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SustainAbility: WHEN CAPITAL LETTER MATTERS

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Abstract: Sustainability, while widely recognized as a global imperative, often struggles to bridge the gap between intention and action (Rockström et al., 2009; Raworth, 2017). This paper introduces the concept of SustainAbility, which reframes traditional sustainability by emphasizing the development of cognitive, behavioral, and systemic abilities necessary for lasting and transformative change (Sterling, 2011; Bandura, 1977). SustainAbility shifts the focus from static goals to dynamic processes, recognizing that long-term sustainability requires a skill-based, adaptive approach (Meadows, 2008; Kahneman, 2011). Drawing on insights from behavioral economics (Thaler & Sunstein, 2008), systems thinking (Senge, 1990) and educational psychology (Kolb, 1984), this paper explores the theoretical foundations and policy implications of SustainAbility. Key areas of focus include the role of education in cultivating systems literacy, corporate strategies for embedding SustainAbility into decision-making and participatory policymaking to build institutional resilience (Ostrom, 1990; Geels, 2011). By redefining SustainAbility through the lens of abilities, this paper advocates for a paradigm shift that integrates knowledge and emphasizes equitable and inclusive frameworks (Sen, 1999; Agyeman et al., 2002).

Keywords: Cognitive abilities, behavioral change, systems thinking, resilience, education for SustainAbility.

1. INTRODUCTION

The concept of SustainAbility has become a cornerstone of global discourse, influencing policy making, corporate strategy, and societal priorities and encompassing the interconnected dimensions of environmental preservation, economic stability, and social equity. However, sustainability efforts often falter in practice, focusing heavily on specific targets while overlooking the dynamic processes and capacities required for lasting change (Meadows, 2008).

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This paper introduces SustainAbility, a reimagined framework that focuses from static outcomes to the abilities needed for enduring transformation. SustainAbility emphasizes the development of cognitive, behavioral, and institutional capacities that enable individuals and organizations to bridge persistent gaps between knowledge and action, fostering resilience and adaptability in the face of global challenges (Carrassi, 2016). Rooted in interdisciplinary insights from behavioral economics, systems thinking, and educational psychology, SustainAbility offers a transformative pathway for operationalizing sustainability across education, corporate strategies, and community engagement.

The remainder of this paper explores SustainAbility in depth. It first grounds the concept in theoretical foundations, focusing on cognitive and behavioral barriers and the systemic processes that underpin SustainAbility transitions. It, then, examines practical applications in key sectors, followed by an analysis of policy implications, challenges, and future directions.

2. THEORETICAL FOUNDATIONS

SustainAbility has long been regarded as a normative construct, guiding humanity toward ecological preservation, economic viability, and social justice. However, a purely goal-oriented approach often remains insufficient when detached from the concrete capacities required to realize sustainable transformations. A growing body of scholars emphasizes that sustainability must be reconceptualized not only as a goal, but as a set of abilities—individual, organizational, and systemic—that enable enduring transformation (Wiek et al., 2011; Barth & Michelsen, 2013).This shift aligns with our reinterpretation of SustAinability, in which ability is both the condition and the driver of enduring sustainable real effects. The concept of SustainAbility highlights the balance between the environmental, social and economic dimensions and also includes concepts such as intergenerational equity, ecological thresholds and resilience, reflecting a deeper understanding of the interconnected and dynamic nature of global challenges (Rockström et al., 2009). However, traditional sustainability frameworks have often been critiqued for focusing excessively on end goals rather than the dynamic processes required to achieve them. As Meadows (2008) and Raworth (2017) have argued, an overemphasis on static targets has led to fragmented policies and limited long-term success, highlighting the importance of cultivating adaptive capacities to aligning systemic processes with behavioral insights. These shortcomings underline the need for an alternative approach - SustainAbility - that integrates the development of capacities necessary for sustainable action. In this context, SustainAbility proposes the cultivation of cognitive, behavioral, and systemic abilities for fostering lasting and transformative change (Bandura, 1977; Sterling, 2011). Behavioral economics provides valuable insights into biases that obstruct long-term thinking. For instance, present bias leads individuals and institutions to prioritize immediate benefits over future gains, while status quo bias reinforces inertia and resists necessary change (Tversky & Kahneman, 1974; Thaler & Sunstein, 2008). Other cognitive challenges, such as loss aversion—the tendency to prioritize avoiding losses over acquiring equivalent gains—further complicate decision-making. SustainAbility emphasizes designing interventions to mitigate these biases, such as using “nudges” to influence decision-making environments and align individual behaviors with SustainAbility goals (Thaler & Sunstein, 2008; Kahneman, 2011). Equally important is the contribution of systems thinking, which underscores the complexity and interconnectedness of sustainable challenges. Traditional linear approaches to problem-solving are inadequate in addressing issues such as climate change or resource depletion, characterized by feedback loops, emergent properties, and cascading effects. Systems thinking offers a holistic perspective, enabling individuals and organizations to navigate the uncertainty and complexity inherent in sustainable transitions (Senge, 1990; Meadows, 2008). By fostering

systems literacy, SustainAbility equips stakeholders to identify leverage points and design interventions that account for real effects. Educational psychology further enriches the SustainAbility framework by providing insights into how individuals learn and adopt sustainable practices. Experiential learning models, such as Kolb's (1984) cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation, are particularly relevant for fostering systems literacy and critical thinking. Sterling (2011) emphasizes that education for sustainability must go beyond knowledge transfer to empower learners to challenge unsustainable norms and develop context-specific solutions. SustainAbility integrates these pedagogical principles to ensure that cognitive and behavioral abilities are nurtured effectively. Theories of sociotechnical transitions add another dimension to SustainAbility by examining how systemic change unfolds over time. These frameworks explore the interplay between technological innovation, institutional evolution, and societal behavior, offering insights into the conditions necessary for scaling SustainAbility initiatives across sectors such as energy, transportation, and agriculture (Geels, 2011). By integrating these perspectives, SustainAbility underscores the importance of fostering collaboration among diverse stakeholders to facilitate systemic transformation.

SustainAbility also emphasizes adaptive management, a strategy that integrates iterative learning, stakeholder participation and feedback mechanisms to navigate uncertainty and change effectively (Ostrom, 1990; Levin et al., 2012). Closely aligned with resilience thinking, adaptive management prioritizes the capacity of systems to absorb shocks, recover from disturbances, and maintain their core functions over time (Folke et al., 2010). By addressing these foundational principles, SustainAbility establishes itself as a dynamic and interdisciplinary framework capable of bridging persistent gaps between knowledge and action.

3. ABILITIES AS A PILLARS OF SUSTAINABILITY

At the core of SustainAbility lies the recognition that achieving meaningful and enduring sustainable transitions requires developing specific abilities — categorized as cognitive, behavioral, and institutional — that enable individuals, organizations, and systems to adapt, innovate, and thrive in the face of complex challenges. By emphasizing the cultivation of these abilities, SustainAbility offers a transformative framework that aligns with the complexity and uncertainty of global challenges (Fig.1).

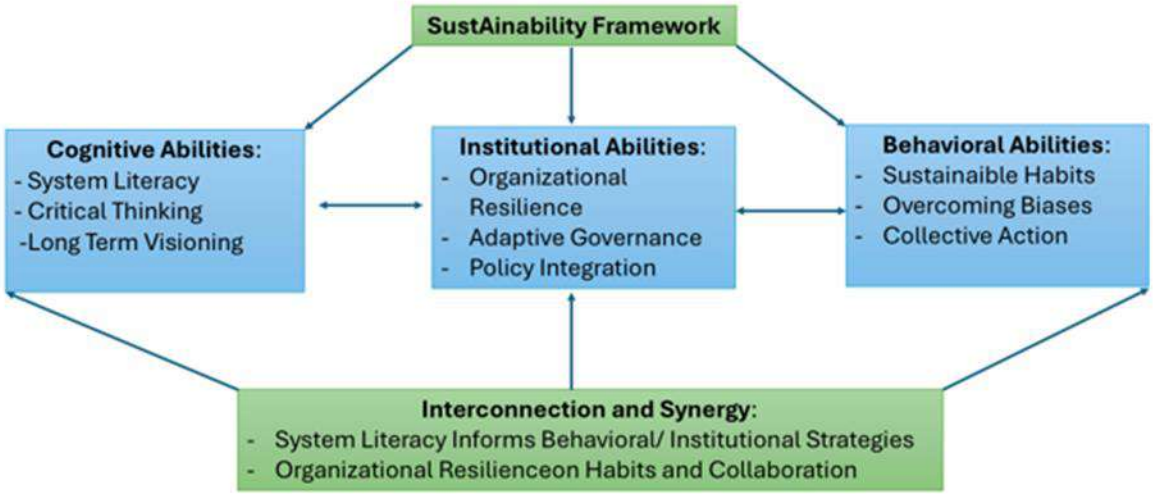

Figure 1. The SustainAbility Framework

The SustainAbility framework integrates cognitive, behavioral, and institutional abilities as key pillars for achieving systemic resilience and transformation. Cognitive abilities, such as system literacy and long-term visioning, provide the foundation for understanding SustainAbility challenges. Behavioral abilities, including sustainable habits and collective action, translate this understanding into practical actions. Institutional abilities, like organizational resilience and adaptive governance, ensure systemic capacities for sustained change. The framework emphasizes the synergy among these domains, with cognitive insights shaping behavioral and institutional strategies, fostering collaboration and adaptability for lasting SustainAbility.

The first pillar of SustainAbility is cognitive abilities, which provide the intellectual foundation for understanding and addressing the interconnected nature of sustainablechallenges. Systems literacy, as a key component, refers to the capacity to comprehend the interrelations, feedback loops, and emergent properties within ecological, social, and economic systems. As Meadows (2008) and Senge (1990) have demonstrated, systems literacy enables individuals to move beyond linear thinking and to appreciate the complexity of issues such as climate change and biodiversity loss, identifying leverage points where small interventions can yield system-wide benefits. Critical thinking, involving questioning assumptions, evaluating evidence, and exploring alternatives, is equally crucial (Sterling, 2011). Furthermore, cognitive abilities include long-term visioning, which entails the capacity to think beyond immediate gains and envision sustainable futures. This ability, as highlighted by Raworth (2017), is vital for anticipating emerging trends and adapting strategies to align with long-term SustainAbility objectives.

While cognitive abilities provide the foundation for understanding sustainable challenges, the second pillar- behavioral abilities - translate this understanding into action by fostering sustainable habits and decision-making processes at both individual and collective levels. Daily behaviors-such as reducing energy consumption, minimizing waste, and making environmentally conscious purchasing decisions-are fundamental to SustainAbility. Behavioral economics, as demonstrated by Thaler and Sunstein (2008), offers insights into how subtle interventions, or nudges, can encourage pro-environmental behaviors without limiting individual freedom. Beyond individual habits, behavioral abilities also involve addressing and overcoming cognitive biases that hinder sustainable decision-making (Kahneman, 2011). Moreover, behavioral abilities extend to collective action, as many SustainAbility challenges, such as resource management and climate adaptation, requiring coordinated efforts across communities. Building trust, fostering collaboration and promoting shared responsibility are essential for mobilizing collective action, as Ostrom (1990) has shown in her work on managing common-pool resources.

In addition to cognitive and behavioral abilities, the third pillar institutional abilities are essential for embedding SustainAbility into governance structures and operational frameworks. Institutional abilities encompass the structural and systemic capacities needed to implement and sustain transformative change. Organizational resilience, for example, is a critical institutional ability that enables organizations to adapt to evolving challenges while maintaining their core functions. This includes the ability to manage crises, optimize resource use and innovate in response to disruptions. Waddock (2016) and Folke et al. (2010) highlight the importance of resilience as a foundation for long-term sustainability. Similarly, adaptive governance is a key institutional ability that allows policies and strategies to evolve in response to changing circumstances and stakeholder needs. Levin et al. (2012) argue that inclusive and iterative governance models, which incorporate diverse perspectives and feedback mechanisms, are crucial for navigating uncertainty and fostering stakeholder trust. Finally, institutional abilities involve the integration of policies across sectors, ensuring coherence and alignment between

environmental regulations, economic incentives, and social welfare initiatives. Geels (2011) emphasizes that policy integration is essential for avoiding fragmentation and maximizing the impact of ustainAbility initiatives.

Behavioral change is central to SustainAbility, and its success often hinges on the degree to which individuals are intrinsically motivated. According to Deci and Ryan (2000), intrinsic motivation, driven by autonomy, competence, and relatedness, leads to sustained engagement with SustainAbility practices. SustainAbility leverages this insight by designing interventions that align with individuals' internal motivations, ensuring that behavioral shifts are not only immediate but enduring.

Although they are distinct, these abilities are deeply interconnected and their synergy is crucial to the success of SustainAbility. For instance, systems literacy, a cognitive ability, enhances long-term visioning and strategic foresight, which in turn inform behavioral shifts and institutional policies. Similarly, the resilience of organizations depends on the pro-environmental habits and collaborative efforts of individuals within those organizations. SustainAbility thrives when these abilities are developed in harmony, creating a holistic approach to addressing SustainAbility challenges.

Measuring the development and impact of these abilities is essential for assessing the progress of SustainAbility initiatives. Traditional performance indicators, such as carbon footprint or resource efficiency metrics, are insufficient for capturing the dynamic processes that SustainAbility emphasizes. Innovative metrics are required to evaluate cognitive, behavioral, and institutional abilities. For example, systems-thinking assessments and critical-thinking evaluations can provide insights into cognitive development, while behavioral metrics such as reductions in energy use or increased adoption of sustainable practices can track changes in individual and collective behavior (Thaler & Sunstein, 2008). Institutional metrics, including resilience indices and governance quality assessments, can reflect an organization's ability to adapt and thrive in changing contexts (Folke et al., 2010). By developing robust measurement frameworks, SustainAbility can ensure that the cultivation of abilities translates into tangible and sustained outcomes.

3.1. Ecological Awareness and SustainAbility: Driving Behavioral Change in Companies

Ecological awareness, defined as the recognition of the interconnectedness between human activity and environmental systems, is pivotal for embedding SustainAbility into corporate behavior. In the context of businesses, ecological awareness transcends mere knowledge of environmental issues and reflects a commitment to rethinking processes, values, and goals to align with regenerative practices. This shift is particularly dependent on fostering a culture of mindfulness, which acts as a mechanism for deepening ecological awareness and driving intentional, sustainable behavioral change at all organizational levels (Brown & Kasser, 2005; Amel et al., 2017). Companies that internalize these principles are better positioned to address systemic challenges such as climate change and resource depletion while maintaining competitiveness and resilience.Mindfulness, a practice emphasizing awareness and present-centered intentionality, has been shown to improve decision-making by reducing cognitive biases and fostering emotional intelligence (Rosenberg, 2004; Doni, 2021). Within corporate contexts, mindfulness supports the integration of ecological awareness into strategic planning by encouraging leaders and employees to reflect on the long-term impacts of their actions on natural systems. Research suggests that mindfulness enhances intrinsic motivation for pro-environmental behaviors, creating a cultural shift that prioritizes sustainability over short-term economic gains (Amel et al., 2017). This cultural transformation is essential for embedding

SustainAbility as an organizational ability, enabling companies to adapt to evolving environmental and societal demands.

Operationalizing ecological awareness requires structural changes that align corporate behaviors with principles of SustainAbility. Systems thinking, as outlined by Meadows (2008), provides the analytical tools necessary for understanding feedback loops and dependencies within ecological and economic systems. By applying this approach, companies can design processes that reduce waste, improve resource efficiency, and foster circular practices. However, achieving such systemic changes depends on fostering ecological awareness at the individual and collective levels. Orr (1992) emphasizes that ecological literacy - awareness coupled with actionable knowledge - is a prerequisite for meaningful behavioral change. In this sense, mindfulness-based training programs serve as a critical tool for cultivating ecological awareness among employees and decision-makers, enabling them to navigate the complexities of SustainAbility effectively.

4. PRACTICAL APPLICATION OF SustainAbility

The principles of SustainAbility extend beyond theoretical constructs, offering practical solutions to pressing challenges. By focusing on the development and application of cognitive, behavioral, and institutional abilities, SustainAbility provides a framework for implementing change across various domains. These include education, corporate practices, community engagement, and technological innovation. Each of these areas demonstrates the potential for SustainAbility to reshape how societies can translate abstract ideas into transformative action.

4.1. Education and Training

Education plays a pivotal role in SustainAbility, as it forms the foundation for cultivating the cognitive and critical thinking skills necessary for informed decision-making. Systems literacy, which involves understanding the interconnectedness of ecological, social, and economic systems, is central to this effort. Sterling (2011) highlights the importance of integrating systems thinking into educational curricula to empower students to grasp the complexity of sustainable challenges. For instance, interdisciplinary courses that combine environmental science, economics and policy analysis encourage students to approach problems holistically rather than through isolated disciplinary lenses.

Experiential learning further enhances the educational impact by engaging learners in real-world applications of SustainAbility principles. Kolb's (1984) model of experiential learning, which emphasizes the interplay between concrete experience, reflective observation, abstract conceptualization, and active experimentation, has proven effective in fostering critical thinking and systems literacy. Field-based projects, such as local ecosystem restoration or renewable energy design initiatives, exemplify how experiential learning can encourage students to address sustainability creatively and collaboratively. Additionally, SustainAbility hackathons and workshops, which bring together diverse participants to tackle environmental and social problems, provide opportunities for hands-on learning and innovation.

Education for SustainAbility is not limited to formal institutions but extends into professional training and community-based learning. Lifelong learning initiatives play a crucial role in ensuring that individuals continue to develop their abilities throughout their careers and lives.

4.2. Corporate Practices

The corporate sector plays a pivotal role in advancing SustainAbility, as businesses possess significant capacity to drive meaningful change by embedding SustainAbility into their core strategies and operations. Rather than treating sustainability as a peripheral concern, effective approaches integrate it as a fundamental component of organizational purpose (Waddock, 2016). This strategic integration not only enhances corporate Sustainability performance but also promotes systemic change across entire industries, demonstrating the potential for businesses to lead by example.

Technological innovation is a key enabler of Sustainability within corporations. Cutting-edge tools such as artificial intelligence (AI), blockchain, and the Internet of Things (IoT) are increasingly employed to improve resource efficiency and monitor sustainability metrics. Blockchain, for instance, enhances supply chain transparency by verifying ethical sourcing practices (Geels, 2011), while AI optimizes logistics, reducing fuel consumption and associated emissions (Brynjolfsson & McAfee, 2014). Beyond operational improvements, corporations are investing heavily in renewable energy solutions like solar and wind, aligning their long-term strategies with net-zero emissions goals. These innovations not only contribute to environmental objectives but also position corporations as leaders in the transition to a sustainable economy.

Employee engagement and organizational culture are equally critical, companies can foster employee participation by offering training programs, hosting SustainAbility workshops, and incentivizing eco-friendly behaviors. Examples include financial rewards for sustainable commuting practices or initiatives that encourage remote work to reduce carbon footprints (Thaler & Sunstein, 2008). Leadership plays a central role in these efforts, with sustainability officers and executive teams championing the integration of ethical principles into daily operations and corporate missions (Waddock, 2016). A culture that actively prioritizes SustainAbility empowers employees to align their personal and professional values with organizational goals.

Collaboration with stakeholders further amplifies corporate efforts. Partnerships with governments, non-profits, and academic institutions can lead to shared value through co-developed green infrastructure projects or the establishment of industry-specific ethical guidelines (Meadows, 2008). Such partnerships enable corporations to pool resources and knowledge, magnifying their impact on sustainable goals.

By adopting circular economy practices companies are minimizing waste and maximizing resource efficiency. They redesign supply chains to ensure materials can be reused or recycled, thereby reducing environmental impact. (Raworth, 2017). By embracing such models, corporations not only enhance their sustainability credentials but also reduce costs and create new business opportunities.

Sustainable finance is another area where the integration of environmental, social, and governance (ESG) factors into investment decisions is becoming increasingly prevalent. (Rockström et al., 2009). By embedding ESG principles into their financial strategies, corporations not only attract socially conscious investors but also enhance their long-term profitability and resilience.

4.3. Community Engagement

Communities are integral to the implementation of SustainAbility, serving as both beneficiaries and agents of sustainable practices. Participatory governance models offer a powerful mechanism for aligning sustainability initiatives with community priorities. By

involving local stakeholders in decision-making processes, these models foster trust, ownership, and accountability. Ostrom (1990) has demonstrated the effectiveness of participatory governance in managing common-pool resources, such as forests and fisheries, where collaboration and shared responsibility are essential for success.

Equity and inclusivity are central to SustainAbility's approach to community engagement. Programs that focus on skill development in marginalized communities illustrate how sustainability can address social inequalities while advancing environmental goals.

Urban settings provide a unique opportunity to apply SustainAbility through community-driven initiatives. As Elmqvist et al. (2013) emphasize, integrating ecosystem services into urban planning not only enhances resilience but also fosters active community participation. Projects such as green roofs, urban agriculture and biodiversity corridors exemplify how local engagement can align with broader sustainability goals. Community-driven initiatives also highlight the importance of local adaptation strategies. Rainwater harvesting systems in arid regions or urban gardening projects in underserved neighborhoods demonstrate how localized knowledge and resources can address global challenges effectively.

4.4. Technological Tools

Technology plays a transformative role by providing tools to support the development and application of abilities across domains. Artificial intelligence (AI) is particularly impactful, offering solutions to complex challenges through data analysis and predictive modeling. For instance, AI platforms have been used to optimize renewable energy grids, balancing supply and demand in real time and reducing overall energy waste (Rockström et al., 2009). These advancements illustrate how cognitive abilities, such as systems thinking, can be enhanced through technological support. The role of technology in Sustainability extends beyond efficiency gains; it also supports the cognitive and institutional abilities required for systemic change. Brynjolfsson and McAfee (2014) argue that tools like artificial intelligence and blockchain can revolutionize Sustainability governance. For instance, AI-powered systems optimize resource use by analyzing complex datasets, while blockchain ensures transparency and accountability in supply chain management. Digital education platforms further expand access to Sustainability training, enabling individuals worldwide to develop critical abilities, offering courses on systems thinking, climate change, and sustainable business practices, reaching diverse learners and fostering a global culture of ethical behaviour . Blockchain technology also contributes to SustainAbility by enhancing transparency and accountability in supply chains, ensuring compliance with SDG's standards. (Geels, 2011).

Education, corporate practices, community engagement, and technology do not function in isolation but interact to create synergies that amplify their collective impact, reflecting the interconnected nature of SustainAbility and its systemic approach to addressing global challenges.

5. POLICY IMPLICATIONS OF SUSTAINABILITY

Policy is the foundation for embedding SustainAbility principles into societal structures, guiding behavior and decision-making across multiple levels of governance. Traditional sustainable policies have often prioritized measurable outcomes, such as reducing carbon emissions or preserving natural resources. While these goals remain essential, they frequently neglect the capacities required to achieve and sustain them over time. SustainAbility addresses this oversight by focusing on the development of cognitive, behavioral, and institutional abilities as the drivers of long-term transformation. By integrating these principles into policy

design, governments and organizations can create adaptive frameworks that respond to evolving challenges and foster systemic resilience.

Addressing transboundary challenges, such as climate change and resource scarcity, requires global cooperation. The United Nations Development Programme (2020) emphasizes the need for capacity-building initiatives that equip countries with the institutional and cognitive abilities necessary for adaptive governance. These efforts align with SustainAbility's focus on fostering resilience and inclusivity across diverse contexts. Policies rooted in SustainAbility emphasize the cultivation of abilities across all levels of society. Cognitive abilities, for instance, are critical for equipping individuals with the skills necessary to understand and address the complexity of SustainAbility challenges. Governments can promote these abilities through policies that embed systems literacy and critical thinking into educational curricula Sterling (2011) Behavioral abilities are equally important in driving sustainable practices. Policymakers can design interventions that align individual behaviors with societal goals, leveraging insights from behavioral economics to encourage pro-SustainAbility actions. For instance, economic incentives, such as subsidies for renewable energy adoption or carbon taxes, have proven effective in shaping consumer choices and reducing environmental impacts (Thaler & Sunstein, 2008; Kahneman, 2011).

Institutional abilities, which encompass the structural and systemic capacities needed to implement and sustain change, are central to SustainAbility's policy framework. Policies that strengthen institutional resilience, such as those supporting adaptive governance, enable organizations and governments to respond dynamically to emerging challenges. Levin et al. (2012) argue that adaptive governance models, which incorporate iterative learning and stakeholder participation, are essential for navigating the uncertainty inherent in sustainable transitions. These models allow policies to evolve in response to new data, ensuring their continued relevance and effectiveness.

SustainAbility also emphasizes equity in policy design, advocating for participatory governance models that include marginalized voices. Fraser (2009) critiques top-down SustainAbility frameworks for perpetuating global inequalities and calls for a reimagined political space where vulnerable communities can influence decision-making processes. By embedding equity into its principles, SustainAbility ensures that no stakeholder is excluded from the transition to SustainAbility."

6. CHALLENGES AND CRITICISM OF SUSTAINABILITY

SustainAbility offers a forward-thinking framework that emphasizes abilities as the cornerstone of achieving real and long-term goals. However, its implementation is fraught with challenges that require careful examination to ensure feasibility and effectiveness. These challenges range from resistance to change, issues of equity and inclusivity, difficulties in measurement, balancing priorities, and navigating complex trade-offs. Critiques surrounding its practicality and scalability further highlight the need for adaptive and strategic responses.

One significant barrier to SustainAbility is resistance to change, which occurs at both individual and institutional levels. On an individual level, deeply entrenched habits and cognitive biases often hinder the adoption of new perspectives or behaviors. For example, present bias leads individuals to prioritize immediate benefits over long-term gains, making transitions such as moving from fossil fuels to renewable energy particularly challenging (Kahneman, 2011; Thaler & Sunstein, 2008). At an institutional level, organizations and governments often resist transformative policies due to structural rigidity and short-term priorities. Established investments in existing systems create path dependencies, particularly in sectors like energy and transportation that obstruct innovation and adaptability (Geels, 2011).

Addressing these barriers requires a combination of education and incentives. Public awareness campaigns can enhance systems literacy, fostering a deeper understanding of the interconnectedness of sustainability challenges. Meanwhile, policy tools, such as subsidies for renewable energy or tax incentives for green innovation, can align economic interests with sustainability goals, reducing institutional inertia and encouraging change.

Another challenge is the measurement of abilities, which is crucial for translating SustainAbility into actionable strategies. Traditional metrics, such as GDP growth or carbon emissions reductions, often fail to capture the dynamic and process-oriented nature of SustainAbility. Instead, assessing cognitive, behavioral, and institutional abilities requires innovative tools that go beyond static outcomes. For example, systems literacy might be evaluated through scenario-based exercises that test an individual's ability to apply complex concepts (Meadows, 2008). Behavioral shifts can be measured through changes in habits, such as energy conservation or recycling, tracked using surveys or digital tools. Institutional abilities, such as resilience and adaptability, may be assessed through governance quality reviews or disaster preparedness simulations. Advances in technology, such as artificial intelligence and blockchain, offer further opportunities to enhance measurement capabilities (Geels, 2011). AI can analyze behavioral and institutional data patterns, while blockchain ensures transparency in tracking progress. Moreover, participatory evaluation frameworks engage stakeholders directly, allowing them to provide feedback on their cognitive and behavioral development, as well as institutional practices. Despite these advances, challenges remain in balancing short-term and long-term goals. SustainAbility's emphasis on long-term processes often conflicts with the urgency of addressing immediate crises. Policymakers and organizations frequently prioritize short-term solutions, driven by political and economic pressures, which undermine sustainability initiatives and exacerbate existing challenges (Levin et al., 2012). Communicating the long-term benefits is therefore critical, whether through targeted outreach, storytelling, or emphasizing how investments in abilities can simultaneously address immediate concerns, such as job creation in renewable energy transitions (Raworth, 2017).

7. CONCLUSIONS

This paper has argued for SustainAbility as a paradigm shift, emphasizing the importance of developing cognitive, behavioral and institutional abilities to bridge the persistent disconnect between ambition and action in addressing global challenges. The traditional concept of sustainability, defined through static goals and outcome-focused frameworks, has often struggled to translate theoretical aspirations into lasting systemic change. Our alternative interpretation argues that SustainAbility can reframe this challenge, advocating for a dynamic and adaptive approach that prioritizes processes, capacities and inclusivity over mere end states. By conceptualizing SustainAbility, moreover, as an intrinsic ability, it expands the theoretical foundation of sustainability, emphasizing its behavioral and systemic dimensions.

At the heart of this framework lies the recognition that meaningful and enduring ethical transitions are contingent upon the integration of cognitive, behavioral, and institutional abilities.

Recognizing that transitions often exacerbate existing inequalities, participatory governance and capacity-building initiatives are critical for ensuring that all stakeholders—not only those in resource-rich or developed contexts—are empowered to contribute to and benefit from sustainability efforts. However, the realization of SustainAbility is not without its challenges: resistance to change, entrenched biases and institutional inertia represent significant barriers to the widespread adoption of this framework. Furthermore, the need to balance short-

term crises with long-term capacity-building complicates the policy landscape, requiring innovative approaches to communication, incentive structures and cross-sector collaboration.

In conclusion, SustainAbility offers a comprehensive and adaptive framework that moves beyond static goals to focus on the processes and abilities necessary for transformative change. By foregrounding cognitive, behavioral and institutional capacities, SustainAbility not only bridges the gap between intention and action but also lays the groundwork for a more resilient, equitable and inclusive future.

This framework, while ambitious, provides a critical lens through which to reimagine the pathways toward a sustainable world, aligning knowledge, practice and policy in service of enduring systemic transformation.

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