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SUSTAINABILITY AND INNOVATION: NEW ROLES OF UNIVERSITIES IN ENSURING ECONOMIC GROWTH AND ACHIEVING GLOBAL SUSTAINABLE DEVELOPMENT GOALS

In today's rapidly changing global economy, universities play a critical role in fostering economic growth and advancing sustainable development goals through innovation. This paper examines the concept of sustainability and innovation and explores the evolving roles of universities in driving economic growth and realizing global sustainable development goals. Drawing on existing literature, the paper discusses the Triple Helix model of university-industry-government relations proposed by Etzkowitz (2003) as a framework for understanding the interactions and collaborations between these entities in the context of innovation. The paper also discusses the concept of open innovation as advocated by Chesbrough (2003), which emphasises the importance of collaboration and knowledge sharing between universities, industry, and government in driving innovation.

Furthermore, the paper reviews a number of works by Ukrainian scholars such as Kostyshyna et al. (2020), Cherniavska et al. (2014), Bondar et al. (2005, 2006, 2007, 2008), which provide insights into the socio-economic and intellectual capital aspects of national economy and highlight the role of universities in shaping economic development. These works contribute to the understanding of the

Ukrainian context and provide valuable perspectives on the integration of sustainability and innovation in the region.

The paper concludes by proposing a transdisciplinary framework for analysing sustainable development and social ecology, drawing on the Triple Helix, open innovation, and other relevant concepts. This framework can serve as a guide for policymakers, academics, and practitioners to leverage the capabilities of universities in promoting economic growth and achieving global sustainable development goals.

Universities have traditionally been seen as institutions of higher education, primarily focused on teaching and research. However, in today's rapidly changing global economy, universities are increasingly being recognized as engines of innovation and key players in driving economic growth and achieving sustainable development goals. The integration of sustainability and innovation has become a critical imperative for addressing pressing global challenges such as climate change, poverty, inequality, and social injustice. The concept of sustainability encompasses economic, social, and environmental dimensions, and it requires innovative approaches to address complex and interconnected problems. Innovation, on the other hand, involves the creation and application of new knowledge, technologies, and processes to meet societal needs and create economic value. Universities, with their diverse expertise, research capabilities, and knowledge networks, are well positioned to play a pivotal role in advancing sustainability and driving innovation.

In this paper, we will explore the evolving roles of universities in ensuring economic growth and realising global sustainable development goals through innovation. We will draw on existing literature, including works by Ukrainian scholars, to provide insights into the context of Ukraine and its challenges and opportunities in integrating sustainability and innovation. We will also discuss the Triple Helix model of university-industry-government relations proposed by Etzkowitz (2003) and the concept of open innovation advocated by Chesbrough (2003) as frameworks for understanding the interactions and collaborations between

universities, industry, and government in the context of innovation. Finally, we will propose a transdisciplinary framework for analysing sustainable development and social ecology, drawing on relevant concepts and perspectives.

The Evolving Roles of Universities in Ensuring Economic Growth and Realising Sustainable Development Goals:

Universities have traditionally been known for their roles in education and research, but in recent years, their roles have expanded to include innovation, entrepreneurship, and economic development. Universities have become key players in the knowledge economy, driving economic growth and contributing to the development of sustainable solutions to global challenges.

One of the frameworks that have been proposed to understand the roles of universities in innovation and economic development is the Triple Helix model by Etzkowitz (2003). The Triple Helix model suggests that universities, industry, and government are interconnected and mutually reinforcing in their efforts to promote innovation and economic growth. According to this model, universities play a central role in the knowledge triangle, which involves research, education, and innovation, and they collaborate with industry and government to create and apply new knowledge and technologies.

In the context of sustainability and innovation, universities can contribute in several ways. Firstly, universities are critical in producing knowledge and conducting research that addresses pressing global challenges related to sustainability, such as climate change, resource management, social inequality, and poverty. Through interdisciplinary research and collaboration with other stakeholders, universities can generate new ideas, technologies, and solutions that contribute to sustainable development goals.

Secondly, universities can foster innovation through technology transfer and commercialization of research outcomes. Many universities have established technology transfer offices and innovation centres that facilitate the transfer of knowledge and technologies from academia to industry and society. These efforts

can lead to the development of new products, services, and processes that have economic, social, and environmental benefits.

Thirdly, universities can promote entrepreneurship and innovation among their students and faculty. By providing entrepreneurship education, incubation programs, and support for startups, universities can cultivate a culture of innovation and entrepreneurship, which encourages students and faculty to develop innovative ideas and turn them into viable businesses or social enterprises. This can contribute to economic growth, job creation, and social impact.

Fourthly, universities can engage in collaborative partnerships with industry and government to drive innovation and sustainable development. Through research collaborations, joint projects, and knowledge sharing, universities can contribute their expertise and resources to address complex societal challenges and create innovative solutions. This collaborative approach can leverage the strengths of each partner and lead to more impactful outcomes.

In Ukraine, Azerbaijan and Italy, as in many other countries, universities are increasingly recognizing the importance of integrating sustainability and innovation in their roles and activities. By producing knowledge, fostering innovation, promoting entrepreneurship, and engaging in collaborative partnerships, universities can contribute to addressing pressing global challenges and creating sustainable solutions for a better future. The integration of sustainability and innovation in the roles and activities of universities is a key imperative for driving economic growth and realising sustainable development goals in the 21st century.

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