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Article Review

The Role of Sustainable Entrepreneurship in Advancing the United Nations Sustainable Development Goals: Themes, Challenges, and Opportunities

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Abstract

Sustainable entrepreneurship entrepreneurial action that simultaneously pursues economic viability, social inclusion, and ecological integrity has moved from a niche scholarly domain to a central lever for achieving the United Nations Sustainable Development Goals (SDGs). This review synthesizes conceptual and empirical research on how sustainable entrepreneurship advances the SDGs, identifying dominant themes, mechanisms of impact, challenges, and opportunity spaces. We connect foundational theory on opportunity recognition under ecological and social constraints with contemporary work on circular economy ventures, impact investing, blended finance, and impact management standards. We further examine how national policy frameworks and ecosystem-level interventions (e.g., UNCTAD's Entrepreneurship Policy Framework, the EU Social Economy Action Plan, and UNDP's SDG Impact Standards) can enable entrepreneurs to contribute more effectively to SDG targets. The review surfaces persistent obstacles measurement and attribution of impact, financing gaps for early-stage and inclusive ventures, institutional voids, trade-offs and mission drift, and uneven scaling pathways while outlining promising research and practice opportunities in business model innovation for the SDGs, inclusive and frugal innovation, and outcome-aligned capital. We conclude with a research agenda and policy implications to accelerate entrepreneurship-led progress toward 2030.

Keywords: *Entrepreneurship, The Sustainable Development Goals (SDGs), Opportunities.*

Introduction

In 2015, the United Nations General Assembly adopted *"Transforming our world: the 2030 Agenda for Sustainable Development,"* which established 17 Sustainable Development Goals (SDGs) and 169 associated targets as a comprehensive global action plan for people, the planet, and prosperity [1]. Although national governments remain the primary actors responsible for implementation, the agenda explicitly recognizes the crucial role of businesses and entrepreneurs in driving innovation, mobilizing investment, and fostering partnerships to achieve sustainable outcomes. To support this engagement, practical frameworks such as the SDG Compass developed by GRI, the UN Global Compact, and WBCSD provide structured guidance for

companies to align their strategies with the SDGs, define measurable objectives, integrate sustainability across operations, and transparently report their contributions [2–4].

Within this global context, sustainable entrepreneurship has gained increasing attention as a dynamic field that bridges economic development with environmental and social responsibility. It emphasizes the identification, creation, and scaling of business opportunities that not only generate economic value but also contribute to ecological preservation and community well-being. By integrating sustainability principles into entrepreneurial processes, this approach challenges traditional profit-driven models and promotes long-term value creation that is inclusive and resilient [5–7].

Building on these developments, this review paper seeks to explore the role of sustainable entrepreneurship in advancing the SDGs. Specifically, it addresses key questions regarding how entrepreneurial activities contribute to sustainable development outcomes, what thematic pathways are most prominent, and what challenges and opportunities arise in this context. To provide a comprehensive perspective, this study synthesizes both foundational and recent literature from the fields of entrepreneurship, sustainability management, impact finance, and public policy, thereby offering an integrated understanding of how sustainable entrepreneurship can support global development agendas.

Defining Sustainable Entrepreneurship and its Link to the SDGs

Sustainable entrepreneurship is commonly defined as entrepreneurial action intended to "preserve nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed" [5]. Seminal work frames sustainability-oriented opportunities as arising from market failures and institutional voids linked to environmental degradation and social exclusion [8], and identifies the knowledge bases (e.g., of natural and communal environments) that make opportunity recognition for sustainable development more likely [6].

Because the SDGs span environmental integrity (SDGs 6, 12–15), social inclusion (SDGs 1–5, 10, 16), and economic prosperity (SDGs 7–9, 11, 17), the field's triple-bottom-line orientation maps naturally onto the agenda's integrated logic. Systematic reviews show that sustainable entrepreneurship research now encompasses opportunity recognition, business model innovation, growth and scaling, financing, and impact measurement [9,10], with newer streams linking directly to SDG-labeled strategies and impact assessment [11,12].

Thematic Pathways from Sustainable Entrepreneurship to SDG Progress

Entrepreneurs advance the SDGs by (i) inventing or deploying technology (e.g., clean energy solutions), (ii) innovating business models (e.g., circular economy, pay-as-you-go access models), (iii) shaping markets (standard setting, certification, coalitions), and (iv) orchestrating ecosystems (platforms, partnerships). Table 1 summarizes core themes, mechanisms, and representative studies.

Sustainable business model innovation (SBMI) translates mission into design choices (partners, value proposition, revenue logic, and impact logic) that target SDG-relevant outcomes [13,11]. Recent work proposes SDG-oriented design tools and roadmaps that integrate materiality analysis with target-setting and governance [11]. For entrepreneurs, SBMI often involves circularity (repair, reuse, remanufacture), access-over-ownership models, and inclusive distribution channels all of which directly influence SDG indicators on resource efficiency, decent work, and reduced inequalities [13–16].

A growing body of research investigates how entrepreneurial circular strategies contribute to specific SDGs and targets (e.g., 12.5 on waste reduction, 12.2 on natural resource management). Mapping studies link 27 circularity strategies to SDG targets, highlighting strong connections to responsible consumption/production and climate action [15]. Evidence suggests circular ventures can deliver environmental benefits while creating local jobs and new value networks aligned with SDGs 9, 11, 12, and 13 [16].

Table 1. Core themes, mechanisms, and representative studies linking sustainable entrepreneurship to SDGs

Theme	Mechanism toward SDGs	Illustrative SDGs	Ref.
Opportunity recognition under environmental & social constraints	Knowledge of natural/community systems increases identification of sustainability opportunities	6, 7, 12–15	[5,6]
Market imperfections as entrepreneurial opportunities	Correcting information/externality failures via sustainable products/services	7, 9, 12–13	[8]
Business model innovation for SDGs	Designing value creation/delivery/capture for positive externalities; aligning with SDG targets	7–13	[11], [13,14]
Circular economy entrepreneurship	Closing loops, extending lifecycles, remanufacturing; reducing resource intensity	9, 11–13	[15,16]
Scaling impact & growth dynamics	Managing tensions and growth enablers in impact ventures	Crosscutting	[17]
Financing for SDG-aligned ventures	Impact investing, blended finance to mobilize private capital	1–17 (context-specific)	[18–20]
Impact management & reporting	Standards, metrics, and governance for credible SDG contributions	Crosscutting	[21,22]
Policy & ecosystem supports	Entrepreneurship policy frameworks, social economy action plans	Crosscutting	[23–25]

Scaling sustainable ventures entails addressing capability development, partnerships, and financing. A review of impact venture growth identifies enablers such as mission clarity, stakeholder engagement, and hybrid governance as key to sustaining impact at scale [17]. Yet, growth can introduce tensions between revenue growth and inclusivity, or between speed and depth of environmental impact that require explicit guardrails (Section 5).

Achieving the SDGs requires trillions in annual investment, with persistent gaps in developing contexts [18]. Impact investing channels capital with intentional social/environmental objectives alongside financial returns, increasingly mapped to SDG outcomes [19]. Blended finance the strategic use of public and philanthropic capital to mobilize private investment has been associated with a broader SDG footprint relative to non-blended deals, though rigorous causal evidence remains emergent [20], [26,27]. Venture-level instruments (first-loss tranches, outcome-based financing) can lower risk and crowd in commercial co-investors to SDG-aligned ventures (Section 6).

Measuring SDG Impact

A central challenge for entrepreneurs and investors is moving from activity/output reporting to outcome and impact measurement aligned with SDG targets. The UNDP SDG Impact Standards guide enterprises, funds, and bond issuers to integrate impact into strategic decision-making, governance, and transparency including assessing both positive and negative effects across stakeholders [21,28]. The OECD-UNDP Impact Standards for Financing Sustainable Development provide a complementary best-practice reference for DFIs and private investors [22].

At the venture level, impact measurement design must balance rigor with feasibility. Classic work on social enterprise performance cautions against overreliance on easily measured proxies and underscores the need for theory-of-change logic, material indicators, and learning-oriented systems [29]. Recent meta-reviews of impact investing research likewise point to measurement gap limited evidence that capital flows reliably produce real-world improvements on SDG outcomes, and a need to address attribution, counterfactuals, and time horizons [30].

Table 2. Common pitfalls and better practices in SDG impact measurement for ventures

Pitfall	Why it's a problem	Better practice (illustrative guidance)
Counting outputs as impact (e.g., units sold)	Fails to capture outcomes/long-term change	Articulate theory of change; map to SDG targets/indicators; track outcomes and material negative effects [21,22], [29]
Indicator overload	High reporting burden; noise over signal	Prioritize few, material indicators; align to SDG Compass priorities and stakeholder needs [2,21]
No counterfactual or baseline	Cannot infer contribution	Use quasi-experimental designs where feasible; at minimum, track baselines and time-series outcomes [29,30]
Ignoring negative spillovers	Overstates net contribution	Integrate do-no-harm screens and stakeholder risk assessment (UNDP Standards) [21,28]
Detached governance	Measurement not embedded in decisions	Tie KPIs to governance, incentives, and capital allocation [21,22]

Challenges Constraining Entrepreneurship-Led SDG Progress

Institutional voids weak property rights, unstable regulation, limited enforcement raise transaction costs and risk, restricting market creation for SDG-oriented solutions [8,23]. Entrepreneurs also face policy uncertainty (e.g., shifting subsidies or standards), which can stall investment and scaling trajectories (e.g., in renewable energy and circular value chains). Despite momentum in impact investing, early-stage SDG ventures—especially in low-income contexts and for inclusive business models—face acute financing gaps due to perceived risk, ticket size mismatches, and limited exit options [18,19]. Although blended finance can mobilize capital, evidence on development impact is uneven, and there is no unified definition or approach, complicating comparability and learning [27].

Entrepreneurs and investors grapple with heterogeneous metrics, limited assurance, and risks of impact-washing. Academic reviews call for stronger causal evidence, system-level metrics, and alignment with SDG targets rather than bespoke ESG proxies [30−32]. Pursuing growth can produce mission drift, especially when governance or revenue models are not aligned with the intended social/environmental outcomes [33]. Sustainable ventures also face hard trade-offs (e.g., eco-efficiency vs. affordability; decent work vs. price competition) that require explicit prioritization and stakeholder negotiation [9,13].

SBMI, circular strategies, and inclusive distribution require distinct capabilities (systems thinking, partnership-building, data analytics). Many new ventures and SMEs need support to design viable yet impact-credible models, manage supply chains, and comply with emerging standards.

Table 3. Key challenges and representative evidence

Challenge	Summary	Ref.
Institutional voids & policy uncertainty	Weak enabling environment raises cost/risk; slows diffusion	[8,23,25]
Early-stage financing gaps	Ticket sizes, risk/return misalignment, exits	[18,19]
Blended finance evidence gap	Mobilization ≠ development impact; definition variance	[20,26,27]
Impact measurement limitations	Attribution, negative impacts, comparability	[29,21,22]
Mission drift under growth	Hybrid governance tensions	[33]

Opportunities and Emerging Directions

Blended structures (first loss guarantees, concessional debt, development impact bonds) can de-risk SDG ventures and crowd in commercial capital, with early evidence of broader SDG coverage compared to non-blended deals [20]. Clarifying definitions and standardizing reporting would improve comparability and learning at the portfolio level [27]. Public–private pipelines aligned to national priorities (e.g., integrated financing frameworks) can also reduce transaction costs in frontier markets [18].

Widespread adoption of SDG Impact Standards and IS-FSD can embed impact in strategy and governance, providing entrepreneurs with a decision architecture to design, monitor, and signal credible SDG contributions [21,22,28]. At sector level, linking standards to industry metrics (e.g., for circularity or health access) and assurance can improve integrity and comparability. Entrepreneurship can speed just and

inclusive transitions by combining circular economy strategies with inclusive models (local remanufacturing, repair services, take-back logistics) that create decent work while reducing material throughput [15,16]. SDG-oriented business model tools can help ventures map value to targets and indicators and proactively manage trade-offs [11,13,14].

Entrepreneurship policy frameworks (training, simplified regulation, access to finance, technology extension) can be tuned to SDG priorities and expand opportunity sets for marginalized groups [23–25]. The EU Social Economy Action Plan illustrates how a supranational policy can enable social enterprises to start-up, scale-up, and innovate, including access to finance and markets [24,25]. National strategies can embed SDG procurement, innovation prizes, and data infrastructure to catalyze demand for SDG solutions.

Research Frontiers

1. Causal impact of ventures on SDG outcomes using quasi-experimental designs and administrative data linkages [29,30].
2. System-level effects of entrepreneurial circular strategies on material flows and jobs [15,16].
3. Hybrid governance that resists mission drift while enabling growth [17,33].
4. Comparative policy: which ecosystem interventions most effectively increase SDG-aligned new venture creation and survival?
5. Global South entrepreneurship: inclusive, frugal, and community-based innovations under resource constraints, and their SDG pathways.

Practical Guidance for Entrepreneurs and Investors

1. Start with materiality to the SDGs: Use the SDG Compass steps understand, prioritize, set goals, integrate, report to focus on the few targets your model can materially influence [2,4].
2. Design for impact and viability: Build SBMI that aligns revenue logic with outcomes (e.g., pay-for-impact contracts where feasible) to reduce mission drift [13,14,29].
3. Anticipate trade-offs: Explicitly articulate acceptable trade-offs (e.g., affordability vs. margin) and govern them via board charters and stakeholder covenants [33].
4. Measure simply but credibly: Track a concise set of outcome indicators with baselines, integrate do-no-harm assessments, and align governance to act on the data [21,22,29].
5. Leverage blended instruments: Where risk is a barrier, explore guarantees, concessional layers, or outcome-based financing; structure monitoring to generate learning on SDG outcomes [20,26,27].
6. Build coalitions: Join sector coalitions for standards and joint procurement to accelerate market creation (e.g., circular supply chains) [15,16].

Conclusion

The United Nations Sustainable Development Goals (SDGs) represent a comprehensive global framework aimed at addressing interconnected social, economic, and environmental challenges through an integrated and collaborative approach across multiple disciplines. Due to their interlinked nature, progress in one goal can influence others, highlighting the importance of coordinated action at various levels. In this context, sustainable entrepreneurship plays a crucial role in translating these goals into practical and scalable solutions by integrating economic value creation with social and environmental impact. Its evolution toward more inclusive and innovation-driven models, including circular business practices and impact-oriented strategies, has strengthened its contribution to sustainable development. However, achieving the SDGs by 2030 still requires addressing key challenges such as limited access to financing, gaps in impact measurement, and the need for stronger policy support. By fostering innovation, enhancing accountability, and building supportive ecosystems, sustainable entrepreneurship can significantly accelerate progress toward a more sustainable and inclusive future.

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