INNOVATIVE SCIENCE AND TECHNOLOGY: A SUSTAINABLE DEVELOPMENT FOR TODAY AND TOMORROW

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Science and technology play a fundamental role as an essential driver of sustainable and inclusive development. The variety of technologies and their multiple uses are the key factors to economic growth, employment creation and social inclusion. However, new opportunities for meeting environmental sustainability can be created through technological change, such as changes in production processes or consumption patterns and resource efficiency improvements, all of which are required to achieve a sustainable future.

Technologies must be developed to meet the rising need for a higher standard of living and promote forest growth and reforestation. Examples of such technologies are systems for capturing and storing carbon dioxide, more effective irrigation techniques, life-saving medications, home water purification equipment, and manufacturing techniques that reduce common issues like pollution, energy use, waste production, and recycling capacity. Therefore, actions on various fronts, including utilizing and leveraging the potential of technology innovation, will be necessary to achieve sustainable development goals.

Agbedahin (2019) presented a narrative account of the findings of a thorough historical literature review of global policy development and processes about the emergence, effectiveness, and preeminence of sustainable development, Education for Sustainable Development (ESD), and the 2030 Agenda for Sustainable Development (Sustainable Development Goals [SDGs]) from its inception to the present. Making recommendations for the future of ESD study and practice, the report finishes by critically

analyzing the information mentioned earlier in light of the author's prior empirical research on higher ESD.

According to Guanming et al. (2022), many people now have considerable equalizing opportunities to access opportunities and meaningfully participate in society, thanks to assistive technologies (AT). Children with impairments comprise a sizeable section of the population in Southeast Asia (SEA). One of the highest prevalences of moderate and severe impairments worldwide has been seen in the SEA region. Achieving the Sustainable Development Goals (SDGs) and helping all children with disabilities to live healthy, fulfilling, independent, and dignified lives are both possible with AT.

Calderon & Nguyen (2017) stated that communities react differently to sustainable development. The Sustainable Dynamics Model, which describes the processes by which interdependent actors and stakeholders exploit each other's forces and capacities, can be used to create a sustainable community. As a result, the dynamics of the stakeholders involved in the partnership are determined by whether social, economic, and ecological balance may be attained within the community.

According to Daniel & Niemczyk (2022), as evident in scholarly literature, universities worldwide have taken up the Sustainable Development Goals outlined in the 2030 United Nations Agenda, as evidenced by their academic literature. Although many countries have committed, it is apparent that the efficient implementation of sustainable teaching principles and practices in academia will be challenging for numerous countries, particularly emerging ones. The results indicate that educators and potential teachers must be trained in sustainability educational knowledge and skills. In addition, universities must adapt to a comprehensive approach and adopt the principles of sustainability, knowledge, and practices in all academic activities to strengthen Sustainable Development.

Understanding the environment and our contribution to it is helped by innovative science and technologies that are a crucial element of sustainability for future generations. It is vital to make good decisions about the use of our resources. To improve all people's quality of life, it can also help us solve the problems mentioned above. In this way, the sustainable future we imagine for today and tomorrow will depend on new materials and emerging energy sources.

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