

SUSTAINABLE SOCIAL INNOVATION IN NIGERIA

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 14 April 2023</p> <p>Accepted 13 July 2023</p>	<p>Purpose: Innovation is a constant state of affairs, in order for development to continue. However, there is also a need to ensure that innovations are sustainable. To this end, the paper examines the challenges that may hinder the achievement of sustainable social innovation in Nigeria and explores possible solutions and opportunities for development.</p>
<p>Keywords:</p> <p>Social Innovation; Technology; Sustainable Development; Developing Countries.</p> 	<p>Design/Methodology/Approach: The author conducted normative research that examined existing research with the aim of providing solutions to a research area that is fraught with challenges and also currently under researched. Research was also conducted for documents and research from previous studies which were subsequently analysed to provide suggested solutions.</p> <p>Findings: At over 200 million inhabitants, Nigeria is beset with many challenges such as insurgency, deforestation, poverty, food-shortages, limited access to healthcare and so on. Fittingly, there have been some social innovations that have tried to address some of the aforementioned issues with varying levels of success. However, so far, such initiatives have not delivered change on a large scale. Although there is evidence that there are SI activities in Nigeria, a recurring theme through the literature is the fact that it is difficult to measure the impact of social innovations and there are very limited attempts at documenting and monitoring the outcomes.</p> <p>Research, practical & social implications: This research indicates the need for collaboration, knowledge sharing, in order to contribute effectively to the development and deployment of Social Innovations in Nigeria. Awareness is also a challenge that was raised and is an opportunity for further development.</p> <p>Originality/Value: It is imperative to ensure that social innovations are sustainable particularly where they are direly needed. The sustainability of such innovations is doubtlessly important to ensure that the aim of establishing such initiatives is not thwarted. There is limited academic coverage of social innovations and their impact in developing countries and it is hoped that the various bodies involved in social innovations in such areas will recognise the need for collaboration, knowledge sharing and development of expertise for sustainable social innovation.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i7.2208</p>

INOVAÇÃO SOCIAL SUSTENTÁVEL NA NIGÉRIA

RESUMO

Propósito: A inovação é um estado constante, para que o desenvolvimento continue. No entanto, é também necessário garantir que as inovações são sustentáveis. Para este fim, o documento examina os desafios que podem dificultar a realização de inovação social sustentável na Nigéria e explora possíveis soluções e oportunidades para o desenvolvimento.

Design/Methodologia/Abordagem: O autor realizou uma pesquisa normativa que examinou a pesquisa existente com o objetivo de fornecer soluções para uma área de pesquisa que está repleta de desafios e também atualmente em pesquisa. Foram também realizados estudos sobre documentos e estudos anteriores que foram posteriormente analisados para fornecer soluções sugeridas.

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Constatações: Com mais de 200 milhões de habitantes, a Nigéria enfrenta muitos desafios, como a insurgência, o desmatamento, a pobreza, a escassez de alimentos, o acesso limitado aos cuidados de saúde e outros. Adequadamente, houve algumas inovações sociais que tentaram abordar algumas das questões acima mencionadas com diferentes níveis de sucesso. No entanto, até agora, tais iniciativas não produziram mudanças em grande escala. Embora haja evidências de que há atividades de SI na Nigéria, um tema recorrente na literatura é o fato de que é difícil medir o impacto das inovações sociais e há tentativas muito limitadas de documentar e monitorar os resultados.

Investigação, implicações práticas e sociais: Esta investigação indica a necessidade de colaboração, partilha de conhecimentos, a fim de contribuir eficazmente para o desenvolvimento e implantação de inovações sociais na Nigéria. A sensibilização é também um desafio que foi levantado e constitui uma oportunidade para um maior desenvolvimento.

Originalidade/Valor: É imperativo garantir que as inovações sociais sejam sustentáveis, particularmente onde são diretamente necessárias. A sustentabilidade de tais inovações é sem dúvida importante para garantir que o objetivo de estabelecer tais iniciativas não seja contrariado. Existe uma cobertura acadêmica limitada das inovações sociais e do seu impacto nos países em desenvolvimento, e espera-se que os vários organismos envolvidos nas inovações sociais nessas áreas reconheçam a necessidade de colaboração, partilha de conhecimentos e desenvolvimento de competências especializadas para uma inovação social sustentável.

Palavras-chave: Inovação Social, Tecnologia, Desenvolvimento Sustentável, Países em Desenvolvimento.

INNOVACIÓN SOCIAL SOSTENIBLE EN NIGERIA

RESUMEN

Propósito: La innovación es una situación constante para que el desarrollo continúe. Sin embargo, también es necesario garantizar que las innovaciones sean sostenibles. Para ello, se examinan los desafíos que pueden obstaculizar el logro de la innovación social sostenible en Nigeria y se exploran posibles soluciones y oportunidades para el desarrollo.

Diseño/Metodología/Enfoque: El autor llevó a cabo una investigación normativa que examinó la investigación existente con el objetivo de proporcionar soluciones a un área de investigación que está plagada de desafíos y también actualmente bajo investigación. También se investigaron documentos e investigaciones de estudios anteriores que posteriormente se analizaron para proponer soluciones.

Hallazgos: Con más de 200 millones de habitantes, Nigeria se enfrenta a muchos desafíos como la insurgencia, la deforestación, la pobreza, la escasez de alimentos, el acceso limitado a la atención médica, etc. Apropiadamente, ha habido algunas innovaciones sociales que han tratado de abordar algunas de las cuestiones antes mencionadas con diferentes niveles de éxito. Sin embargo, hasta ahora, esas iniciativas no han producido cambios a gran escala. Aunque hay pruebas de que hay actividades de la SI en Nigeria, un tema recurrente en la bibliografía es el hecho de que es difícil medir el impacto de las innovaciones sociales y hay intentos muy limitados de documentar y supervisar los resultados.

Investigación, implicaciones prácticas y sociales: Esta investigación indica la necesidad de colaboración, intercambio de conocimientos, con el fin de contribuir eficazmente al desarrollo y despliegue de las innovaciones sociales en Nigeria. La sensibilización es también un desafío que se planteó y es una oportunidad para un mayor desarrollo.

Originalidad/Valor: Es imperativo asegurar que las innovaciones sociales sean sostenibles, particularmente donde son extremadamente necesarias. No cabe duda de que la sostenibilidad de esas innovaciones es importante para garantizar que no se frustre el objetivo de establecer esas iniciativas. La cobertura académica de las innovaciones sociales y sus efectos en los países en desarrollo es limitada y se espera que los diversos órganos que participan en las innovaciones sociales en esas esferas reconozcan la necesidad de colaboración, intercambio de conocimientos y desarrollo de conocimientos especializados para la innovación social sostenible.

Palabras clave: Innovación Social, Tecnología, Desarrollo Sostenible, Países en Desarrollo.

INTRODUCTION

Nigeria is a country of over 200 million inhabitants. Although it is classified as Africa's largest economy, it is currently reported as one of the poverty capitals of the world (Yeboua et

al., 2022). It is also plagued by many serious challenges. Some of these include insurgency, deforestation, poverty, food-shortages, limited access to healthcare and so on. Social innovations could potentially play a huge role in alleviating the challenges faced by Nigerians. Some of such innovations have been rolled out in many parts of the country but the challenges appear to remain or even become worse. It is therefore worthwhile to verify whether such innovations have achieved their original aim and to what extent, if they have. It may also be necessary to investigate whether the problems have been adequately defined to ensure that these social innovations help to solve those problems.

Against a backdrop of a variety of social challenges faced by developing nations, social innovation offers the possibility of a sustainable solutions to those challenges. The fields of social innovation, sustainability and technological innovation can be combined to ensure that social innovations are transformative and sustainable.

Developing economies struggle in many ways without access to cutting edge innovation, poor waste management in addition to slow growth. They also tend to be prone to the damaging effects of climate change and environmental pollution stemming from little attention to sustainability. In addition to such challenges, the pandemic contributed immensely to missing sustainable development goals targets in Nigeria (Abdulkadir et al., 2022). These disasters also contribute to the further stagnation of developing economies further stifling opportunities for growth. Therefore, while development is a necessity for developing economies like Nigeria, it must be sustainable without negatively impacting the country. A major economic challenge today is ascertaining the sustainable development of both the society and the economy (Klimovskikh et al., 2023). Sustainable development goals abound, with good intentions and are widely seen as a challenge that must be met (Robinson, 2004; Mohamed & Lee, 2006; Garnett et al, 2013). However, many times these goals tend to be vague and therefore difficult to measure or achieve. As a result, Holden et al (2017) suggest an interpretation of the World Commission on Environment and Development (WCED) model for global sustainable development, based on three moral imperatives: satisfying human needs, ensuring social equity and respecting environmental limits.

Technology plays a major role in the transformation from unsustainable to sustainable consumption. Changes in consumption patterns can drive the creation of new technologies necessary for sustainability and their adoption and diffusion at the desired pace (United Nations, 2013). Technological innovations and the Internet are widely seen as opportunities to bypass historic development constraints. Both have impacts at global, national and local levels. Both

are already changing the way we think and act as citizens and in communities, in policy and practice. Both will have radical impacts on economic and social change in all countries over the next two to three decade and are likely to have more impact than any other long-term changes that we have experienced (Souter et al, 2010). It is however important to note that the impacts of ICT on sustainability are twofold: On the one hand there might be negative effects on sustainability such as the generation of electronic waste, on the other hand ICT is an enabler for more efficient resource usage, education and business operations which is critical success factor for achieving the Sustainability Development Goals (Tjoa & Tjoa, 2016).

Development efforts have not always been successful, and this is evident as many nations have been unable to sustain growths in many parts of the world. The apparent limited economic and social progress, coupled with an inability to reduce poverty all establish the need for governance for development (Estevez & Janowski, 2013). The tendency is for sustainable development to achieve its goals by relying on technological change. Nevertheless, instead of quick technological fixes, governments need to ensure that there is transformation through revolutionary technological innovation (Beder, 1994). In this study however, rather than focussing solely on technological innovation, as has been done in previous studies (Onileowo et al., 2021), the aim is to consider opportunities and barriers to social innovation.

There is a need to consider the challenges of sustainable development in addition to social innovation, when seeking alternative means of addressing challenges (Arocena & Sutz, 2021). Numerous social innovations have been established in Nigeria, with the aim of solving some of the most crucial problems facing the country currently, with varying levels of success. However, social innovation cannot be sustained or achieve the intended objectives without favourable external, organizational and individual conditions (Onileowo et al., 2021). Indeed, in other emerging contexts, the literature indicates that social innovation cannot be created by lone entrepreneurs. Rather, social innovation cuts across several boundaries (Rao-Nicholson et al., 2017).

It is therefore imperative to evaluate current challenges facing social innovation and to seek ways to ensure that such innovations are sustainable particularly where they are direly needed. The sustainability of such innovations is doubtlessly important to ensure that the aim of establishing such initiatives is not thwarted. There is limited academic coverage of social innovations and their impact in developing countries (Eichler & Schwarz, 2019). In addition, there is very limited research that examines social innovation in Nigeria (Onileowo et al., 2021). To this end, it is useful to ask the following question. *What are the challenges hindering*

sustainable social innovation, does technology help to ensure the sustainability of social innovations and if so, how?

This paper therefore aims to explore how developing countries can benefit from sustainable social innovation with the aid of technology. The paper is structured as follows. The following section explores social innovation. Section three evaluates Social Innovation, Sustainability and Technology while the following section examines social innovation and sustainability while the following section examines sustainable social innovation in Nigeria. The concluding sessions provides a conclusion, implications and further research directions.

LITERATURE REVIEW

Ziegler (2017) argues that all innovation should ideally be social innovation. However, there is no established definition of social innovation as several authors define the term in different ways, as it is an emerging and, in some cases, a disputed notion (Repo & Matschoss, 2019). However, the term social innovation (SI) originates with the aim of addressing the most burning needs of society. From an organisational perspective, it can be contextualised as comprising social entrepreneurship, social intrapreneurship and social extrapreneurship (Tracey & Stott, 2017). SI can also describe societal, structural change which reflects the common good and excludes profit maximization (Ziegler, 2017). The goal of SI is to create value for customers and beneficiaries with an emphasis on the translational aspect of the economic, social and cultural values (Gasparin et al., 2021). Additionally, Borzaga and Bodini (2014) describe SI as a new process, not only a new product or service. They further postulate that for an organisation to qualify as one providing social innovation, their core mission is improving the quality or quantity of life. This means that such organisations intentionally focus their innovation on achieving a social mission in line with the interests of the community within which the organisation operates.

Social innovation tends to attempt to attain ambitious objectives. However, there is little proof to evaluate whether and to what extent, those objectives have been achieved. This therefore makes it difficult to determine how helpful the phenomenon has been for sustainably solving social problems (Grimm, Fox, Baines & Albertson, 2013). Other scholars have gone further to characterise SI as transformative. Avelino et al (2019) argue that rather than qualifying transformative SI as a successful type of SI, it is instead considered to be a conditional process through which SI contributes to transformative change. They further conceptualise transformative social innovation as an interactive, co-evolutionary process that

replaces dominant structures (Avelino et al., 2019). These dominant structures are replaced by new structures and ideas that cut across every sector and combines the private, public and civil society sectors (Nicholls & Murdock, 2012). In addition to cutting across sectors, to have the requisite impact, SI should have the potential to readily scale up and be easily replicable (Borzaga & Bodini, 2014). As earlier stated, social innovation should ideally be sustainable and therefore, the sustainability potential of a social innovation must be addressed early in the innovation process. This is because it is the most suitable phase for shaping and designing with sustainable goals in mind. These goals ought to be integrated into the innovation process and should guide the development of social innovations (Hansen et al., 2009).

It is expected that the introduction of SI will have system changing effects. However, this would be impossible to achieve if the SI does not put social-ecological connections into consideration (Olsson et al., 2017). Inequality and justice are also important aspects and values of development that may be served by SI research. This would help to evaluate the contribution of the phenomenon to such values (Ziegler, 2017). Measuring the impact of SI is a challenge that has been raised. There is a dearth of evidence of the influence of SI. This is caused partially by the fact that when the impact of the change from SI can be sufficiently measured, there is a possibility that the SI may no longer be seen as innovative. Although, it could also be difficult to measure the change in situations of dire challenges (Mason et al., 2015).

The role of institutions such as governments and other parties have also been raised in the SI discourse. In particular, there is limited research on how markets, the public sector and social institutions work together to ensure that SI can generate sustainable economic growth (Grimm, R., Fox, C., Baines, S., & Albertson, K. , 2013). This should be addressed as various organisations contribute to the positive impact of social innovations. The types of organizations involved in SI could also have an impact on how innovative they can be. The right organizational model is certain to help ensure that there is sufficient impact on the problems it aims to solve. However, some organizations might have challenges raising funds and therefore be unable to set up and scale up (Borzaga & Bodini, 2014). Indeed, delivering effective social innovations is a challenge and understanding the research terrain requires a deeper appreciation of what counts as a social innovation and various theories and methods that are applicable to the phenomenon (Grimm, R., Fox, C., Baines, S., & Albertson, K. , 2013). Furthermore, identifying the different categories of social innovators may also contribute to a better understanding of the phenomenon. These include social entrepreneurs, non-profit

organizations, public institutions, civil society, firms and social enterprises (Eichler & Schwarz, 2019).

Social Innovation, Sustainability and Technology

In order to avoid social innovations that may merely contribute to reducing the negative impacts or even create long-term problems in other areas, it is important to note that social issues like poverty, unemployment and inequality can no longer be considered in isolation but must also examine environmental issues including greenhouse gas emissions, deforestation, limited resources and biodiversity (Olsson et al., 2017). Human and sustainable development issues have to be considered together with social innovation, in order to provide solutions to many of the challenges plaguing our societies (Arocena & Sutz, 2021). In addition, for any innovation to be sustainable, sustainable development must be at its core, ensuring that the focus of discourse is not just national but local and global levels (Oksanen & Hautamäki, 2015).

SI is indeed a key ingredient in the drive towards achieving higher levels of sustainability (Bock, 2012) and can encourage sustainable development while providing both socio-ecological and economic solutions to challenges such as social injustice and unequal resource consumption (Živojinović et al., 2019). SI can also be seen as the foundation of sustainable development, particularly in rural areas (Neumeier, 2017). However, such developments are more likely to transform whole societies when SI deliberately attempts to resolve deeper long-term needs through sustainable routes (Unger, 2015). Considering the application of SI to issues such as the development of and improvements to products, processes and services created with the aim of achieving a fairer, more efficient and sustainable society, it is clear that SI and sustainability go hand in hand (Castro-Arce & Vanclay, 2020).

In addition to the interconnectedness of SI and sustainability, it is also worth considering the effect of digital technology on the phenomena as technology can have a transformative effect on SI, as social innovation cannot be completely divorced from technology (Angelidou & Psaltoglou, 2017). Equally, the social dimension of technology should not be ignored (Edwards-Schachter & Wallace, 2017). The relatedness of technological and social innovation is intertwined as SIs continuously utilise new technologies, and users make use of technology in new ways (Grimm, R., Fox, C., Baines, S., & Albertson, K. (, 2013). Although technological innovations are not always social and vice versa, it is worth considering both notions in tandem. Also, although it is termed an innovation, SI may not always be completely novel whereas, that is usually the case for Technological Innovation (Cunha & Benneworth, 2013).

Technological innovation is a key component for human and economic development (Anadon et al., 2016) and should ideally serve sustainable development. However, ensuring that this occurs, is challenging because of the multifaceted nature of technology (Patris, Valenduc & Warrant, 2002). The promotion of technological innovation is embedded in sustainable development and provides decision-makers with the possibility of influencing the economy, environment and society as a whole. To achieve this likelihood for developing economies like Nigeria, the transfer of technology must become an essential element of national development policies (Constantinescu & Frone, 2014). In terms of contribution to SI, technological innovations can support SI by providing a platform for its development and allowing for collaboration on a large scale (Angelidou & Psaltoglou, 2017). Furthermore, as industry 4.0 develops, within the backdrop of social innovation, it is important to take into consideration the possible negative impacts on society, particularly with the likelihood of human roles being substituted by technological innovation (Rabeh Morrar, Husam Arman, and Saeed Mousa, 2017). Nevertheless, technological innovation remains at the core of sustainable development (Anadon et al, 2016). It facilitates the connection between environmental and societal issues and has the capacity to change the world (Murphy, 2012). Furthermore, a useful feature of technology for sustainable SI is its ability to facilitate rapid scale up (Todeschini et al., 2017). Therefore, it is worthwhile to ensure that social innovation obtains all the possible benefits of technology (Arocena & Sutz, 2021).

It is widely accepted that technological innovation is a major driver of rapid modernisation and development. It is also being touted as a possible solution to major social and environmental concerns (Hall et al., 2019). However, as previously noted, not all technology will contribute to sustainable social innovation and for any technology to qualify as contributing to SI and sustainable development, it must promote economic development, environmental sustainability and social advancement (Constantinescu & Frone, 2014). But the research on sustainable technological innovation is still work in progress (Hall et al., 2019). Nevertheless, in order to ensure that technological innovations contribute to sustainable development, there has to be concerted effort to change institutions such that particular self-serving interests and those of the present generation are balanced in consideration of future needs (Anadon et al., 2016) as technology can indeed help to build a more sustainable environment (Goi, 2017). It is evident that technological innovations are useful as a tool for sustainable social innovation, by enabling new practices and processes and a way to assess the outcomes. In particular, the ability to track sustainability indicators and routines using

technology contributed to the success of a sustainable innovation, thus indicating that technology is a key agent in this process.

MATERIALS AND METHODS, METHODOLOGY

This paper attempts to highlight areas of improvement in the field of sustainable social innovation in Nigeria, with the use of a normative research methodology. The methodology helps to examine a phenomenon for any weakness with the aim of improving such areas. It entails analysis of a challenging area for possible weaknesses and exploring solutions or possible areas of improvement. The process begins with an examination of challenges occurring in the current situation. Possible solutions that have been implemented are then explored. Finally, possible solutions are examined with the aim of evaluating their effectiveness and their ability to resolve the challenge (McKee, 2011). Normative research attempts to synthesise existing literature on a phenomenon (Wirba, 2003). This paper aims to evaluate current challenges facing social innovation and to seek ways to ensure that such innovations are sustainable, particularly in developing countries like Nigeria.

However, when undertaking normative research, it is important to take context into account (Werhane, 2019). Therefore, in this research, social innovation is discussed within the backdrop of an emerging economy with several challenges plaguing the success and sustainability of such SIs. A number of examples of SIs that should ordinarily be successful but have not been are identified with a view to providing solutions that may render them more sustainable. The results of the analysis are detailed in the next section.

DISCUSSION: TOWARDS A COLLABORATIVE SUSTAINABLE SOCIAL INNOVATION IN NIGERIA

The literature on social innovation in Nigeria illustrates that academic discourse on the phenomenon within the country is still in its infancy and in fact, focusses more on social entrepreneurship. Nevertheless, there are a few examples that can provide some insight into the development of the phenomenon in the context of rural and urban areas in Nigeria.

According to Odumosu et al (2020), the intervention of social innovation for the purpose of providing entrepreneurship and agricultural education to students in Nigerian tertiary education was successful in terms of delivering the education to the intended recipients. However, although the education was provided, the outcomes required to demonstrate the success of the initiative, were not evident. This is because upon graduation, unemployment

rates were still high. Therefore, the benefits of an entrepreneurship and agricultural innovation education made no difference to the employability of the graduates or their ability to create job opportunities and employment for others (Odumosu et al., 2020).

Similarly, Ekwunife et al (2022), carried out a crowdsourcing initiative to identify existing social innovations that had been implemented in Nigeria. The following SIs were selected as those with the most potential to deliver crucial healthcare services to remote areas. The first is drugmedics.com which is a digital platform designed to deliver accessible health information, healthcare and medical supplies. It provides access to suitable medical personnel, upon request. Next is the Parker's mobile clinic. This is a solution that was created by a medical doctor with the aim of providing mobile affordable healthcare. Lastly, a community-based healthcare insurance was also chosen. This SI was developed to provide affordable and accessible healthcare through contributions. These three SIs should ideally be changing the medical landscape for remote communities. However, their impact has not been scientifically assessed. But it is worth noting that two out of three SIs were already experiencing challenges that were preventing their take off (Ekwunife et al., 2022). Other examples exist but they are typically classified as social initiatives and social entrepreneurship and there is no evidence that any measurement of their impact has been done so far. Although it is also worth mentioning that there may not be any universally accepted indicators or metrics to measure the impact of SI (Oksanen & Hautamäki, 2015).

There are several aspects of the SI terrain that may impede the development of the phenomenon or impede its success. In Nigeria, some of those challenges lack of skilled designers and marketers of SI, incompetence, limited access to funds and a lack of awareness of SI and its opportunities (Onileowo et al., 2021). The lack of awareness is a peculiar challenge and must be addressed because, in order to achieve success in the introduction of an SI solution, there must be a systematic collaboration between those that contribute to the development of the social innovation and the ability to understand its intricacies (Cunha & Benneworth, 2013). More so, to achieve the most success from the SI, there must be a close participation of those with the deepest clarity of the problems and where there are obvious metrics that indicate success (Mulgan, 2006).

Collaboration among those with expertise (where they exist) and others actors in technological innovation in developing countries are necessary to ensure that such countries are innovating towards sustainable development (Anadon et al., 2016). Also, it is expedient to ensure that SIs are moved to local levels where people can collaborate, instead of remaining at

a national level. This way, those closer to the needs and their networks can contribute more to the innovation activities (Oksanen & Hautamäki, 2015). Nevertheless, such local initiatives must be scaled up at multiple levels, in order to achieve adequate sustainability outcomes (Castro-Arce & Vanclay, 2020). Collaboration and technological innovation can enable developing countries to leapfrog into sustainable development. However, to benefit from this possibility, access to knowledge existing in the advanced countries and technological capabilities are necessities (Lee & Mathews, 2013). Therefore, the best solutions can be established when every stakeholder in a network is able to discover their role in generating solutions (Oksanen & Hautamäki, 2015). It is therefore expedient to strengthen every actor to make their own decisions with respect to the use of sustainable innovative technologies (Tigabu et al., 2015). All actors including those in authority should not ignore the benefits of technological innovation for sustainable development (Goi, 2017). It is worth noting however, that, social innovations fail just as most innovations in business and technology do (Mulgan, 2006).

CONCLUSION AND FURTHER RESEARCH DIRECTIONS.

Nigeria and its inhabitants can benefit immensely from the opportunities afforded by SI. The difficulties that can be overcome, and the need for considering the challenges of sustainable development, in addition to social innovation has been established. It has also been established that technological innovations can contribute to sustainable development. To this end, this paper presents a limited review of the interconnected nature social innovations, technology and sustainable development. This was done because of the potential benefit of ensuring that social innovations are transformative and sustainable.

Although there is evidence that there are SI activities in Nigeria, a recurring theme through the literature is the fact that it is difficult to measure the impact of social innovations and there are very limited attempts at documenting and monitoring the outcomes. Following Bengston and Ågerfalk (2011), this paper also argues that technology can not only aid the sustainability of social innovations, but it can also contribute to ensuring that the impact can be evaluated.

SI possesses the potential for positive change but must also contribute to sustainable development of humans and the environment to ensure that there are future beneficiaries. One way is to ensure the possibility of integrating with suitable technology. It is evident from two of the examples of SIs in Nigeria, that technology alone is incapable of producing all the

answers as two of the innovations that were technological in nature were fraught with issues delaying their take-off. It is also clear that not all technology has the capability of contributing to sustainable social innovation. Thus, indicating that there is more to be considered in the research area within this context. Key issues have already been raised regarding the various stakeholders involved in sustainable SI, necessitating the need for collaboration, knowledge sharing and development of expertise, in order to contribute effectively to the development and deployment of SIs. Awareness is also a challenge that was raised and an opportunity for further development.

There are obvious limitations to this study, and they provide opportunities for further exploration of the research area. Following the identification of the need for collaborative efforts, further research will apply the actor network theory and will identify a few case studies that can yield empirical data that will be analyzed for further insight. It is hoped that the results of this research will contribute richly to the discourse and development on social innovation in Nigeria. These results can contribute to the practice of social innovators and to policy makers.

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