Achieving Sustainable Development Goals Through Microfinance: An Incremental Steps Towards Growth.

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Abstract

In order to access a brighter and more sustainable future for all by the year 2030 the UN Members have adopted the Sustainable Development Goals (SDGs). The three most important global challenges they tackle are ensuring that everyone lives in peace and prosperity, protecting the environment, and ending poverty. The 17 Goals are critical worldwide development initiatives that balance social, economic, and environmental sustainability. They are all interconnected and interdependent. At present Microfinance Institutions (MFINs) are playing very crucial role to make banking and financial services available for remote people which is contributing directly or indirectly for achievement of SDG. Among four of SDGs, notably No Poverty, Quality Education, Gender Equality and promoting Decent work & Economic growth, and reducing inequality, are closely tied to the concepts of microfinance. Their growth is depicted through increasing Gross loan Portfolio (GLP) in recent years. The purpose of this paper is to look into how these 4 goals can be met in India through microfinance practices. For investigating the linkage between SDG and Microfinance tools like CAGR, Pearson Correlation has been used.

Keywords: SDG, Microfinance Institutions (MFINs), Gross loan Portfolio (GLP)

Introduction

Sustainable development is an overarching goal in the modern world, aiming to tackle problems like poverty, inequality, environmental degradation, and instability of the economy. With seventeen audacious objectives to change the world, the SDGs of the United Nations have become a complete framework. Despite our shared dedication and determination, accomplishing these objectives still seems impossible, especially in the context of economic empowerment and poverty reduction. In the middle of this difficulty, Microfinance Institutions, a theory based on empowering people at the grassroots level, has attracted a lot of interest. This research paper delves into the intricate intersection of microfinance and sustainable development, exploring the profound impact of seemingly 'tiny strides' in addressing colossal challenges. Microfinance is essentially about giving financial services to those who have historically been shut out of the conventional banking system. This allows these people to start small enterprises, invest in education, and raise their standard of living in general. By examining the role of microfinance institutions, this study seeks to dissect the ways in which these initiatives contribute to the realization of Sustainable Development Goals. In doing so, it not only investigates the successes but also critically assesses the limitations and areas requiring further attention. This study seeks to focus on complex dynamics of microfinance as a driver of sustainable development by a thorough examination of the current literature and other available resources. Shortage of authorised financial services is the catalyst for studying rural microfinance and rural communities face. For instance, it is impossible to eradicate poverty and achieve gender equality while two thirds of adults globally lack financial literacy and women continue to lag behind men in financial decisionmaking (Lee, C. W., & Huruta, A. D., 2022).

This study will also examine the difficulties that microfinance institutions confront, taking into account things like scalability, social effect measurement, and ethical considerations. In essence, this study project is a thorough investigation of the mutually beneficial relationship between sustainable development and microfinance. It is intended that by gaining a deeper understanding through these insights, plans and policies would be able to be developed that will be more successful in meeting the Sustainable Development Goals and promoting a more just and sustainable future for all. The symbiotic relationship between microfinance and sustainable development represents a crucial nexus in the global pursuit of a more equitable and sustainable future. By providing financial resources and support, microfinance interventions have been instrumental in fostering financial inclusion, breaking gender barriers, and enhancing environmental conservation efforts. One of the primary focal points of this research lies in understanding the profound impact of microfinance interventions on communities. These interventions not only enable individuals to lift themselves out of poverty but also create a ripple effect, bolstering entire communities economically and socially. By providing access to credit and financial

services, microfinance acts as a potent tool, nurturing entrepreneurship and local enterprise, thereby enhancing economic stability and resilience.

Furthermore, a key dimension of this research revolves around the theme of financial inclusion, exploring how microfinance acts as an agent of change in societies where large segments of the population are excluded from formal financial systems. Through innovative financial products and services, microfinance institutions bridge the gap between the unbanked population and mainstream banking, offering them avenues for savings, credit, and investment. In the realm of gender equality, microfinance has emerged as a driving force, challenging traditional norms and empowering women economically. By providing financial resources and promoting financial literacy among women, microfinance initiatives dismantle barriers, allowing women to actively participate in economic activities. Environmental conservation represents another pivotal facet of this exploration. By supporting eco-friendly enterprises and initiatives, microfinance not only aids in environmental preservation but also educates communities about the importance of sustainable living. Through these efforts, microfinance emerges as a vital force in fostering environmental consciousness and sustainable development.

Review of Literature

This overview of literature gives an overview of main themes and findings related with the area of microfinance and its potential in achieving the Sustainable Development Goals. It emphasizes the multifaceted effect of microfinance on poverty reduction, gender equality, entrepreneurship, environmental sustainability, and social inclusion. Further research and analysis in these areas are essential for developing targeted and effective microfinance strategies that align with the broader agenda of sustainable development.

- 1.Microfinance and Poverty Alleviation: By giving access to low earning people, tiny businesses, microfinance can act as a financial tool that can help in alleviation of poverty. Numerous studies (Agarwal, Y., 2016 & Kumari, P., 2020) highlight the positive effect in poverty eradication by microfinance.
- 2. Microfinance and Gender Equality: One of the remarkable achievements of microfinance is its contribution to gender equality. Research demonstrates that when women are given access to financial resources, they invest in the well-being of their families and communities, leading to improved education and healthcare (Kabeer, 2005; Duflo, 2012), thus advancing multiple SDG, including SDG 1 (No Poverty), SDG 4 (Quality Education), and SDG 5 (Gender Equality).
- **3.Microfinance and Entrepreneurship Development:** Microfinance nurtures entrepreneurship among the impoverished. By providing small loans and financial literacy training, microfinance institutions foster the development of small businesses (Garcia, A., 2020). These enterprises generate employment, stimulate local economies, and contribute to SDG 8 (Decent Work and Economic Growth).
- **4.** Challenges in Microfinance Implementation: Despite its potential, microfinance faces challenges. Limited financial literacy, high-interest rates, and inadequate regulatory frameworks can impede its effectiveness (Nugroho, L., & et al. 2017; Nagaraju, R. C., & V. 2016). Addressing these challenges is crucial for ensuring that microfinance initiatives align with the broader go of the Sustainable Development Goals.
- 5. Microfinance and Environmental Sustainability: Recent research has explored the intersection of microfinance and environmental sustainability. Initiatives promoting eco-friendly practices, such as renewable energy projects and sustainable agriculture, demonstrate the potential of microfinance in advancing SDG 7 (Affordable and Clean Energy) and SDG 13 Climate Action (Atahau, A. D. R., Huruta, A. D., & Lee, C. W. 2020). Integrating environmental considerations into microfinance programs is essential for achieving holistic sustainable development.

Scope of the Study:

The paper is focused on Microfinance institutions and their contributions in achieving certain SDGs.

Objectives of Study:

- 1. To know concepts of Microfinance and their functioning in India.
- 2. To know concepts of Sustainable Development Goals (SDGs).
- 3. To identify the linkage between Microfinance and SDGs.

Hypothesis:

H₀₁: - The association of Financial Services and GVA is not Significant.

Hal: - The association of Financial Services and GVA is Significant.

Research Methodology:

- Sources of Data: The data is Secondary in nature and compiled from various sources like MFINs' annual report, RBI's annual report and other publications.
- Nature of the Study: The study is Exploratory & Analytical in Nature.
- Statistical Tools: For testing of Hypothesis Pearson's Correlation has been used and CAGR has been calculated to know the growth pattern.

Analysis and Interpretation:

Concepts of Microfinance and their functioning in India:

Microfinance entails delivering essential financial services to underprivileged communities, focusing on both credit facilities and deposit options. It involves providing accessible and tailored financial solutions to empower economically disadvantaged individuals, fostering entrepreneurship and financial inclusion in marginalized sectors of society. The Nobel Prize winner Muhammad Yunus invented microfinance, which aids those who are economically weak, by giving them the resources they need to launch a business and progress toward financial independence. Because the borrowers for these loans lack any form of collateral, they are important. In comparison to commercial banks, the interest rate charged by the microfinance organization is very high due to the significant risk of default and the high cost of service (Sonkar, S. & Vishwakarma, D., 2021). Microloans, micro savings, and microinsurance are all included in the definition of "microfinance". To aid business owners and entrepreneurs in starting their companies, microfinance institutions offer small loans and other resources. MFINs is the provision of small loans and other financial services to the disadvantaged members of society who were previously shut out of the established financial system. NBFIs and banks are governed under the Reserve Bank of India (RBI), NABARD, the Registrar of Cooperative Societies (RCs), and SHGs are responsible for cooperatives (Vishwakarma, D & Sonkar, S., 2023).

History of Microfinance Institutions:

Microfinance has a vast and famed history in India. "Since its introduction in Gujarat in 1974 by the SEWA Bank, a branch of the Self-Employed Women's Association (SEWA), it has played a critical role in supplying financial services to numerous individuals who have been excluded from the economy's mainstream. The Malegam Committee recommended a margin cap of 10% for NBFC-MFIs with loan portfolios of US\$ 1 billion or more, a cap of 12% for all NBFC-MFIs, and a cap of 24% for individual loans." The final guidelines were announced on December 2, 2011, coupled with a maximum of 26% on individual loans and a uniform margin cap of 12% for all NBFC-MFIs. As of March 31, 2022, the initiative has reached 140 million families and 11.9 million Self-Help Groups (SHGs), accumulating a substantial sum of \$472.4 billion in savings. The credit linkage has been exceptionally strong, with loans totalling \$997.2 billion disbursed during the fiscal year 2021-22. Notably, 3.4 million SHGs related to credit, surpassing the previous year's 2.9 million groups. By that date, there was outstanding credit of \$1,510.5 billion for 6.74 million SHGs, averaging \$0.24 million per SHG. Despite the relatively modest individual amounts, the impact has been transformative, as evidenced by numerous success stories featured in this publication. (Source: Evolution of Micro Finance in India | IBEF) Over time, a variety of prototypes of MFIs have appeared. The following are some of the main microfinance Prototypes:

The Grameen Bank Model: It was developed in Bangladesh by Prof. Mohammad Yunus. One of the earliest and most efficient microfinance techniques is this one. The complete growth of the rural economy is the main goal of this system.

Joint Liability Group Model: This is a loose association of 4–10 individuals that looks for loans with joint guarantees. Primarily, loans are given for agriculture or related uses. In this case, the main borrowers are farmers, rural employees, and tenants. Each JLG member is equally responsible for timely loan payments.

Individual Lending Model: In this model, loans are given directly to borrowers. In This MFIs assigns a person to the individuals and assists them in comprehending the complete process involved in loan acquisition and loan repayment.

Self-Help Group Model: Self-Help Groups are made up of individuals from comparable socioeconomic backgrounds. For a brief time, these small business owners band together to create a shared fund for their operational needs. The team is in charge of collecting debt. In this sense, the NABARD SHG linkage initiative is important since it allows a number of Self-Help Groups to obtain bank loans if they can demonstrate a history of prompt repayments.

MFINs: Way forward

The Microfinance Industry Network (MFIN), a grouping of NBFC-MFIs, was founded up in 2009. The Reserve Bank of India recognised MFIN as the nation's first NBFC-MFI Self-Regulatory Organisation (SRO) in 2014. MFIN celebrated its tenth anniversary as an association in 2019. Under the MFIN umbrella, the entire microfinance ecosystem has grown over time as new members have graduated as Universal Bank and Small Finance Bank and as banks and NBFCs have entered the microfinance market. NBFC-MFI, banks, credit bureaus, fintech businesses, banking correspondents, NBFCs, Small Finance Banks, and other institutions under the purview of the RBI are examples of MFIN Members.

Sustainable Development Goals (SDGs):

The Sustainable Development Goals (SDGs), also known as the Global Goals, are an international call to action to end poverty, protect the environment, and ensure that everyone is well-off. Under the 2030 Agenda for Sustainable Development, all UN members adopted the 17-goal Sustainable Development Goal (SDG) in 2015. These objectives address a variety of social, economic, and environmental problems that the modern world faces and are interconnected. Here are some previews of these objectives:

- 1. No Poverty: Eradication of extreme poverty from every corner.
- 2. **Zero Hunger**: Eradicate hunger, ensure food stability, enhance nutritional standards, and advocate for sustainable farming applications.
- 3. Good Health and Well-being: Promoting well-being by ensuring healthy lives at all ages.
- 4. **Quality Education**: Let everyone, regardless of age or background, have equitable and universal access to high-quality education and be encouraged to pursue further learning opportunities.
- 5. Gender Equality: Empowering women by giving equal opportunities at all levels and gender equality.
- 6. Clean Water and Sanitation: Secure access to clean water and sustainable sanitation facilities for everyone.
- 7. Affordable and Clean Energy: Ensure access to affordable, reliable, sustainable, and modern energy for all.
- 8. **Decent Work and Economic Growth**: Encourage continuous, comprehensive, and lasting economic growth, along with providing ample opportunities for full and productive employment, ensuring decent work for everyone.
- 9. **Industry, Innovation, and Infrastructure**: Develop robust infrastructure, encourage industrial growth that includes everyone, and nurture innovation in a sustainable manner.
- 10. **Reduced Inequalities**: Diminish disparities both within nations and across borders.
- 11. **Sustainable Cities and Communities**: Ensure that cities and human habitats are welcoming, secure, able to withstand challenges, and environmentally sustainable.
- 12. **Responsible Consumption and Production**: Promote patterns of consumption and production that are environmentally sustainable in the long run.
- 13. Climate Action: Take immediate measures to address the challenges posed by climate change and its repercussions.
- 14. **Life Below Water**: Preserve and responsibly utilize oceans, seas, and marine resources to support sustainable development initiatives.
- 15. **Life on Land**: Safeguard, revive, and encourage the sustainable utilization of land-based ecosystems, manage forests in a sustainable manner, combat desertification, and halt the loss of biodiversity.
- 16. **Peace, Justice, and Strong Institutions**: Foster peaceful and inclusive societies that support sustainable development, ensure universal access to justice, and establish effective, accountable, and inclusive institutions at every level.
- 17. **Partnerships for the Goals**: Improve the strategies for implementation and reinvigorate the global collaboration to attain sustainable development objectives.

These objectives outline a collective plan for a harmonious and prosperous coexistence for both humanity and the Earth, spanning the present and the future. They acknowledge the interconnectedness of eradicating poverty and enhancing well-being, alongside endeavours to improve healthcare and education, diminish disparities, foster economic progress, all while combating climate change and safeguarding our marine and forest ecosystems. Attaining these objectives demands unified action from governments, corporations, communities, and individuals on a global scale.

To identify the linkage between Microfinance and SDGs

We have tried to find out and acknowledge the connections, relationships, and interactions between MFINs (the implementation of giving financial services to less-earning people and small businesses) and the SDGs), The UN has defined a series of international objectives to tackle a range of social, economic, and environmental issues. In essence, this objective involves examining how microfinance initiatives and programs contribute to the achievement of specific SDGs. It seeks to uncover the ways in which microfinance can be a tool for advancing the goals outlined in the SDGs. For instance, microfinance can be linked to No Poverty SDG 1 by providing financial resources to lift people out of poverty. Similarly, it can contribute to SDG 5 (Gender Equality) by empowering women through access to financial services. To achieve this objective, researchers might conduct in-depth analyses of microfinance projects, studying their impacts on poverty reduction, gender equality, economic growth, education, healthcare, environmental sustainability, and other areas targeted by the SDGs. By identifying these linkages, we are providing valuable insights into how microfinance can be optimized and harnessed to support the global agenda of sustainable development.

❖ SDG 1 No Poverty: This objective recognizes the elimination of poverty as the biggest global issue and a necessary prerequisite for sustainable development. India has made substantial success in reducing poverty between the years 2005–2006 and 2019–2021, as per report in 2022 by Global Multidimensional Poverty Index with 415 million individuals doing so.



Source: UNDERSTANDING THE SDGS – GOAL 1 – Israel Fugah – Move The World

Even though there are numerous contributing causes, microfinance institutions have a big impact on lowering poverty because they give the poor access to financial services that help them raise their standard of living, build wealth, and guard against outside shocks. In a study conducted by the "National Council of Applied Economic Research (NCAER)", it was found that the sector generated about "1.28 crore jobs, with NBFC-MFIs alone accounting for 38.54" lakh of those, which is a sizable portion of the sector's overall job creation. The loan officers who are the core of the credit delivery model are among the more than 3 lakh people that operate in the microfinance industry. Most loan officers are young people from rural areas who are provided new career opportunities, sometimes just after they complete their final year of high school. People may build their confidence and manage their households, improve in their jobs, and finish their education all at the same time when they have early access to respectable employment.

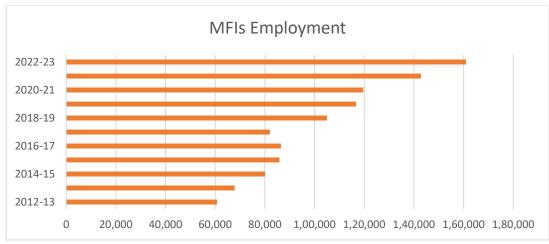


Chart No. 1

Authors own compilation. Source: MFINs

Chart no.1 shows data of employment provided by MFINs. The data ranges from 2012-13 till 2022-23. In year 2012-13 the Total Employment generated by these Institutions was 60,754 which continue to grow in between the years and reaches up to level of 1,61,010. By providing employment opportunities to public, MFINs are contributing to reduce poverty and extracting people from BPL and making them self-reliant which is helping India in achievement of SDG 1. A'

Contribution to Employment:

- 1. The NBFC-MFI sector has a 1.2 lakh jobs impact on employment through direct and indirect backward linkage.
- 2. Jobs impacted by the "forward linkages" total 37.34 lakh.
- 3. 38.54 lakh jobs overall, including backward, forward, and indirect linkages.
- 4. There were 128.46 lakh jobs created by the microfinance industry overall, including all MFIs and SHGs and all direct, indirect, backward, and forward linkages. (Source: Page X of the NCAER report on microfinance, 2021)

SDG 4 Quality Education:

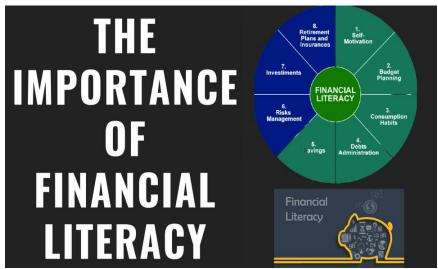
In rural India, microfinance has fueled the growth of financial literacy. The centre meeting model used by microfinance institutions demonstrated to contribute to the promotion of women's financial awareness borrowers. Knowing about and

being interested in financial services the path to digitalization, facilitating the transformation journey of the loaners. MFINs are contributing positively in achieving the goal of Financial Literacy programmes of RBI.

RBI's initiative uses a "5Cs" approach to spread financial literacy, placing special emphasis on the creation of pertinent **Content** (such as curriculum in schools, college, and training facilities), the **Capacity** of the intermediaries who offer financial services and education, maximizing the benefits of **Community**-led financial literacy initiatives through effective **Communication** strategies, and fostering **Collaboration** among various stakeholders. The Reserve Bank started the pilot CFL (Centre for Financial Literacy) project in 2017 in 80 blocks across nine states with the goal of having an exclusive focus on financial literacy at the block level through a physical presence. In 2019, the project was expanded to 20 tribal/economically underdeveloped blocks. There were 1,478 financial literacy centres (FLCs) throughout the nation as of the end of December 2022. Up till December 31, 2022, the FLCs conducted a total of 1,10,081 financial literacy programs over the 2022–2023 year. (Source: RBI Bulletin on **National Strategy on Financial Education 2020-25**) MFINs are playing key role in achieving this goal of RBI.

Observing Financial Literacy Week 2023

The Reserve Bank created Financial Literacy Week (FLW) as a program to raise public awareness of important issues by focusing a yearly campaign on the general public and diverse sections of the population. FLW was observed in 2022–2023 from February 13–17 under the theme "Good Financial Behaviour – Your Saviour," with a focus on raising awareness of saving, planning, and budgeting as well as responsible use of digital financial services. MFINs and Banks were asked to inform and educate their clients and the wider public during this week.



Source: The single biggest difference between... - Financial Supreme | Facebook

Microfinance providers' capacity building initiatives helped them continually emphasize providing skill-improving trainings to ensure a sustainable way of life. MFINs are organising several workshops and programmes to make people educated. This will help to increase the financial literacy. As most of MFINs operate for bridging the financial gap of rural people, making them literate about financial terms, it will help in financial inclusion of marginalise people leading to balanced development. Programmes like "SKILLING AND FINANCIAL LITERACY WORKSHOPS" for making rural people more literate. Village groups act as platforms for sharing knowledge about financial literacy, with practical implications for policymakers and microfinance bank management.

SDG 5 Gender Equality: SDG 5 is critical because empowering women and girls and promoting gender equality is not only a fundamental human right but also a prerequisite for creating a world community that is peaceful, affluent, and sustainable. For social progress, economic expansion, and the eradication of poverty, gender equality is crucial. Assuring that women and girls have equal chances in all spheres of life entails dismantling preconceptions, combating discriminatory practices, and doing the aforementioned. In today's technologically advanced society, financial availability and digital literacy go hand in hand. Women, who make up the final mile of an industry that is fast going digital, are equally skilled at using this technology to get services. This transformation of cell phone ownership, information access, and decision-making among rural women is incredibly exciting. Women who apply for loans become aware of internet platforms. Their acceptance of acknowledging credit online or repaying it digitally is a sign of their ease with technology.

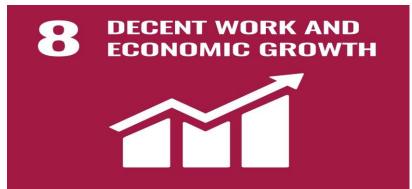


Source: Gender Rights - Bing images

The delivery model of microfinance is centred around women. Through JLG (joint liability groups), microfinance services are predominantly provided to women, positioning them as the head of their households and giving them the capacity to administer them. With the aid of microfinance, low-income women can start earning an income and gain financial independence, giving them more influence over decisions in the family and community. Microfinance therefore has the potential to lessen gender inequality (GI). MFIs supports women's empowerment through technology in addition to equal rights to financial and economic resources.

In accordance with Micrometre, a publication of MFIN, 53 NBFC-MFIs provided data for the third quarter of FY 22–23 showing that 99% of loans made to women were released in cashless transactions. Third-quarter cashless collection in fiscal year 22–23 increased to 11% from 9% in fiscal year 21–22. The expansion of microfinance can greatly help women and MSMEs owned by women. A microcredit loan is currently known to 51% of women, and 11% of them have opted to apply for one, according to the National Family Health Survey (NFHS) 2019–21. Women can achieve financial independence because of having a stronger say in household financial decisions. In India, there are currently 13.5–15.7 million women business owners, and more than 95% of them are micro businesses. The IFC research from 2022 indicates that there is an unmet credit need of Rs. 836 billion for women-owned very small enterprises (WVSEs), which MFINs are filling.

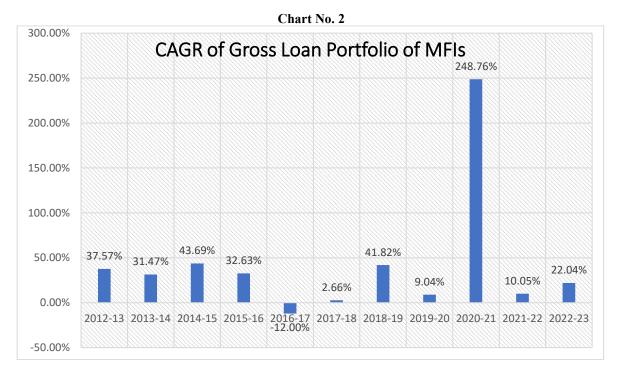
SDG 8 Decent work and Economic Growth: it is focused on "sustainable economic growth and decent work", underscores the necessity of tailoring economic progress to individual countries' needs, ensuring equitable distribution of its benefits. Encouraging diversification, technological innovation, and policy support, it strives for productive employment, especially for youth and women, fostering dynamic economies. Emphasizing sustainable consumption, waste reduction, and resource efficiency, it aims to separate economic growth from environmental harm. By advocating for safe working conditions, equal opportunities, and eliminating forced labour and human trafficking, SDG 8 promotes inclusive, fair societies. Vital for poverty reduction and social inclusion, it champions decent work, recognizing it as a cornerstone for sustainable development, thereby enhancing living standards and fostering just communities.



Source: SDG 8 Logo - Bing images

MFINs are directly or indirectly linking their activities to achieve these goals. Microfinance enables businesses to make investments in their company and buy new machinery. Many business owners have expanded their operations to create jobs for others, which has raised production and income. The local economy is supported by these microenterprises. MFIN

produced a television commercial showcasing Women entrepreneurs, their challenges, and the joy they experience because of an improvement in their standard of living in order to highlight how collateral-free loans benefit small enterprises. According to a "National Council of Applied Economic Research (NCAER) study titled "Present and Potential Contribution of Microfinance to India's Economy," the industry generated about 1.28 crore jobs, with NBFC-MFIs alone contributing significantly to this figure with 38.54 lakh jobs created". More than 3 lakh individuals work in the microfinance sector, including the loan officers who form the center of the credit delivery model. This sector takes pride in its capacity to develop local youth and produce lucrative positions, motivating them to actively contribute to the expansion of their country's economy. They are offering direct employment chances by hosting Mega Job Fair. Most of the clients of MFINs are young entrepreneurs and SHGs which establish their own Business houses. The data of Goss Loan Portfolio (GLP) of MFINs has been shown in Chart no.2:



Author's own calculations

For presentation of growth, we have calculated CAGR of GLP for 11 years. Data of GLP has been compiled from Annual report presented on the website of MFIN. The trends of CAGR shows that GLP has been growing in last 10 years and it was highest in FY 2020-21 despite advent of COVID-19.

What does the growth of GLP elucidate?

The growth pattern showcases that people are benefiting from the financial products offered by MFINs and helping them to be self-sustained. This will help to achieve India in achieving Agenda 2030. MFINs growth has interconnection with the Economy's GVA, and they are contributing to positively towards it.

Contribution to the GVA:

- 1.The NBFC-MFI sector's contribution of both direct and indirect backward linkage is 0.08 percent.

 2. The "forward linkages" had an influence of 0.53 percent of the country's Gross Value Added (GVA).

 3.National GVA represents 0.61 percent of all direct, indirect, backward, and forward links.
- 4. The MFINs contribution, which includes all MFIs and SHGs: 2.03% of the GVA (Source: Page X of the NCAER report on microfinance, 2021)

These figures hold considerable importance. In the fiscal year 2018-19, the financial sector, encompassing insurance and microfinance, contributed 5.5 percent to the Gross Value Added (GVA). When we examine the sector's 'forward linkages,' which create additional value and job opportunities, we gain a deeper understanding of the microfinance sector's true significance in the economy. The MFINs GVA are included in GVA of Financial sector. For studying the relationship of MFINs in achieving SDG 8 we have performed statistical test which include financial services (among which MFINs are major contributors) and Total GVA. Following Hypotheses has been framed:

H₀₁: - The association of Financial Services and GVA is not Significant.

Hal: - The association of Financial Services and GVA is Significant.

For testing of Hypothesis, we have employed the Coefficient of Correlation to explore the relationship between the Total GVA of Indian Economy and GVA of financial services (which also include Real Estate & Professional Services). The coefficient of correlation has been tested using IBM SPSS25. The correlation data is presented in Table 01 providing facts of connection between variables. Among the variables, Financial Services are taken as IV and Total GVA is selected as DV.

Table 01: Correlations			
	Economy GVA		Financial Services GVA
Economy GVA	Pearson Correlation	1	.955**
	Sig. (2-tailed)		.001
	N	7	7
Financial	Pearson Correlation	.955**	1
Services GVA	Sig. (2-tailed)	.001	
	N	7	7

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Results and Findings:

The data presented in Table 01 sheds light on the intricate relationship between the DV, GVA, and the IV Financial Services. There exists a strong positive relationship among variables with a high degree of coefficient of correlation as illustrated by table 1. Correlation observed for a value of 0.955 at a significance level of 0.001. This indicates a strong and significant connection between the GVA and Financial Services. Based on these statistical findings, the null hypothesis asserting no significant relationship between GVA and Financial Services gets rejected and alternate hypothesis, suggesting significant relationship, is accepted, highlighting the strong nature of the linkage between GVA and Financial Services.

Conclusion:

Sustainable Development Goals (SDGs) and microfinance are interlinked to reduce poverty, stimulate economic growth, and achieve sustainable development. Microfinance, which entails offering low-income people and small businesses financial services like loans, savings accounts, and insurance, significantly contributes to numerous aspects of SDGs. In essence, microfinance is a catalyst for social change rather than solely a method for obtaining money. Its effects are felt across several SDGs, having a domino effect that empowers people, lowers inequality, and fosters sustainable economic growth. The function of microfinance serves as a light of hope, illuminating the road to a world where every person could succeed and make a meaningful contribution to society as we move forward on our journey toward a more equitable and sustainable future.

Suggestions:

- Increasing the regulatory and supervisory power of Govt. and concerned institutions like RBI and NABARD.
- The next step is for financial institutions to completely finance all MFIs so that shortage of funds can be resolved.
- Educate the public about the enormous advantages of its financial services.
- More training programmes for managers and staff.
- Creation of appropriate guidelines by RBI including all relevant topics, such as risk management, capital sufficiency, auditing, and monitoring.
- To ensure the sustainability of microfinance, adopt the necessary measures for loan disbursement, liquidity management, and risk management.
- Expand the network of MFINs throughout the nation.

References

- 1. 2022mpireportenpdf.pdf (undp.org)
- 2. 1646639170NCAER-Report-Microfinance-March-2021.pdf
- 3. Reserve Bank of India RBI Bulletin
- 4. MFIN INDIA
- 5. HBS20222023FULLDOCUMENT2FB950EDD2A34FE2BAE3308256EAE587.PDF (rbi.org.in)
- 6. 1646639170NCAER-Report-Microfinance-March-2021.pdf
- 7. Vishwakarma, D., & Sonkar, S. (2023). Impact of Microfinance Institution on the Overall Gross Loan Portfolio: An Overview. Shodh Drishti (an International Peer Reviewed Refereed Research Journal), Vol. 14(No. 3.1), 49321.
- 8. Lee, C. W., & Huruta, A. D. (2022). Green microfinance and women's empowerment: why does financial literacy matter?. *Sustainability*, *14*(5), 3130.

- 9. Kabeer, N. (2005). Is microfinance a 'magic bullet' for women's empowerment? Analysis of findings from South Asia. *Economic and Political weekly*, 4709-4718.
- Sonali D. Patil, Roshani Raut, Rutvij H. Jhaveri, Tariq Ahamed Ahanger, Pallavi V. Dhade, Atul B. Kathole, Kapil N. Vhatkar, "Robust Authentication System with Privacy Preservation of Biometrics", Security and Communication Networks, vol. 2022, Article ID 7857975, 14 pages, 2022. https://doi.org/10.1155/2022/7857975.
- 11. Atul Kathole, Dinesh Chaudhari "Securing the Adhoc Network Data Using Hybrid Malicious Node Detection Approach", Proceedings of the International Conference on Intelligent Vision and Computing (ICIVC 2021) pp 447–457 © 2022 The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd.
- 12. Sonkar, S., & Vishwakarma, D. (2021). Commercial Banks and Microfinance Institutions in India A Comparative Study based on their Operations. *The Kashi Journal of Commerce*, XVII(No.2), 0973–3310.
- 13. Armendáriz, B., & Morduch, J. (2010). The economics of microfinance. MIT press.
- 14. Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic literature*, 50(4), 1051-1079.
- 15. Nugroho, L., Utami, W., Akbar, T., & Arafah, W. (2017). The challenges of microfinance institutions in empowering micro and small entrepreneur to implementating green activity. *International Journal of Energy Economics and Policy*, 7(3), 66-73.
- 16. Kumari, P. (2020). Theoretical analysis of microfinance on poverty alleviation. *Journal of Economic Info*, 7(3), 221-236.
- 17. Agarwal, Y. (2016). Microfinance and Poverty Alleviation. *Imperial Journal of Interdisciplinary Research* (*IJIR*), 2(11), 1575-1577.
- 18. Nagaraju, R. C., & RameshReddy, V. (2016). Operation, issues and challenges of microfinance in India. *Indian Journal of Economics and Development*, 4(9), 1-4.
- 19. A. B. Kathole, K. N. Vhatkar, and S. D. Patil, "IoT-Enabled Pest Identification and Classification with New Meta-Heuristic-Based Deep Learning Framework," Cybernetics and Systems, vol. 0, no. 0, 2022, doi: 10.1080/01969722.2022.2122001.
- 20. Rashid, Md Harun Ur, Mohammed Jashim Uddin, and Shah Asadullah Mohd Zobair. "Islamic microfinance and sustainable development goals in Bangladesh." (2018)
- 21. Sonali D.Patil, Atul B.Kathole, Savita Kumbhare, Kapil Vhatkar, Vinod V. Kimbahune, "A Blockchain-Based Approach to Ensuring the Security of Electronic Data", International Journal of INTELLIGENT SYSTEMS AND APPLICATIONS IN ENGINEERING, IJISAE, 2024, 12(11s), 649–655. https://ijisae.org/index.php/IJISAE/article/view/4486/3145
- 22. García-Pérez, Icíar, María Jesús Muñoz-Torres, and María Ángeles Fernández-Izquierdo. "Microfinance institutions fostering sustainable development." *Sustainable Development* 26.6 (2018): 606-619.
- 23. Gatto, Andrea, and Elkhan Richard Sadik-Zada. "Access to microfinance as a resilience policy to address sustainable development goals: A content analysis." *Heliyon* 8.10 (2022).
- 24. K. N. Vhatkar and G. P. Bhole, "Optimal container resource allocation in cloud architecture: A new hybrid model," Journal of King Saud University Computer and Information Sciences, vol. 34, no. 5, pp. 1906–1918, 2022, doi: 10.1016/j.jksuci.2019.10.009.
- 25. Niaz, Muhammad Umer. "Socio-Economic development and sustainable development goals: a roadmap from vulnerability to sustainability through financial inclusion." *Economic research-Ekonomska istraživanja* 35.1 (2022): 3243-3275.
- 26. Atul Kathole, Dinesh Chaudhari "Secure Hybrid Approach for Sharing Data Securely in VANET", Proceeding of International Conference on Computational Science and Applications pp 217–221, © 2022 The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd.
- 27. Arora, M., & Singh, S. (2023). Microfinance for achieving sustainable development goals: pondering over Indian experiences for the preservation of magnificent african natural resources. In *Research Anthology on Microfinance Services and Roles in Social Progress* (pp. 378-394). IGI Global.
- 28. Atahau, A. D. R., Huruta, A. D., & Lee, C. W. (2020). Rural microfinance sustainability: Does local wisdom driven-governance work?. *Journal of Cleaner Production*, 267, 122153.
- 29. Alhassan, Y., & Nwagbara, U. (Eds.). (2021). Microfinance and Sustainable Development in Africa. Igi Global.
- 30. Antoh, E. F., & Arhin, A. A. (2018). Advancing sustainable development goals (SDGs): an analysis of how non-financial services of microfinance institutions facilitate human capital development of clients in Ghana. *Journal of Sustainable Development*, 11(4), 257-269.