

Research and innovation on sustainable development

EDITORIAL

Role of research and innovation on sustainable development

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ABSTRACT

In recent years, the concept of sustainable development (SD) has attracted much attention from researchers, institutions, organizations, and societies. Sustainable development has gained much attention due to the problems arising in different areas like climate change, health, energy, and environmental conservation. Research and innovation have played a critical role in addressing issues related to healthcare, inequalities, job creation opportunities, enhancing productivity, and alleviating the negative impacts of climate change. This article highlights the significant roles of research and innovation in achieving sustainable development.

1.0 Introduction

The concept of sustainable development has been revived after the adoption of the Sustainable Development Goals by the United Nations in 2015 (UN, 2015). The concept was previously raised in the 1987 Brundtland Commission Report, which defined it as an improvement that solves present issues or problems without compromising the capacity of the future generation to meet their needs while addressing emerging issues (WCED, 1987). The concept has gained attention due to the changes and challenges emerging from climate, health, energy generation and utilization, environmental conservation, and rural development. Many of these have the potential to disrupt the current and future biophysical environment (Cecchin et al., 2021; Axelsson et al., 2011), which is crucial for sustainable production. Over time, the sustainability discourse has expanded to include economic, environmental, and social factors (Cecchin et al., 2021; Seuring and Muller, 2008). This implies that all stakeholders and sectors are affected. This further highlights the significance of research and innovation in fostering economic progress that is sustainable over time.

We investigate complex issues such as climate and environmental change, human welfare, and other social factors through research to make decisions and formulate policies based on the Sustainable Development Goals (SDGs). Silvestre (2015) observes that various countries, regions, organizations, institutions, communities, and supply chains have adjusted their social welfare and biophysical environment to attain sustainability through innovation. Innovation-centred approaches also explore social behaviour patterns and look for alternative sources of

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energy (Talberth, 2008).

2.0 Research, Innovation and Sustainable Development

According to Namanji and Ssekyewa (2012), research and innovation are critical components of meaningful economic growth or development that lead to enhanced productivity and economic well-being for the common good (UNCTAD, 2021). Research and innovation are instrumental in promoting economies through informing and transforming different stages of development and are thus a key to enhanced competitiveness. Besides, proper research should inform the development of balanced policies that result in sustainable resource use (Cecchin et al., 2021; Namanji and Ssekyewa, 2012). Furthermore, research generates ideas through which capital productivity can be increased (Clark 2002).

According to a report by 2UNCTAD (2021) and findings by Silvestre (2015), sustainable development is not attainable in the absence of innovation. Findings by Srensen and Torfing (2017) further demonstrate that innovation plays a critical role in addressing issues related to all aspects concerned with human wellbeing, resource use, and production environment protection. Innovation for sustainability promotes the development of new solutions to problems that disrupt established practices (Hofstad and Torfing, 2016).

3.0 Conclusion

An analysis of the existing information on the significance of research and innovation in development indicates that for any growth to be sustainable, it must be backed and/or interrogated through research and innovation. This provides a platform to evaluate different development theories and practices objectively. Countries and their respective governments should thus invest in research and innovation to enhance sustainable development.

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