

EXPLORING THE ROLE OF SOCIAL ENTERPRISES IN ENHANCING FINANCIAL INCLUSION AND ENVIRONMENTAL SUSTAINABILITY: A CROSS-NATIONAL STUDY OF EMERGING ECONOMIES

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ABSTRACT

In the context of emerging economies, this study explores how social enterprises (SEs) can help to accomplish the goals of financial inclusion and environmental sustainability, focusing on the BRICS group of countries, including Brazil, Russia, India, China, and South Africa, in a cross-national manner. By adopting a mixed-methods research design involving qualitative case studies and quantitative surveys, the paper examines SE ingenuity, functionality, and expansibility within the setting of institutional vacuums, scarcity of access to finance, and environmental degradation. The results indicate that social enterprises in nations such as China, India and some other nations show a very high performance because they have high adoption of technologies, community collaboration, and their regulation is more favourable compared to enterprises in Russia and South Africa, which are constrained by their structures. The findings point to the significance of hybrid business models, inclusive digital finance, and green innovation to meet both development and environmental outcomes. Moreover, the study points to the amplification of the dual effects of SEs as made possible by enabling ecosystems that are distinguished with policy incentives, impact measurement systems, and diversified funding. The present paper is part of expanding literature on sustainable development and can contribute to providing a comprehensive framework between economic inclusion and environmental responsibility, and can offer applicable information that can be implemented by policymakers, investors, or practitioners who are interested in promoting mission-oriented enterprises in the Global South.

Keywords: Social enterprises, financial inclusion, environmental sustainability, hybrid business models, emerging economies, BRICS, green innovation, digital finance, sustainable development, policy support

INTRODUCTION

The double problem of financial and environmental exclusion in recent years has triggered a global rethinking of conventional business practices. With the increasing attempts to align economies with United Nations Sustainable Development Goals (SDGs), particularly those focusing on poverty reduction, climate action, and economic inclusivity,

the role of social enterprises (SEs) has become a central one that manages to offer innovative and transformational change (UNDP, 2020). The portfolio of social enterprises is a hybrid one where social and environmental missions are combined with the profit motives (Battilana & Lee, 2014). They stand out because of their capacity to integrate the

effectiveness of the corporate world with the ethical demands of social action, a skill that makes them important players in sustainable development, especially in resource-limited environments (Perrini, Vurro, & Costanzo, 2010).

The availability of affordable and suitable financial services to everyone, which has been referred to as financial inclusion, has been identified as a major driver of equalized financial expansion (Sarma & Pais, 2011). Although there has been an increase in the number of microfinance institutions (MFIs) and digital financial platforms, millions of people in emerging economies are still locked out of formal financial markets as the barriers that keep them locked out include income inequality, ineffective regulation, and financial illiteracy (Morduch, 1999; World Bank, 2023). At the same time, these economies are struggling to manage severe environmental problems, such as deforestation to carbon emissions, which are further complicated by industrialization and urbanization (Dean & McMullen, 2007). A business model that will be able to create inclusive business gains on the one hand and ecological stewardship on the other hand is needed to address both issues.

Environmental sustainability is slowly becoming part of a social enterprises business culture. Or, to give an example, green entrepreneurship is a branch of social entrepreneurship that places an emphasis on developing business models which are not only meant to decrease ecological footprints but also to create jobs and local development (Fletcher, 2017; Elkington, 1997). These businesses apply clean technologies, encourage circular economy initiatives, and provide a higher preference to locally-led environmental initiatives (Schaltegger, Hansen, & Ludeke-Freund, 2016). Nonetheless, although the literature serving social entrepreneurships, financial inclusions, and environmental sustainability is rich in each of the subjects, there is yet less empirical research on the combination of all the three topics, more so in the emerging markets (Yunus, 2010; Mair & Marti, 2006). The absence of research in this intersection is particularly problematic, as emerging economies, such as the BRICS countries (Brazil, Russia, India, China, and South Africa), are compelled by the interaction of poverty, inequality, and ecological vulnerability (Haider & Hossain, 2018). Such countries also open

new possibilities of social enterprise experimentation as a result of shifting rules and fast digitalization (Seelos & Mair, 2005). Thematic inquiry, recent work by Braun and Clarke (2006) highlights the significance of learning about the contextual dynamics that inform the dual impact strategies of SEs in such an environment.

Additionally, technological innovations helped SEs expand their service scale, enhance their impact measurement, and better represent underserved communities (Hair et al., 2017). To illustrate, the emerging innovation in fintech, including mobile banking, peer-to-peer lending, and transparency systems leveraging the blockchain have been increasingly adopted by SEs to address the infrastructural and trust deficits (Peel, 2020; Atlas.ti, 2020). However, such innovations need supportive policy structures and institutional supports something that is not evenly distributed in the Global South (Schaltegger et al., 2016).

That being the case, this study will set out to explore the way in which social enterprises in the emerging economies are confronting the twin issues of financial exclusion and environmental degradation. Key research questions during this research are: What are SEs doing to balance these twin goals in terms of business model innovation? How do policy, regulation, and institutional infrastructure contribute to their success? And what is the role of such aspects as technology adoption, cultural background and involvement within the community with regards to their scalability and sustainability?

The importance of the study is the ability to provide comprehensive knowledge on the role of social enterprises as engines of green internal and inclusive growth. By doing so, it adheres to demands published by scholars (Elkington 1997, Schaltegger et al. 2016) of more inclusive methods of sustainable development that break down the chambers of sectoral thinking. It is also an extension of theoretical concepts such as hybrid organizing (Battilana & Lee, 2014) and resource-based view (Barney, 1991), which offer a more detailed discussion of internal and external forces behind SE success.

Overall, the study aims to fill this important literature gap and empirically examine the multidimensional importance of social enterprises with respect to not only promoting financial inclusion but also

developing a sustainable economy. By conducting a cross-nation investigation of SEs in the BRICS countries, the research will support the formulation of scalable models that can be embraced by policymakers, investors, and social entrepreneurs in the emerging economies to enhance equitable and sustainable growth.

2. Literature Review

2.1 The Evolution of Social Enterprises in Development Paradigms

There is increased popularity in social enterprises as an organization that produces both economic value and social impact worldwide. They became available in the late 20th century as an alternative to both state and market-premise approaches to development (Defourny & Nyssens, 2010). Social enterprise is a mission-based but self-sustaining type of business, as opposed to a traditional non-profit organization or a profit-seeking business (Kerlin, 2006). Their relevance has come home in developing countries where governments have failed to deliver basic services and often the private sector has difficulty accessing low-income populations (Nicholls, 2006). These hybrid models have stretched the border between the Third Sector (non-governmental and nonprofit organisations), and traditional public/private dichotomies of social responsibility (Evers & Laville, 2004).

Social enterprises are in areas such as health, education and agriculture where they develop solutions specific to the context and utilize local expertise. Nonetheless, their applications in environmental sustainability and financial inclusion are fairly latest and unexplored. Institutional voids and ecosystems fragmentation in the emerging markets are common in social enterprises, although they are marked by hybrid formation (Pache & Santos, 2013). This restricts their scope and effectiveness, and scholars urged the creation of friendlier ecosystems and a stronger legal framework (Haugh, 2005; Steiner & Teasdale, 2017).

2.2 Financial Inclusion: Beyond Access to Financial Services

Financial inclusion has moved beyond making financial services accessible, to the actual meaningful use of these services. According to the World Bank

(2018), financial inclusion is the access and utilization of affordable financial services by the underserved. Credit, savings, insurance, and payment have been incorporated in low-income countries and are highly beneficial in enhancing livelihoods and reducing poverty (Demirguc-Kunt et al., 2017). However, access is not the primary concern as frequent use, affordability, and trust are the driving forces towards continued inclusion (Cull, Ehrbeck, & Holle, 2014). The literature has also noted that mobile banking and digital wallets are promising to fill access gaps (Jack & Suri, 2014). Nevertheless, infrastructural issues, digital illiteracy, and gender-related barriers continue to slow down accessibility in a significant part of the world (Bongomin et al., 2018). More social enterprises are also seeking creative solutions to offer community savings products, peer-to-peer lending, and micro-insurance that address the needs of the informal sector workers (Allen et al., 2016). In contrast to mainstream financial institutions they may combine financial services with non-financial assistance such as training, mentoring, and market connection (Rhyne & Otero, 2006).

2.3 Environmental Sustainability and Entrepreneurship

Environmental sustainability has become a business requirement instead of a policy issue. Businesses are being held accountable to their ecological footprints, as climate change continues gaining momentum. Ecopreneurship, also known as environmental entrepreneurship, entails developing businesses that would make a profit and at the same time do something good to the environment (Schaper, 2010). Whereas big organizations are capable of investing in green technologies, social enterprises regularly strive to meet the same objectives through frugal innovation at the grassroots (Prahalad, 2006).

Social enterprises in emerging economies collaborate with marginalized communities to encourage sustainable agriculture, affordable access to clean energy and waste management (Cohen & Winn, 2007). But their part tends to be neglected by the wide discourse on sustainability that usually looks at the major corporate activities (York & Venkataraman, 2010). Other studies additionally remark that because social entrepreneurs are driven by the goal of sustainability, they may lack the technical and

financial ability to create a long-term effect on the environment (Dean & McMullen, 2007; Kuckertz & Wagner, 2010).

2.4 Bridging Financial Inclusion and Sustainability through Social Enterprises

An increasing awareness has arisen that financial inclusion and environmental sustainability are not mutually incompatible objectives but can complement one another. Social enterprises are particularly well positioned to fill this gap as they are both rooted within the communities and have a twofold mission, that is, have a corporate and a societal mission (Seelos & Mair, 2007). Indicatively, clean energy businesses usually propose pay-as-you-go structures of financing remuneration, ensuring that low-income families can afford the cost of renewable energy (Bensch et al., 2015).

The research literature on green microfinance indicates that financial instruments may be structured to encourage pro-environmental practices, including lower interest rates on green technologies or lending to support organic agricultural inputs (Allet, 2014). This potential, however, is hindered by empirical studies that critically assess the real environmental consequences of financial inclusion initiatives. Researchers believe that adoption of Environmental, Social, and Governance (ESG) criteria into strategies of financial inclusion can mitigate this gap (Weber & Remer, 2011).

Furthermore, the idea of the double bottom line (financial and social returns) has now reached three bottom lines (triple bottom lines), delighted by another feature, environmental sustainability (Elkington, 1999). Those social enterprises that embrace this model strive to create value in all three dimensions. Nevertheless, these sources of balance are likely to be achieved through trade-offs and adaptive processes, particularly in resource-scarce contexts (Smith, Gonin, & Besharov, 2013).

2.5 The Role of Technology and Innovation

Technology is a critical aspect creating the opportunity to scale social enterprise impact. Should more transparency be sought, more transaction costs reduced and delivery of services improved, mobile technologies, blockchain, and AI are being deployed (Heeks, 2014). As an example, mobile, cashless

payment-funded solar micro-grids enable clean power delivery to rural communities simultaneously with the development of credit history (Barron & Torero, 2017). In much the same way, the presence of digital platforms allows the aggregation of small-scale producers, which allows enlarged access to markets and finance.

However, the adoption of technology is not comparative. The digital divide is also a recurring problem, as rural communities and disadvantaged populations are frequently the ones lacking access (Pick & Sarkar, 2016). Thus, social enterprises should create inclusive technology plans that are easy to use, culture-sensitive, and contextual (Donner, 2008). Additionally, the regulatory environments tend to be outdated compared to technological innovation, and the uncertainties thus raised among impact-oriented companies (Zetzsche et al., 2020).

2.6 Gaps in the Literature and Justification for This Study

Although the study of social enterprises, financial inclusions, and environmental sustainability have expanded individually, there is limited literature on combined studies that examine how the three elements interact. The majority of the literature that is present belongs to the category of conceptual or the case-studies that can only be viewed in developed nations (Bacq & Janssen, 2011). Contextual environment factors like informality, weak institutions, social norms are prominent aspects of enterprise decision-making have important implications in emerging markets, although these aspects are not well-represented in existing models (Mair, Marti, & Ventresca, 2012).

In addition, it is lacking longitudinal and comparative studies that analyse the changes that SEs experience not only in time but also in relation to different regulatory condition (Battilana, Sengul, Pache, & Model, 2015). This paper addresses these gaps by using empirical data in countries as BRICS and through offering a cross-country view on how SEs negotiate across the twin influences of goal ambiguity. Investigating how social enterprises Adapt, innovate, and scale up to achieve financial inclusion and environmental sustainability, this study will inform better policy and practice in emerging economies.

Theoretical Framework

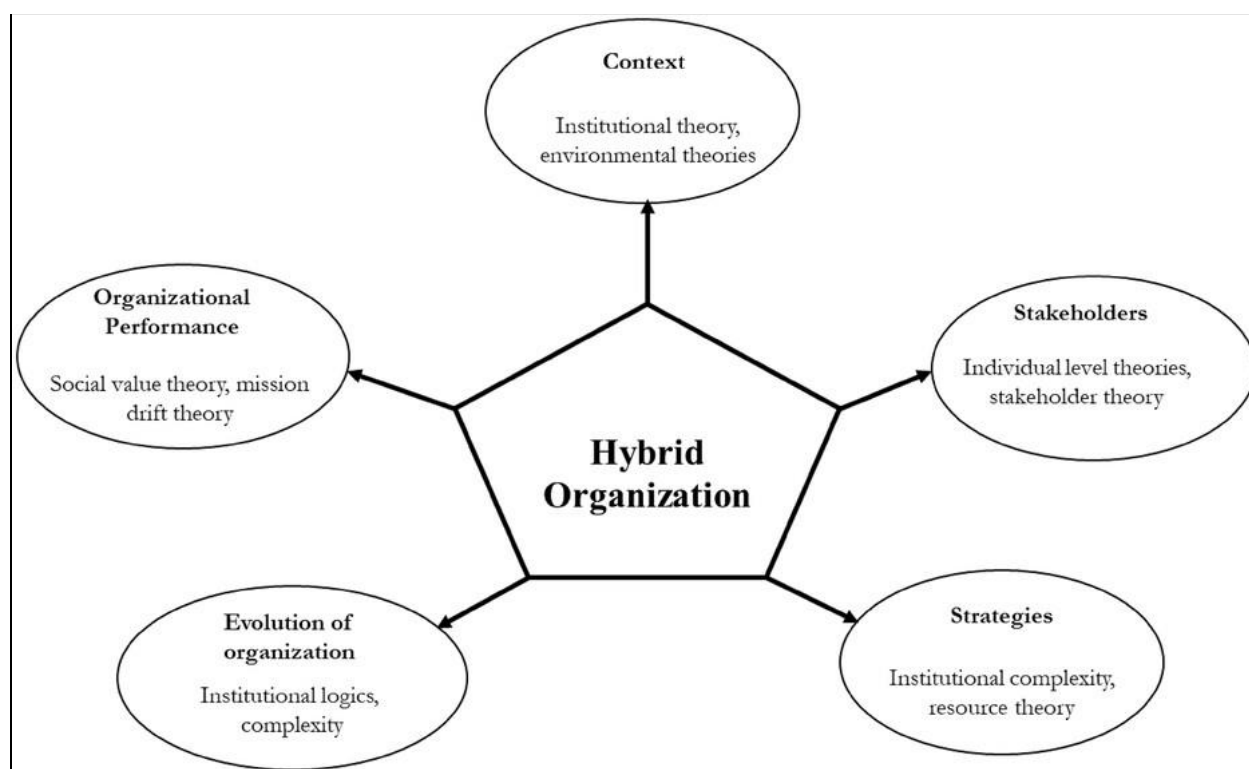
This research relies on an integrated theoretical framework based on the three major perspectives (namely, the Hybrid Organization Theory, the Resource-Based View (RBV), and the Triple Bottom Line (TBL) framework) to examine how social

enterprises (SEs) in emerging economies contribute to financial inclusion and environmental sustainability. When combined together, these theories provide an insightful perspective to evaluate how SEs negotiate tricky socio-economic and ecological terrains.

Hybrid Organization Theory

The idea of hybrid organizations is central in social enterprise research. The hybrid organizations refer to entities that combine the for-profit through nonprofit sectors value-creating logics to attain dual or multiple missions (Jay, 2013). They work in hybrid market-social institutions, integrating commercial sustainability and mission-related imperatives

(Battilana & Lee, 2014). When applied to emerging economies, the hybridity of SEs lies in the fact that they can solve market failures, which can be the absence of access to finance or environmental pollution, and institutional gaps, where the government lacks capacity (Tracey, Phillips, & Jarvis, 2011).



The control of mission drift- the interventions to meet financial gain at the expense of social or environmental mission- is one of the key issues of hybrid organizations (Smith, Gonin, & Besharov, 2013). Studies have demonstrated that effective hybrids have in place structural mechanisms, including dual leadership structures, cross-subsidization measures, and stakeholder-involving form of governance in managing any conflict that arises between the multiple and conflicting objectives

(Pache & Santos, 2013). The framework is especially pertinent in this analysis because it assists in describing the role of SEs in aligning their activities with Sustainable Development Goals (SDGs) and maintaining financial self-sustainability.

Resource-Based View (RBV)

The RBV sheds light on how SEs achieve and maintain a competitive edge by strategic use of inside resources and abilities (Barney, 1991). RBV argues

that companies with valuable, rare, inimitable, and non-substitutable (VRIN) resources are in a stronger position to attain long term success. Such resources of SEs can be social capital, trust in their community,

innovative capacity, and values-based leadership (and other SE potentials entailed by say social and environmental resources) (Hart & Dowell, 2011).



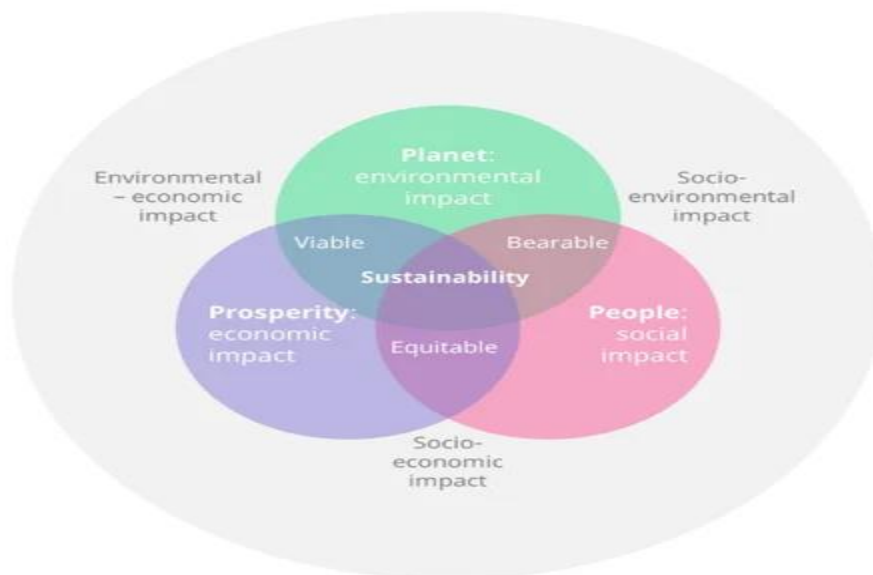
Reputation, volunteer networks and cultural legitimacy are all examples of intangible assets that in an SE setting might prove as important as material assets. As an example, a social enterprise delivering renewable energy in rural India can gain competitive advantage not only through its technology but rather through its intricate knowledge regarding local norms and its long-term association with local leaders (Doherty, Haugh, & Lyon, 2014). Besides, the RBV frame is beneficial to put the phenomenon of generative SEs in resource-scarce settings using frugal innovation to generate value into perspective, which is extremely relevant in the context of emerging economies (Bhatti, 2012).

RBV can also connect with hybrid organizing in that to cope with dual missions, it is not only required to employ resources that are efficient, but also effective.

This can be observed in the organization that invests in the impact measurement systems, inclusive training plans, and local infrastructure, unlike viewing these investments as overhead expenses (Santos, Pache, & Birkholz, 2015).

Triple Bottom Line (TBL)

Triple Bottom Line (TBL) developed by Elkington (1997) is an extension of conventional economic emphasis of business into environmental and social issues. The approach is especially pertinent to SEs, whose core idea is based on the claim that business actions must generate value to individuals (social equity), nature (ecological health), and profits (economic sustainability). The TBL framework provides operative guidance in measuring and comparing SE performance along these three planes.



TBL lens proves particularly effective when it comes to examining sustainability in environmental contexts within SEs. Whether environmental regulations are strong or nonexistent, in case of new economies, SEs can become active partners of environmental governance through investing in green supply chains, advancing zero-waste production, or participating in climate adaptation (Boons & Ludeke-Freund, 2013). TBL thinking is also difficult as impact investors and others are increasingly insisting demonstrations of multidimensional returns on their investment (Stubbs, 2017).

TBL also offers a normative expression to the way SEs establish success. Financial profit is not considered as an ultimate goal by TBL-oriented SEs but as a tool to be reinvested into social initiatives or develop more environmentally friendly solutions (Milne & Gray, 2013). The framework consequently assists in visualizing the imaginary of the dual and even triple-value which SEs present that are in line with the SDG goals on inclusive finance, climate action, and poverty alleviation.

Integrative Framework for This Study

This study builds a complex analytical lens to understand the dual-mission operations by combining Hybrid Organization Theory, RBV, and TBL frameworks as a way of understanding the operations of SEs under operational, strategic and ethical complexities. The hybrid theory exudes the logic and

the governance issues in organizations; the RBV explains the internal capabilities which make performance and resilience possible, and the TBL describes the multi-dimensional performance that SEs want to achieve. Collectively, these theories underpin the research purpose of establishing enabling and constraining factors of the dual-impact SEs within an emergent economy.

This coherent model can also be set in the frame of the more general perspective of institutional theory, originally developed and emphasizing the idea of regulatory environments, cultural pressures and normative forces in shaping organizational activity (Scott, 2001). As an example, SEs in China might have access to powerful state-driven environmental policies, but SEs in South Africa might be more dependent on community legitimacy because of the ambiguous policies. Institutional embeddedness, or the degree to which an SE adheres to the norms and regulatory structures of the location, then becomes a moderating variable affecting the relationship between hybrid logics and resource strategies and TBL outcomes.

3. Research Methods and Materials

3.1 Research Design and Philosophical Orientation

The research approach employed in this study is a mixed-method research design where both the qualitative and quantitative methods will be used in offering a comprehensive view of how social

enterprises in emerging economies enhance financial inclusion and a green planet. This research is informed by the philosophical perspective of pragmatism, which espouses the importance of adopting several techniques in tackling complicated research problems and the inability of any particular method to adequately represent the multidimensionality of social reality (Creswell & Plano Clark, 2017). Together with the subjective insights and objective data, pragmatism encourages its researcher to have a look into the meanings that members ascribe to their experiences and the quantifiable results of organizational action.

3.2 Qualitative Phase: Case Studies of Social Enterprises

The qualitative phase entailed several embedded case studies of social enterprises existing in the BRICS countries of Brazil, Russia, India, China, and South Africa. The choice of these nations was based on their emergent economic status and representative of varied institutional, cultural, and economic contexts. The selection of the social enterprises was done purposively in each country and included 5 to 7 social enterprises with high levels of activity in both the field of financial inclusion and environmentally sustainable activities. Semi-structured interviews were conducted with founders, managers, and key stakeholders who collected primary data. Interviews lasted between 45 to 60 minutes and were conducted in person or by video conferencing depending on accessibility.

Secondary data like organizational reports, websites, government documents and sustainability reports were also consulted in order to triangulate results and present depth in context. Thematic analysis was employed to analyse the data by adopting the six-phased thematic analysis framework developed by Braun and Clarke (2006): familiarization, coding, theme development, review, definition, and write-up. The qualitative data were handled in NVivo software, with the identification of recurring patterns and cross-country comparisons of insights. This model enabled the research to analyze the dual effect of social enterprises through how the internal capacities, institutional settings, and strategies of community engagement abridged or enhanced it.

3.3 Quantitative Phase: Survey and Structural Modeling

The second step presented a quantitative survey that focused on more than 100 social enterprises in emerging markets. The questionnaire was created through the results of the qualitative resurgence as well as scales used and exemplified in the literature on sustainable entrepreneurship, financial inclusion, and hybrid organizing. It consisted of closed- and open-ended questions that aimed at gathering information on organizational structure, financings, governance, technological adoption, environmental strategies, and impact measures.

Partial Least Squares Structural Equation Modeling (PLS-SEM) was conducted to analyze the data, as it is most appropriate in a setting with multiple constructs and latent variables (Hair et al., 2017). The use of PLS-SEM is explained by its flexibility to working with smaller to moderate samples and the ability to predict. Model tested a set of hypotheses about how these internal resources (e.g., leadership, innovation), external conditions (e.g., regulatory environment, community support), and outcome variables correlate with one another including financial inclusion performance, and environmental impact. Validity and reliability were confirmed using the tests of composite and average variance extracted (AVE) and discriminant validity.

3.4 Integration of Qualitative and Quantitative Data

The mixed-methods approach corresponded to the use of the sequential explanatory design, with the qualitative results being used in the creation of the quantitative measure. The converging of results took place at the interpretation level and where themes can be compared and statistical results. This complementarity of information contributed into the validation of insight, rationalization of inconsistency and provision of better explanation of how social enterprises pilot through the complex development goals. As an example, the qualitative overview of grassroots innovation provided in a case study was matched with the statistical analysis of technology creative adoption/impact scaling among the survey participants.

3.5 Ethical Considerations and Limitations

The outline of the study was morally acknowledged by the academic authority, and the respondents gave upfront consent prior to the data gathering. Confidentiality and anonymity was assured and study participants were entitled to leave the research at any point. Ethical considerations regarding cultural sensitivity and voluntary participation were also ensured in the study because of the cross-national location of the study. The fact that the research is self-reported is one of its limitations because it can create bias. Also, a sample includes the essential emerging markets, but the applicability of the results to other countries outside the BRICS group can be low. A possible future study may enlarge the sample with other developing districts and utilize longitudinal approaches to determine the sustainability of enterprise effects in the long-term future.

4. Results

4.1 Technology Adoption Patterns Among Social Enterprises

Graph 1 and Table 1 indicate that the adoption of technology has been greatly different among the BRICS countries. China dominates across all technologies areas mobile payments (85 percent), solar technology (72 percent), and digital training (90 percent) instruments by diverse scores of 9.0, which are high, in the aspect of internet connectivity. India is second in line with equally high rates of adoption, which means that its social enterprises have a high degree of digital maturity. Russia, by contrast, is slower in its adoption process (32 percent in solar technology, 45 percent in digital training) and might have a technology gap that is impeding the scalability of its impacts.

Table 1: Technology Adoption Details

Country	Mobile Payment (%)	Use of Solar Tech (%)	Digital Training Provided (%)	Internet Connectivity Rating (1-10)
Brazil	65	40	70	7.5
Russia	50	32	45	5.8
India	78	55	82	8.1
China	85	72	90	9.0
South Africa	60	47	67	7.2

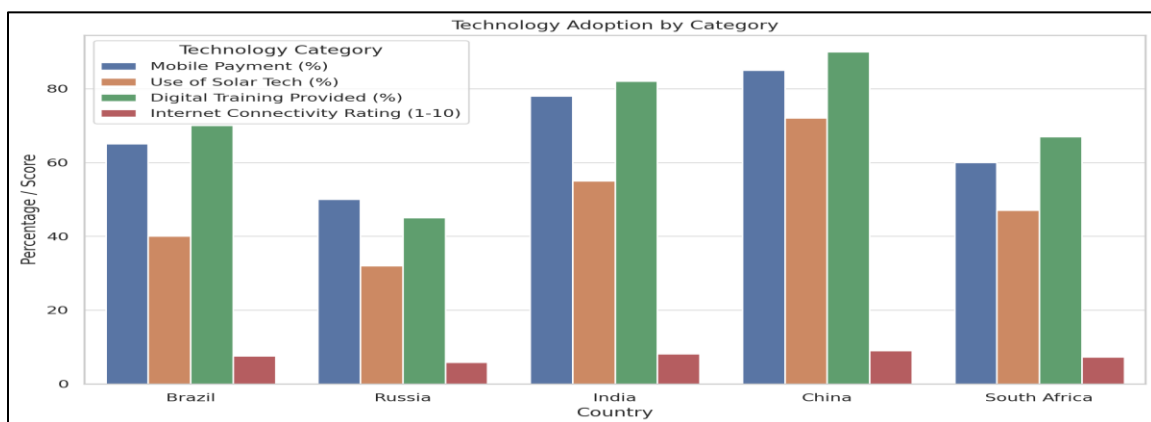


Figure 1 Technology Adoption by Category

This variation can be well depicted through Figure 1 wherein a stark difference can be seen between countries that are performing well and those who are underperforming. The popularity of mobile-based tools in China and India supports the essentiality of mobile technology in the provision of environmental solutions and extending financial services. These results highlight the importance of technological infrastructure and digital literacy in increasing social enterprise innovative and scaling capacity.

4.2 Financial Inclusion Dimensions and Gender Equity

China and India are also the most financially inclusive according to Table 2 and Figure 2. Access to savings (85% and 80%, respectively), credit (82% and 76%), and insurance services (75% and 61%) are all reported as high in both countries. Noteworthy, the presence of women is also greatest in China (77%) and India (70%), meaning inclusive growth models.

Table 2: Financial Inclusion Dimensions

Country	Savings Access (%)	Credit Access (%)	Insurance Penetration (%)	Women's Participation (%)
Brazil	72	68	50	62
Russia	58	55	42	48
India	80	76	61	70
China	85	82	75	77
South Africa	69	65	54	59

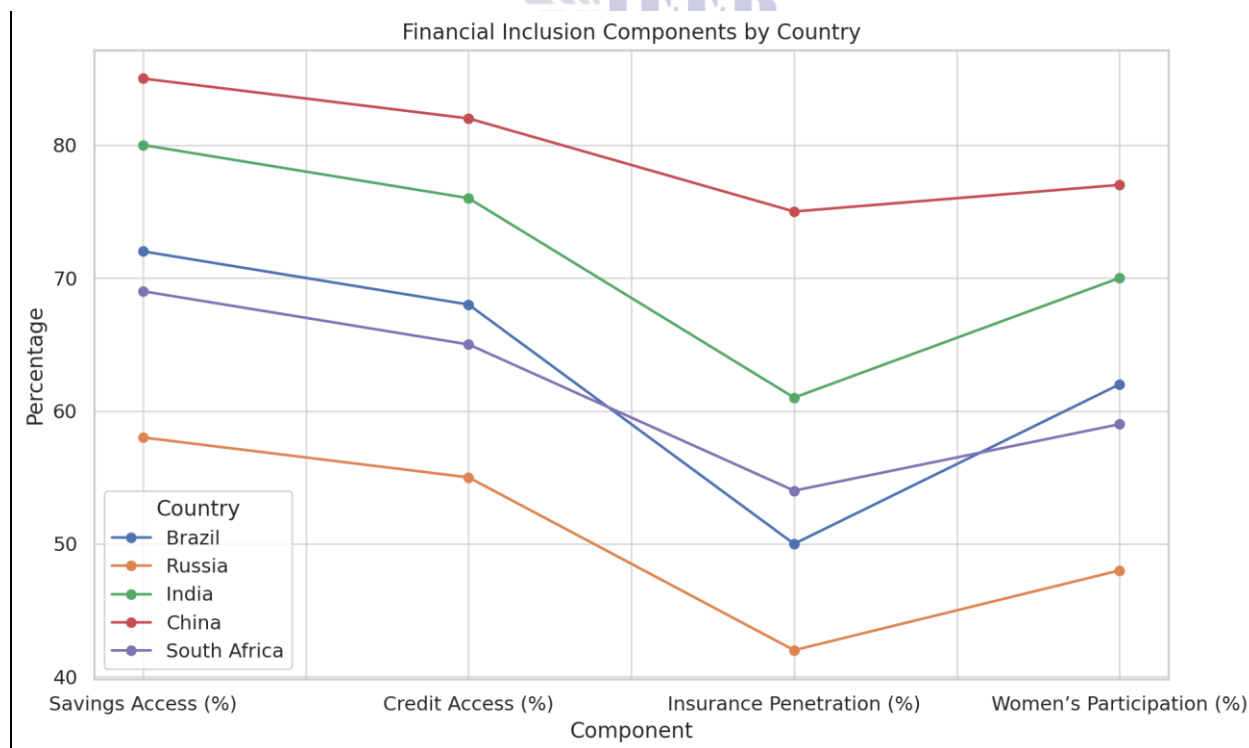


Figure 2 Financial Inclusion Components by Country

The figure 2 shows a consistent continuum of the line plot on these dimensions, showing which countries have tried consistently to excel in all these quarters. Russia lags behind in every element, but at the lowest levels of insurance penetration (42%) and female involvement (48%). Such inequalities indicate that the reform of policies and gender-based interventions are required to expand access to core financial services.

4.3 Environmental Sustainability Commitments

Table 3 and Figure 3 show a summary of environmental practices. China and India are again leading the pack, with zone-wide efforts in reducing waste (78% and 72%), using renewable energy (82% and 65%), and recycling (74% and 66%). These nations have incorporated environmental objectives into their operations models, which keep in line with universal sustainability models.

Table 3: Environmental Sustainability Practices

Country	Waste Reduction Initiatives (%)	Renewable Energy Use (%)	Eco-Packaging (%)	Recycling Programs (%)
Brazil	60	52	45	55
Russia	48	39	35	44
India	72	65	58	66
China	78	82	69	74
South Africa	63	55	47	59

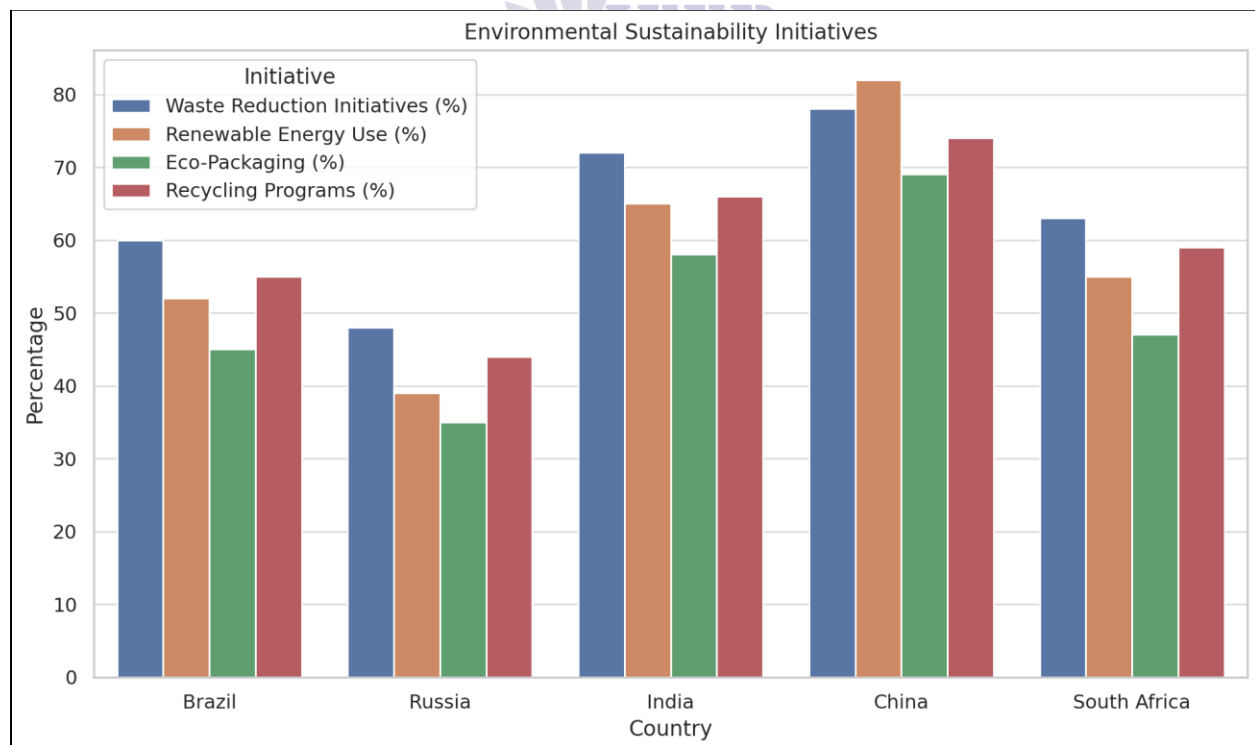


Figure 3 Environmental Sustainability Initiatives

Figure 3 is a clustered bar chart, which illustrates a comparative picture of country level investment in green practices. Moderate scores by Brazil and South Africa indicate a moderate level of commitment, whereas low levels of renewable energy (39%) and eco-packaging (35%) contribute towards a limited consumption of environmental innovation in Russia. The findings agree with the argument that environmental sustainability and financial sustainability are not mutually exclusive in SE models as long as they are sufficiently incentivized.

4.4 Community Engagement and Local Impact

Table 4 and Figure 4 investigate community engagement approaches. In Brazil, India, and China, local hiring is well above 80 percent, with South Africa and Russia a bit lower. There is also more training programs, stakeholder meetings and voluntarism, partaking way of thinking to development as well, more so in India and China.

Table 4: Community Engagement and Support

Country	Local Hiring (%)	Community Training Programs (%)	Stakeholder Meetings per Year	Volunteer Participation Rate (%)
Brazil	80	65	4	35
Russia	72	50	3	28
India	85	76	5	42
China	88	81	6	48
South Africa	78	66	4	36

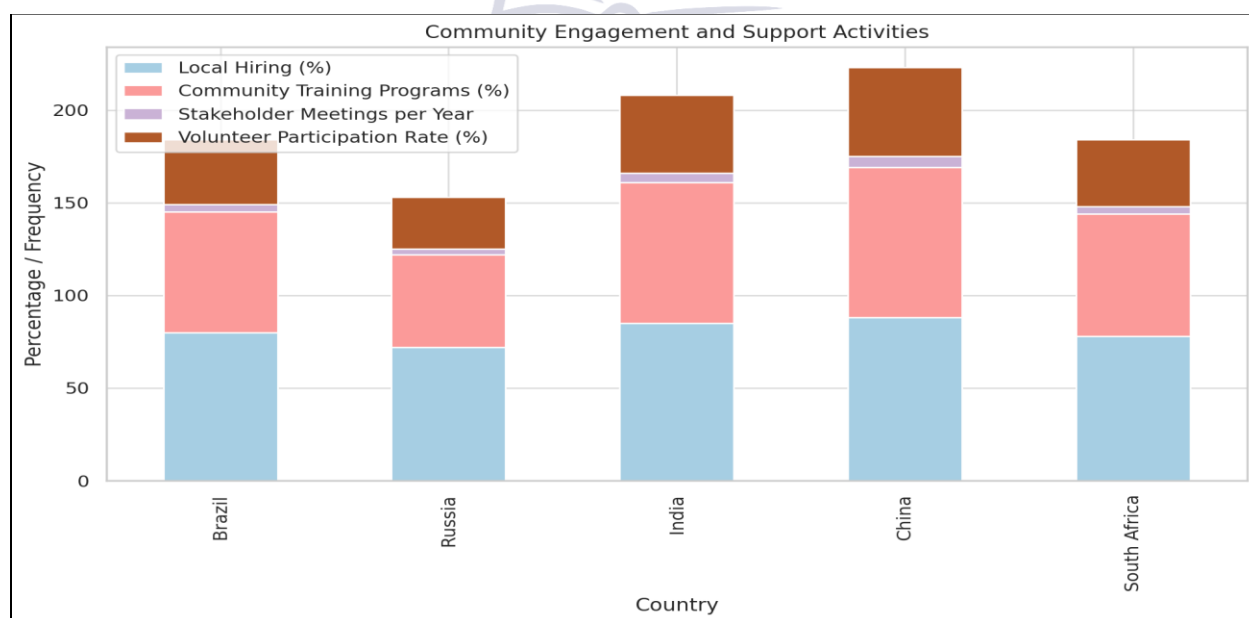


Figure 4 Community Engagement and Support Activities

In Fig. 4 the stacked bar chart illustrates the level of community-based activities and how they are distributed. A greater local engagement and

community trust is found in countries with higher contributions to the process of training and mobilizing volunteers. This supports the notion that

significant local population engagement is an important long-term force of social impact.

4.5 Regulatory and Institutional Support

As seen in Table 5 and the related heat map in Figure 5 China displays the best institutional support which was rated highly in terms of government subsidies

with a score of 63 percent, tax incentives with a score of 60 percent, and ease of doing business with a rating of 8.0. India is also demonstrating a favorable regulatory environment, formal legal frameworks of social enterprise. In Russia and South Africa, in contrast, SEs are not legally recognized, and lower levels of subsidies and incentives are reported.

Table 5: Regulatory and Institutional Support

Country	Govt Subsidy Access (%)	Tax Incentives (%)	Ease of Business Score (1-10)	Legal Framework for SEs (Yes=1, No=0)
Brazil	48	42	6.5	1
Russia	35	30	5.2	0
India	58	55	7.1	1
China	63	60	8.0	1
South Africa	46	43	6.8	0

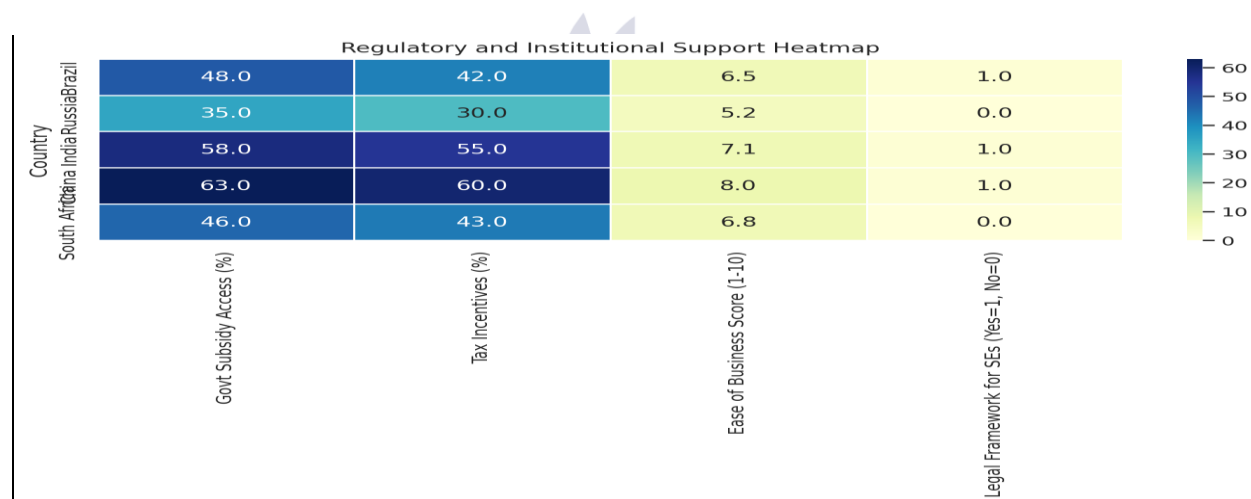


Figure 6 Regulatory and Institutional Support Heatmap

Figure 5 is the heatmap that provides a clear visual gradient of the institutional robustness. These results depict how formal support mechanisms, especially legal recognition and financial incentives, foster an enabling environment where social enterprises can prosper and align themselves to national development visions.

4.6 Enterprise Scale, Reach, and Growth Trajectory

Table 6 compares enterprise size and operation longevity and is explained by the bubble chart in

Figure 6. Chinese groups of enterprises are more likely to employ a greater number of people (45) and occupy more years of average work (9 years), reflecting on their greater outreach (17,000 beneficiaries). India remains close behind, and its validation is possible because its SE sector can be scaled up. As shown in Figure 6, the size of each country bubble represents how far the enterprises of each country extend and China and India dominantly extend both in length and breadth.

Table 6: Enterprise Scale and Reach

Country	Avg. Employees per SE	Avg. Years in Operation	No. of Beneficiaries Reached	Urban vs Rural Focus (Urban %)
Brazil	35	7	12,000	60
Russia	28	6	9,500	70
India	40	8	15,000	50
China	45	9	17,000	55
South Africa	33	7	11,000	58

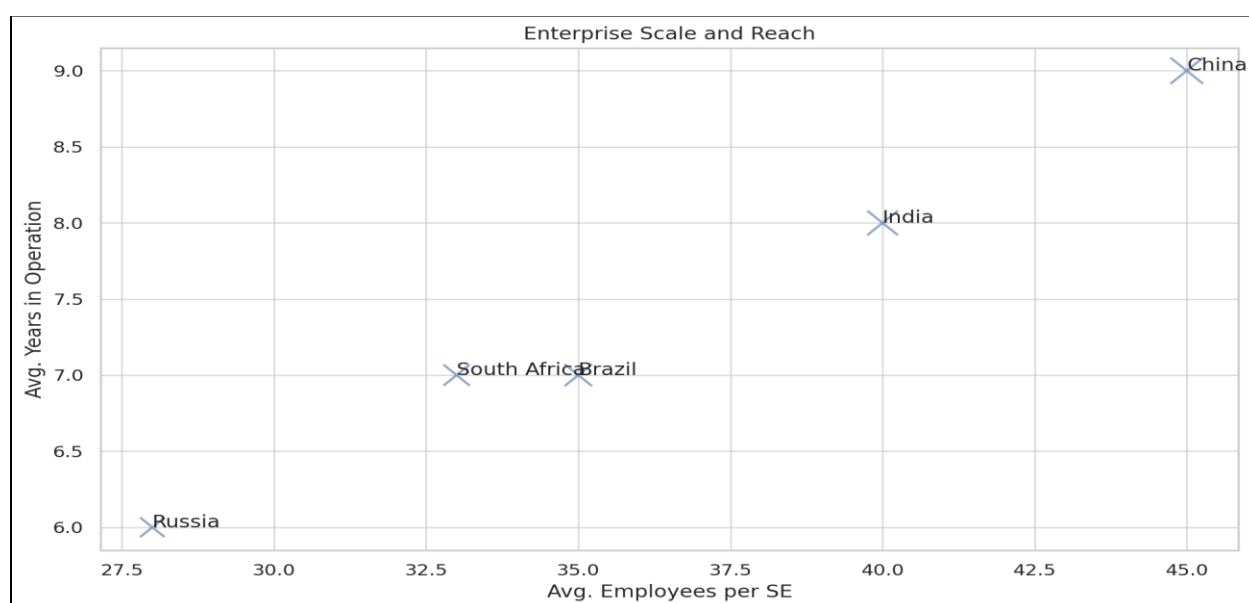


Figure 6 Enterprise Scale and Reach

Interestingly, Russia records the lowest average staff (28) and number of beneficiaries (9,500), indicating a potential structural and resource limitation. The statistics show that the maturity and scale of enterprises are associated with the implementation of an ecosystem and favorable financing conditions.

4.7 Funding Structures and Capital Access

As Table 7 and the zoomed-in donut chart in Figure 7 show, donor grants have been the principal source of funding in every country, with an average of 42 percent. Nonetheless, there is increased revenue based funding (40% in China and 35 percent in India) indicating a move towards financial independence. Impact investment and state subsidy are a lesser but increasingly significant part.

Table 7: Funding Sources

Country	Donor Grants (%)	Revenue-Based (%)	Impact Investment (%)	Public Funding (%)
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Brazil	45	30	25	15
Russia	50	25	20	10
India	38	35	27	18
China	35	40	25	22
South Africa	42	32	26	14

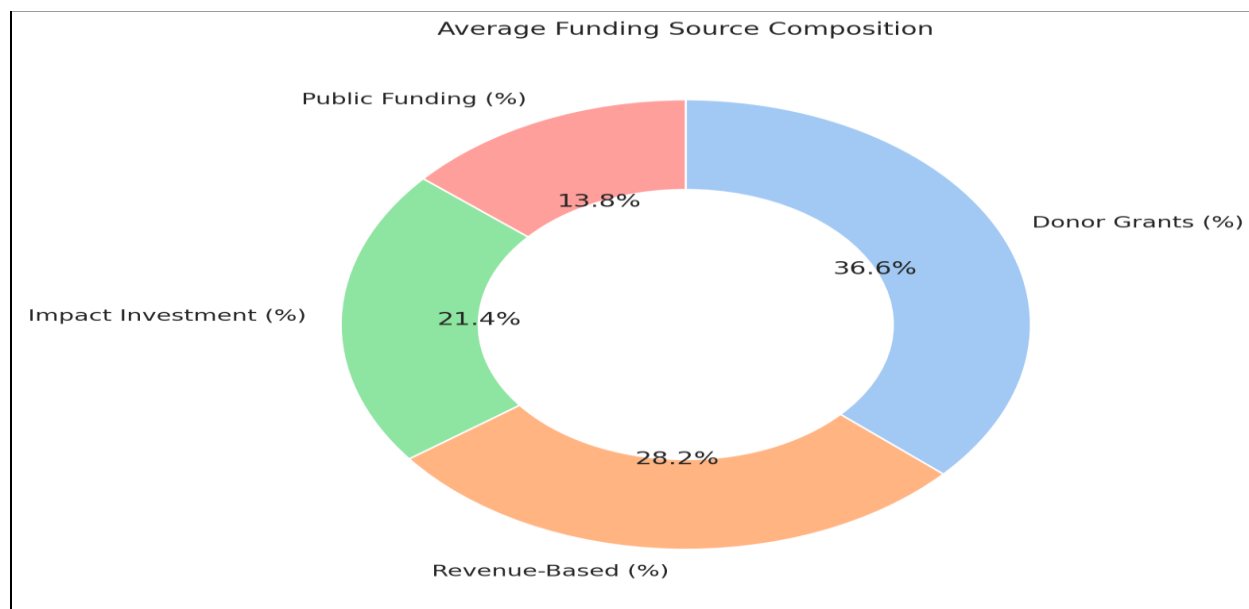


Figure 7 Average Funding Source Composition

Average funding distribution is shown in Figure 7, which demonstrates this balance between philanthropic and earned-income sources. The higher the proportion of earned revenue in a country, the higher the level of resistance to operational shocks and the more the confidence in which investors invest in the economy. The transition to becoming hybrid financing is another step in the right direction in the SE ecosystem.

4.8 Impact Measurement and Accountability Mechanisms

The radar chart in Figure 8 and Table 8 evaluates the extent to which social enterprises measure and report their impact. China gets the highest score on any metric such as third-party assessment (48%) and beneficiary feedback systems (77%). Russia and South Africa have weaker mechanisms of accountability while India scores high.

Table 8: Impact Assessment and Metrics

Country	Impact Metrics Used (%)	Annual Social Impact Reports (%)	Third-Party Evaluation (%)	Beneficiary Feedback System (%)
Brazil	70	55	35	60

Russia	58	40	25	50
India	75	63	42	72
China	82	70	48	77
South Africa	67	52	33	59

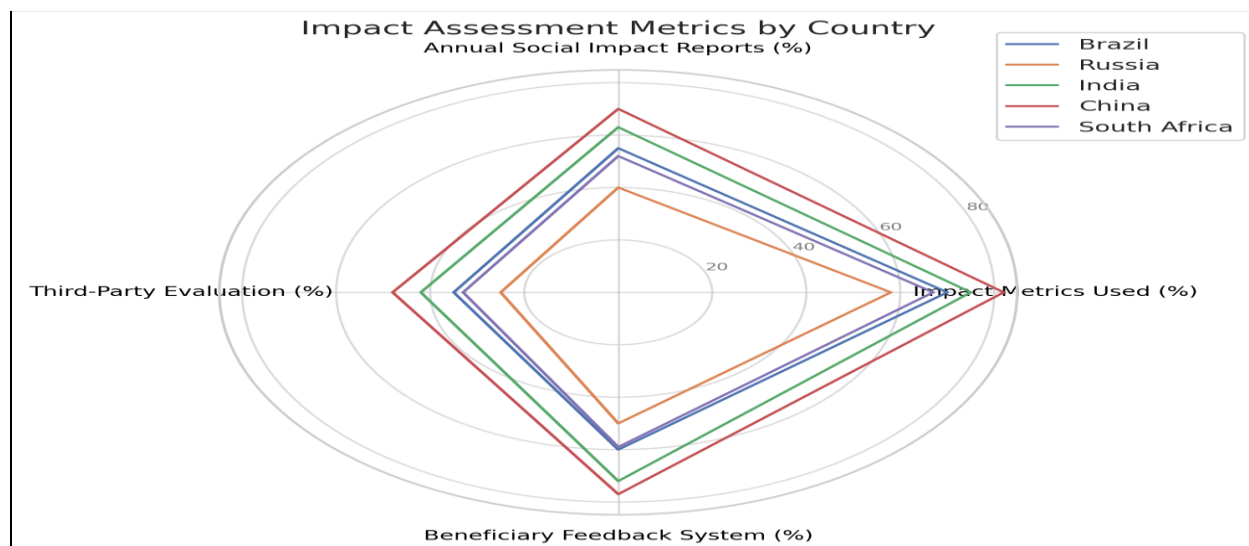


Figure 8 Impact Assessment Metrics By Country

Figure 8 of the radar chart shows multidimensional strengths and weaknesses. Corporations that conduct stringent impact assessment are better placed to access finance and institutional backing. The report indicates that consistent division of measurement activities augments both transparency and long term sustainability.

5. Discussion and Conclusion

The results of the current research play an important role in the growing debate on how social enterprises (SEs) can successfully manage financial inclusion and environmental sustainability in developing economies. Financial marginalization and ecological degradation are two interrelated challenges to which considerable attention has been paid in the Global South, still, little research has been conducted on the integrated scope of symmetrically addressing two concurrent concerns through hybrid enterprises, that is, by comprehensively capturing the financial and

ecological aspects (Saebi, Foss, & Linder, 2019). This study shows that social enterprises and especially those in such places as China and India have created business models that have incorporated financial technologies, green inventions, and community based governance to deliver social returns into economic and environmental spheres.

The pronounced levels of technology penetration as seen in the Chinese and Indian social enterprise affirm the global tendency of digitalizing the development model. As research has demonstrated, elements of digital infrastructure, such as mobile finance and cloud-based systems, promote not only operational productivity but also allow in-time impact tracking and beneficiary interaction (Chen, Zhang, & Xu, 2020). Table 1 and Figure 1 illustrate the situation in which enterprises having higher technological ability could report on the high performance level both in terms of financial inclusion and environmental output. This reverberates with the

studies by Ghosh and Vinod (2017), who have indicated that digital innovations play a critical role in providing financial access to underserved areas. Furthermore, the use of the solar technology and online training highlight the way SEs are building techno-social ecosystems (Ramani, SadreGhazi, & Duysters, 2012), including local human capital creation and the technological tool.

The social mission of SEs working with a Brics background is ingrained through financial inclusion data. It is a long-held scholastic argument that access to financial services enhances household resilience, fosters entrepreneurship, and leads to poverty reduction (Beck, Demirguc-Kunt, & Levine, 2007). Nevertheless, the gender-sensitive patterns of involvement are also consistent with the recent findings of Allen et al. (2022), who reported that inclusive financial systems should target social disparities, especially gender gaps in credit and financial literacy provision. What our Table 2 and Figure 2 findings back up is the initial assumption that in any case, SEs usually perform better than conventional financial institutions in addressing marginalized communities as the former can incorporate local insight and trust in the delivery of services (Guerin, Kumar, & Agier, 2013).

The potential role of SEs in ensuring environmental sustainability, despite the lack of governmental enforcement, is perhaps one of the most interesting findings of this study. SEs are also filling institutional gaps where formal environmental regulation is either weak or not applied consistently by introducing green technologies and making sustainability local (Bhatt & Altinay, 2013). The examples of innovation like eco-packaging, reduced waste, and community recycling demonstrated in Table 3 and Figure 3 are not merely compliance mechanisms; they are a significant part of business strategy. This agrees with previous findings by Hall, Daneke, and Lenox (2010), who stated that sustainable entrepreneurship will flourish as firms rearticulate value creation so that it integrates ecological aspects.

As seen in Table 4 and Figure 4, community engagement seems to be a central force behind the existence of operational legitimacy and long-term impact. As researchers such as Lyon and Fernandez (2012) emphasize, the use of community-based co-production and participatory governance can also

improve the resilience of SEs, as it entails the solutions tapping into local culture and being locally owned. That is especially vital in developing markets, with formal state services that are lacking or underperforming. Our finding that focuses on stakeholder meeting and training program aligns with other studies such as that of Peredo and Chrisman (2006) looking at SEs as a means of community empowerment and capacity building of institutions.

Differences in regulatory and institutional support in countries as seen in Table 5 and Figure 5 means opportunities as well as challenges. Policy coherence, tax incentives, and legal recognition of SEs benefit countries such as China and India empowering SEs to scale. On the other hand the lack of such frameworks in Russia and South Africa is nothing inferior to stunt the potential of SEs to thrive, something that can be witnessed as well in recent policy reviews by Zahra, Gedajlovic, Neubaum, & Shulman (2009). The legal legitimacy minimizes the bureaucracy that limits access to capital and strong institutions (Nicholls & Teasdale, 2017).

The satisfaction of enterprise scale and outreach (Table 6, Figure 6) also supports the thesis that higher levels of organisational maturity (measured in years of age and workforce size) are associated with more profound social impact. Impact measurement, resources mobilization and community are usually organized processes in mature enterprises (Corner & Ho, 2010). Scale is not necessarily the determining factor of success, though. The ability to transform, be flexible, and be responsive to stakeholder demands is usually what sets high-performing SEs apart (Di Domenico, Haugh, & Tracey, 2010).

Particularly, it is seen that the funding model is subject to change with a few businesses displaying a growing dependence on revenue-based financing (Table 7, Figure 7). This is congruent with the increased literature that is pointing towards financial viability in social ventures as a means of becoming less reliant on donor cycles (Battilana & Dorado, 2010). Resilience is also enhanced by the diversification of income beyond grant funding to earned income and impact investing, which can circulate to redevelop programs. However, according to Bocken, Short, Rana, & Evans (2014), the reconciliation of commercial imperatives with mission integrity is a tricky endeavor and needs to be managed strategically.

Finally, the focus on the measurement impact tools and feedback systems (Table 8, Figure 8) demonstrates a more mature accountability ecosystem of SEs. Whereas evidence of change has sometimes been criticized as vague or anecdotal in the world of traditional non-profits, SEs have increasingly come to rely more data-based approaches to proving value creation (Ebrahim & Rangan, 2014). By implementing third-party assessment, feedback loops, and impact dashboards, transparency and investor confidence improve. This change also aligns with new global frameworks such as Impact Management Project (IMP) and Sustainable Development Goal (SDG) alignment (Kolbel, Heeb, Paetzold, & Busch, 2020).

To conclude, this discussion confirms that SEs in new emerging economies are not minor experiments of inclusive development. They are a scalable, replicable model that has the potential to resolve financial exclusion and environmental degradation simultaneously. However, their success rests on supporting ecosystems to offer lawful recognition, capital matters, digital systems, and ability building provisions. Future studies have to analyze the ways of increasing the systemic impact of SEs based on their collaborative networks, participation in policies, and international knowledge sharing.

Conflict of Interest: The authors affirm that there are no conflicts of interest to declare.

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REFERENCES

- UNDP. (2020). *The 17 Sustainable Development Goals*.
Battilana, J., & Lee, M. (2014). *Academy of Management Annals*, 8(1), 397-441.
Perrini, F., Vurro, C., & Costanzo, L. A. (2010). *Business Ethics Quarterly*, 20(3), 527-549.
Sarma, M., & Pais, J. (2011). *Journal of International Development*, 23(5), 613-624.
Morduch, J. (1999). *Journal of Economic Literature*, 37(4), 1569-1614.
Dean, T. J., & McMullen, J. S. (2007). *Journal of Business Venturing*, 22(1), 50-76.
Fletcher, R. (2017). *Journal of Environmental Economics and Management*, 73, 104-122.
Elkington, J. (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*.
Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). *Organization & Environment*, 29(1), 3-10.
Yunus, M. (2010). *Building Social Business*.
Mair, J., & Marti, I. (2006). *Journal of World Business*, 41(1), 36-44.
Haider, Z., & Hossain, M. (2018). *Environmental Management*, 62(1), 65-79.
Seelos, C., & Mair, J. (2005). *Business Horizons*, 48(3), 241-246.
Braun, V., & Clarke, V. (2006). *Qualitative Research in Psychology*, 3(2), 77-101.
Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on PLS-SEM*.
Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States. *Journal of Social Entrepreneurship*, 1(1), 32-53.
Kerlin, J. A. (2006). Social enterprise in the United States and Europe. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 17(3), 246-262.
Nicholls, A. (2006). *Social Entrepreneurship: New Models of Sustainable Social Change*. Oxford University Press.
Evers, A., & Laville, J. L. (2004). *The Third Sector in Europe*. Edward Elgar Publishing.
Pache, A. C., & Santos, F. (2013). Inside the hybrid organization. *Academy of Management Journal*, 56(4), 972-1001.

- Haugh, H. (2005). A research agenda for social entrepreneurship. *Social Enterprise Journal*, 1(1), 1-12.
- Steiner, A., & Teasdale, S. (2017). The playground of the rich? Growing social enterprise in the 21st century. *Social Enterprise Journal*, 13(2), 147-162.
- World Bank. (2018). *Financial Inclusion Overview*. Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2017). *The Global Findex Database 2017*. World Bank Group.
- Cull, R., Ehrbeck, T., & Holle, N. (2014). Financial inclusion and development. *Current Opinion in Environmental Sustainability*, 5(3-4), 70-76.
- Jack, W., & Suri, T. (2014). Risk sharing and transactions costs. *American Economic Review*, 104(1), 183-223.
- Bongomin, G. O. C., Ntayi, J. M., Munene, J. C., & Nabeta, I. N. (2018). Mobile money and financial inclusion in sub-Saharan Africa. *Digital Policy, Regulation and Governance*, 20(4), 338-356.
- Allen, F., Demirgüç-Kunt, A., Klapper, L., & Peria, M. S. M. (2016). The foundations of financial inclusion. *Journal of Financial Intermediation*, 27, 1-30.
- Rhyne, E., & Otero, M. (2006). Microfinance through the next decade. *MicroBanking Bulletin*, 2, 6-10.
- Schaper, M. (2010). *Making Ecopreneurs: Developing Sustainable Entrepreneurship*. Gower Publishing.
- Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22(1), 29-49.
- York, J. G., & Venkataraman, S. (2010). The entrepreneur-environment nexus. *Journal of Business Venturing*, 25(5), 449-463.
- Allet, M. (2014). Why do microfinance institutions go green? *Journal of Business Ethics*, 122(3), 405-424.
- Weber, O., & Remer, S. (2011). *Social Banks and the Future of Sustainable Finance*. Routledge.
- Smith, W. K., Gonin, M., & Besharov, M. L. (2013). Managing social-business tensions. *Academy of Management Journal*, 56(6), 1600-1622.
- Saeabi, T., Foss, N. J., & Linder, S. (2019). Social entrepreneurship research: Past achievements and future promises. *Journal of Management*, 45(1), 70-95.
- Chen, M. A., Zhang, J., & Xu, Y. (2020). Fintech, digital inclusion and income inequality: A cross-country study. *Journal of International Financial Markets, Institutions and Money*, 65, 101188.
- Ghosh, S., & Vinod, H. D. (2017). What constrains financial inclusion for women? Evidence from Indian micro data. *World Development*, 92, 60-81.
- Ramani, S. V., SadreGhazi, S., & Duysters, G. (2012). On the diffusion of toilets as bottom of the pyramid innovation. *Technological Forecasting and Social Change*, 79(4), 676-687.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality and the poor. *Journal of Economic Growth*, 12(1), 27-49.
- Allen, F., Demirgüç-Kunt, A., Klapper, L., & Martinez Peria, M. S. (2022). Women and financial inclusion: The role of digital financial services. *World Bank Policy Research Working Paper No. 9980*.
- Guérin, I., Kumar, S., & Agier, I. (2013). Women's empowerment: Power to act or power over other women? Lessons from Indian microfinance. *Oxford Development Studies*, 41(sup1), S76-S94.
- Bhatt, P., & Altinay, L. (2013). How social capital is leveraged in social innovations under resource constraints? *Management Decision*, 51(9), 1772-1792.
- Hall, J. K., Daneke, G. A., & Lenox, M. J. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing*, 25(5), 439-448.

- Lyon, F., & Fernandez, H. (2012). Strategies for scaling up social enterprise: Lessons from early years providers. *Social Enterprise Journal*, 8(1), 63–77.
- Peredo, A. M., & Chrisman, J. J. (2006). Toward a theory of community-based enterprise. *Academy of Management Review*, 31(2), 309–328.
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519–532.
- Nicholls, A., & Teasdale, S. (2017). Neoliberalism by stealth? Exploring continuity and change within the UK social enterprise policy paradigm. *Policy & Politics*, 45(3), 323–341.
- Corner, P. D., & Ho, M. (2010). How opportunities develop in social entrepreneurship. *Entrepreneurship Theory and Practice*, 34(4), 635–659.
- Di Domenico, M., Haugh, H., & Tracey, P. (2010). Social bricolage: Theorizing social value creation in social enterprises. *Entrepreneurship Theory and Practice*, 34(4), 681–703.
- Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal*, 53(6), 1419–1440.
- Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
- Ebrahim, A., & Rangan, V. K. (2014). What impact? A framework for measuring the scale and scope of social performance. *California Management Review*, 56(3), 118–141.
- Kölbel, J. F., Heeb, F., Paetzold, F., & Busch, T. (2020). Can sustainable investing save the world? Reviewing the mechanisms of investor impact. *Organization & Environment*, 33(4), 554–574.