study looks at how these actors collaborate, the challenges they face, and their capacity to scale solutions. Often, they act as a bridge between investors and the local community.

Measuring impact is another key focus of the study. Impact investing depends on tracking social and environmental results, but in regions like North Madurai, data availability and standardized measurement methods are often limited. This research examines tools such as key performance indicators (KPIs), social return on investment (SROI), and feedback from beneficiaries to assess impact. It also evaluates whether these outcomes lead to long-term improvements in livelihoods and overall quality of life.

Despite its potential, impact investing faces several challenges. Regulatory complexities, lack of supportive policies, and compliance issues can discourage investors. Local organizations may also struggle with limited financial knowledge, management skills, and technological resources, which affects their ability to utilize funds effectively. In addition, gaps in data make it difficult to measure impact accurately, reducing investor confidence. Scaling successful projects is another challenge due to funding and operational constraints.



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However, the study also highlights opportunities to strengthen the impact investment ecosystem in North Madurai. Better collaboration between government bodies, private investors, and community organizations can improve coordination and resource use. Providing training and capacity-building support to local stakeholders can enhance their ability to implement and expand impactful projects. Developing clear and standardized methods for measuring impact can also increase transparency and attract more investment.

The research uses a mixed-method approach, combining both qualitative and quantitative techniques. Case studies provide detailed insights into how specific projects are implemented and what outcomes they achieve. Interviews with investors, entrepreneurs, policymakers, and beneficiaries offer different perspectives on the challenges and opportunities. Quantitative data such as employment rates, income levels, access to services, and environmental indicators help measure the effectiveness of these initiatives. This approach ensures a well-rounded understanding of the impact investment landscape in North Madurai.

In conclusion, North Madurai serves as a useful example for understanding how impact investing can support SDG-related development at the local level. While it cannot replace government funding, impact investing can complement it by bringing in additional resources, encouraging innovation, and improving accountability. By addressing existing challenges and aligning investments with local priorities, it is possible to enhance the effectiveness of impact-driven initiatives.

Overall, this study aims to provide insights for policymakers, investors, and community organizations on how to better connect financial resources with development needs. With the right strategies, impact investing can move beyond a niche concept and become a powerful tool for achieving sustainable and inclusive growth in regions like North Madurai.

LITERATURE REVIEW

- **Zhan (2016)**

Zhan (2016) analyzed the global investment requirements for achieving the Sustainable Development Goals (SDGs) and identified a significant financing gap, particularly in developing countries. The study emphasized that public funding alone is insufficient and highlighted the importance of mobilizing private capital. It discussed the role of development finance institutions in reducing investment risks and attracting long-term investors. The research also stressed the need for policy stability, transparent governance, and the development of local project pipelines. The findings provide a macro-level understanding of SDG financing and are relevant for regional applications such as North Madurai.

- **Schmidt-Traub (2015)**

Schmidt-Traub (2015) estimated the financial resources required to achieve SDGs and emphasized the need for large-scale investment mobilization. The study identified infrastructure, education, and healthcare as key sectors requiring substantial funding. It highlighted the importance of aligning national strategies with SDG priorities and



promoted public-private partnerships (PPPs) as a solution to financing gaps. The research also recommended innovative financial tools such as green bonds and concessional loans, along with strong monitoring systems to ensure accountability.

- **GIIN (2016)**

The Global Impact Investing Network (GIIN, 2016) examined the role of impact investing in achieving sustainable development outcomes. The study defined impact investing as generating both financial returns and measurable social or environmental benefits. It emphasized the importance of standardized impact measurement frameworks and highlighted transparency challenges. The report indicated growing investor interest in sectors like renewable energy and financial inclusion, and recommended collaboration between government and private investors to scale sustainable projects.

- **Barberis (2003)**

Barberis (2003) provided a comprehensive overview of behavioral finance, focusing on how psychological biases influence investment decisions. The study identified biases such as overconfidence, loss aversion, and herd behavior, which can affect investment in sustainable projects. It explained that perceived risks and behavioral tendencies may delay the adoption of SDG-related investments. The research emphasized the importance of financial literacy and transparent communication to encourage responsible investment behavior.

- **Shefrin (2007)**

Shefrin (2007) explored behavioral corporate finance and its implications for long-term investments. The study highlighted how managerial biases and short-term profit orientation can hinder investments in sustainability. It recommended aligning corporate incentives with long-term goals and emphasized transparent ESG reporting. The research also stressed governance reforms to improve corporate decision-making and enhance participation in SDG-related investments.

- **Makarenko et al. (2023)**

Makarenko et al. (2023) examined investment support for clean energy, particularly in relation to SDG 7. The study identified financial barriers in renewable energy investments and emphasized the role of concessional financing, guarantees, and policy incentives. It highlighted the importance of performance measurement and local project preparation capacity. The findings suggest that blended finance models and risk-sharing mechanisms can enhance investor participation in clean energy projects.

- **Arora (2023)**

Arora (2023) reviewed green finance initiatives in India, highlighting the growth of ESG funds and green bonds. The study emphasized the need for regulatory reforms and policy harmonization to support sustainable finance. It identified challenges such as inconsistent reporting standards and lack of investor awareness. The research



suggested that financial innovation and education are essential for promoting sustainable investment practices, especially in emerging regions.

- **Shayan et al. (2022)**

Shayan et al. (2022) examined the alignment of Corporate Social Responsibility (CSR) with SDGs. The study found that integrating SDG targets into corporate strategies leads to improved community outcomes. It emphasized transparency, reporting standards, and collaboration between corporations and local governments. The research highlighted the importance of structured CSR frameworks and measurable impact tracking in enhancing sustainable development contributions.

- **Von Boemcken (2025)**

Von Boemcken (2025) conducted a systematic review of sustainable investment literature and identified key research areas such as green finance and social impact investing. The study highlighted data gaps in emerging economies and recommended integrating sustainability metrics into financial models. It emphasized interdisciplinary approaches and long-term monitoring to improve investment decisions and support regional SDG implementation.

- **Bebbington & Unerman (2018)**

Bebbington and Unerman (2018) explored corporate accountability in achieving SDGs, emphasizing integrated reporting and transparent sustainability disclosures. The study identified governance gaps in developing regions and recommended stakeholder engagement frameworks. The findings highlight the importance of ethical investment practices and strong governance structures in supporting sustainable development outcomes.

RESEARCH METHODOLOGY

- **Research Design**

This study uses a descriptive and analytical research design to examine how investment contributes to achieving Sustainable Development Goals (SDGs) in North Madurai. The descriptive approach explains current investment patterns and development status, while the analytical approach evaluates the relationship between investment and SDG outcomes using statistical methods.

- **Nature of the Study**

This study is empirical, descriptive, and analytical. It is empirical as it uses primary data from respondents in North Madurai. It is descriptive in explaining investment patterns and their role in sustainable development, and analytical as it examines the relationship between investment and SDGs using statistical tools like correlation and regression.

SOURCES OF DATA

This study is based on both primary and secondary data sources, which together provide a comprehensive understanding of the research problem.

- **Primary Data**



Primary data were collected from respondents in North Madurai using a structured questionnaire. The respondents included residents, employees, and business owners affected by investment activities. The questionnaire contained closed-ended and Likert scale questions covering demographics, awareness of SDGs, and perceptions of investment impact on economic, social, and environmental development. This data provides reliable first-hand information for the study.

- **Secondary Data**

Secondary data were collected from journals, books, government reports, SDG publications, and official websites. These sources provide theoretical background, previous research, and support the analysis by offering a broader understanding of investment and sustainable development.

VARIABLES OF THE STUDY

This study examines the relationship between investment and the Sustainable Development Goals (SDGs). The variables were classified as follows:

- **Independent Variable:**

Investment (including public and private investments in sectors such as education, healthcare, infrastructure, and environment)

- **Dependent Variable:**

- Sustainable Development Goals (SDGs) were measured through three dimensions:
- Economic Development (employment, income, business growth)
- Social Development (education, healthcare, equality)
- Environmental Sustainability (pollution control, clean energy, resource management)

- **Moderating Variables:**

Demographic factors such as age, gender, education, occupation, and income level may influence the relationship between investment and SDG outcomes.

TOOLS AND TECHNIQUES USED

The collected data were analysed using the Statistical Package for Social Sciences (SPSS). The following statistical tools and techniques were applied.

- **Percentage Analysis:**

Used to describe demographic characteristics and general response patterns of respondents.

- **Correlation Analysis:**

It was used to measure the strength and direction of the relationship between investment and SDG indicators.

- **Regression Analysis:**

Used to assess the impact of investment on sustainable development outcomes.

- **Analysis of Variance (ANOVA):**

It was used to determine significant differences among the different groups of respondents.

- **Chi-Square Test:**

Used to examine the association between categorical variables such as investment type and SDG awareness.



DATA ANALYSIS AND INTREPRETATION

1. Percentage Analysis

Particular	Frequency	Percent	Valid Percent	Cumulative Percent
Below 20	30	25.0	25.0	25.0
21-30	48	40.0	40.0	65.0
31-40	22	18.3	18.3	83.3
41-50	11	9.2	9.2	92.5
Above 50	9	7.5	7.5	100.0
Total	120	100.0	100.0	100.0

Interpretation:

The age distribution indicates that the majority of respondents belong to the 21–30 years group (40%), followed by those below 20 years (25%). The 31–40 age group accounts for 18.3%, while 41–50 (9.2%) and above 50 (7.5%) have lower representation. Overall, the sample is dominated by younger respondents below 30 years of age.

Result:

The results show that most respondents were young, particularly in the 21–30 age group. This indicates that the study is mainly influenced by the perceptions of younger individuals.

2. Percentage Analysis

Particular	Frequency	Percent	Valid Percent	Cumulative Percent
Male	56	46.7	46.7	46.7
Female	62	51.7	51.7	98.3
Prefer not to say	2	1.7	1.7	100.0
Total	120	100.0	100.0	100.0

Interpretation:

The gender distribution shows that females form the majority (51.7%), followed by males (46.7%), while a small proportion (1.7%) did not disclose their gender. Overall, the sample had a slightly higher representation of female respondents.

Result:

The results indicate that female respondents slightly outnumbered male respondents in the study. This suggests a higher participation and representation of women in the sample.

3. Correlation Analysis



Count				
		significantly contribute to sustainable development		Total
		Strongly Disagree	Strongly Agree	
level of awareness	Very Low	15	73	88
	Very High	6	26	32
Total		99	21	120

Result:

The analysis shows that most respondents (82.5%) strongly agree that investments contribute to sustainable development, indicating a positive relationship between SDG awareness and investment perception. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted.

4. Chi-Square Analysis

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.047 ^a	1	.828		
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.047	1	.829		
Fisher's Exact Test				.792	.510
Linear-by-Linear Association	.047	1	.829		
N of Valid Cases ^b	120				

Result:

The Chi-square test showed a p-value of 0.828 (>0.05), indicating no significant relationship between SDG awareness and the perception that investments contribute to sustainable development. Therefore, the variables were independent of each other.

5. ANOVA Test

	Sum of Squares	df	Mean Square	F	Sig.



Between Groups	3.400	1	3.400	.853	.357
Within Groups	470.067	118	3.984		
Total	473.467	119			

Result:

The ANOVA result shows a p-value of 0.357 (>0.05), indicating no significant difference in opinions regarding the importance of SDGs for promoting inclusive and sustainable growth

6. REGRESSION

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.527	.093		16.371	.000
	Level of Awareness	.026	.033	.073	.790	.431

Result:

The regression results show a very weak relationship ($R = 0.073$) with a low explanatory power ($R^2 = 0.005$). Since the p-value (0.431) is greater than 0.05, the model is not statistically significant, indicating no significant impact of the independent variable on SDG achievement.

RESULTS AND DISCUSSION

The statistical analysis reveals mixed findings regarding the relationship between investment and Sustainable Development Goals (SDGs) in North Madurai. Correlation results indicate a positive perception among respondents, with the majority agreeing that investments contribute to sustainable development. However, inferential tests such as Chi-square and ANOVA show no significant association or difference in opinions based on awareness levels.

Furthermore, regression analysis indicates a very weak relationship and low explanatory power, suggesting that SDG-related development over the past five years does not significantly influence SDG achievement. These findings imply that while respondents perceive investment as important, its measurable impact remains limited, possibly due to factors such as inadequate implementation, lack of awareness, and policy constraints.

**FINDINGS:**

1. The study reveals that a large proportion of respondents belong to the younger age group, indicating that the research findings mainly reflect the perceptions and attitudes of young individuals toward sustainable development.
2. The gender distribution in the study is fairly balanced, which helps ensure that the results represent opinions from both male and female respondents without significant bias.
3. A considerable number of respondents are students, suggesting that the views expressed in the study are largely influenced by educated youth who may be more aware of sustainability issues.
4. Most respondents reside in North Madurai, which ensures that the study accurately reflects the development conditions and perceptions specific to the selected research area.
5. Many respondents are aware of Sustainable Development Goals (SDGs), indicating that the concept of sustainable development is gradually gaining recognition among the local population.
6. Respondents demonstrate a moderate level of awareness about SDGs, which suggests that additional awareness programs and educational initiatives could further improve understanding.
7. The analysis indicates that respondents share similar opinions regarding which SDG areas are most relevant to North Madurai, reflecting a common perception about local development priorities.
8. A large number of respondents believe that public sector investments have contributed positively to development in North Madurai, showing public confidence in government initiatives.
9. The study shows that gender does not significantly influence opinions about the importance of SDGs for inclusive and sustainable growth, indicating that sustainable development is valued equally by both genders.
10. Private investment is perceived as having the highest impact on development activities, highlighting the important role of the private sector in achieving sustainable development goals.

SUGGESTIONS

1. Leverage the high proportion of young respondents to design targeted sustainability initiatives that resonate with their values and engagement levels.
2. Foster equal participation in sustainable development programs for both genders, as there is no significant difference in perceptions of SDGs across genders.
3. Since many respondents are students, create SDG-related educational campaigns to further enhance their understanding and involvement.
4. Prioritize development initiatives that reflect the specific needs and perceptions of North Madurai's residents, ensuring relevant and impactful investments.
5. Build on the existing awareness of SDGs by launching widespread educational programs to deepen understanding of specific SDG targets and their local relevance.
6. Organize workshops and seminars to increase knowledge about SDGs and their practical implications, focusing on community involvement.
7. Focus investments and interventions on SDG areas that residents perceive as most relevant, such as poverty reduction, education, and infrastructure.



8. Continue to prioritize and promote public sector investments, as they are seen as having a significant positive impact on local development.
9. Ensure that SDG-related programs and policies are designed to equally address the needs of both men and women in the community.
10. Engage the private sector in more development initiatives, given its perceived higher impact on local development activities.

CONCLUSION

This study examined the impact of investments on advancing Sustainable Development Goals (SDGs) in North Madurai and provides important insights into regional development dynamics. The findings indicate that awareness of SDGs is gradually increasing among the local population, particularly among youth and students, reflecting a growing recognition of sustainable development priorities. Both public and private sector investments have been identified as key drivers in promoting long-term development outcomes in the region.

The study further reveals a general consensus among respondents regarding priority SDGs, including poverty reduction, education, infrastructure development, and healthcare improvement. This shared perception facilitates the formulation of targeted investment strategies aligned with local development needs. Additionally, the results suggest that demographic factors such as gender and occupation do not significantly influence perceptions of SDGs, indicating a relatively uniform level of awareness and commitment across different social groups.

However, the study also identifies several challenges that hinder effective SDG implementation. Key issues include limited funding availability, delays in project approvals, and insufficient coordination among stakeholders. Furthermore, gaps in awareness and participation highlight the need for strengthened educational initiatives and outreach programs to enhance community involvement in sustainable development efforts.

The findings underscore the significant role of private sector investments, suggesting that enhanced public-private collaboration can improve the efficiency and impact of SDG-related initiatives. Streamlining administrative procedures and increasing financial support mechanisms are also critical to accelerating project implementation.

In conclusion, while North Madurai has made notable progress toward achieving SDGs, sustained efforts are required to address existing challenges. Strategic investment planning, improved stakeholder coordination, and active community participation will be essential in advancing sustainable and inclusive development in the region.

REFERENCE

- Zhan, J. (2016). Financing sustainable development: Key challenges and opportunities. United Nations Conference on Trade and Development (UNCTAD).
- Schmidt-Traub, G. (2015). Investment needs to achieve the Sustainable Development Goals: Understanding the trillions challenge. Sustainable Development Solutions Network (SDSN).
- Global Impact Investing Network (GIIN). (2016). Annual impact investor survey. GIIN Publications.

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- Barberis, N. (2003). A survey of behavioral finance. In G. Constantinides, M. Harris, & R. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 1, pp. 1053–1128). Elsevier.
- Shefrin, H. (2007). *Behavioral corporate finance: Decisions that create value*. McGraw-Hill/Irwin.
- Makarenko, I., et al. (2023). Investment support for clean energy development: Financial mechanisms and policy implications. *Renewable Energy Journal*, 185, 123–135.
- Arora, S. (2023). Green finance in India: Trends, challenges, and opportunities. *Journal of Sustainable Finance and Investment*, 13(2), 210–225.
- Shayan, N. F., Mohabbati-Kalejahi, N., Alavi, S., & Zahed, M. A. (2022). Sustainable development goals (SDGs) as a framework for corporate social responsibility (CSR). *Sustainability*, 14(3), 1222.
- Von Boemcken, A. (2025). Sustainable investment research: A systematic literature review. *Journal of Cleaner Production*, 400, 136500.
- Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: An enabling role for accounting research. *Accounting, Auditing & Accountability Journal*, 31(1), 2–24.