The Role of Lifelong Learning in Promoting Sustainable Development: An Indian Perspective in the 21st Century

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Abstract

This paper emphasizes the critical role of lifelong learning in promoting sustainable development, particularly in developing countries. Sustainable development, while a central concept in global discourse, is often misunderstood by ordinary citizens and technocrats, underlining the need for educational interventions to demystify the concept. The paper argues that lifelong learning is crucial for fostering awareness of resource depletion and the importance of conserving essential resources for future generations. In many developing nations, a knowledge and skills deficit, compounded by the rapid pace of technological advancement, hinders economic and social progress. The lack of understanding in key areas, including economics, politics, and society, contributes to issues such as resource depletion, poverty, and environmental degradation. The paper asserts that lifelong learning can bridge these gaps, enabling individuals to adapt to the evolving global landscape and to embrace sustainable development practices.

By empowering citizens with the necessary knowledge, attitudes, and skills, lifelong learning can help tackle challenges such as overconsumption and unsustainable resource use. Educating individuals through heutagogical approaches—learner-centred strategies that emphasize self-directed learning—can drive reform and sustainable practices at the grassroots level. The paper also discusses the alignment of lifelong learning with the United Nations' 2030 Agenda for Sustainable Development, which emphasizes the importance of inclusive education in achieving the Sustainable Development Goals (SDGs). Specifically, SDG 4, which advocates for "inclusive and equitable quality education and lifelong learning opportunities for all," serves as a key framework for integrating lifelong learning into national development strategies.

Lifelong learning also contributes to the attainment of other SDGs, such as gender equality (SDG 5), decent work and economic growth (SDG 8), health and well-being (SDG 3), responsible consumption and production (SDG 12), and climate change mitigation (SDG 13). As such, lifelong learning is presented not only as a critical tool for individual empowerment but also as a strategic means to achieve sustainable, inclusive, and equitable development in the 21st century.

Keywords: Sustainable development, lifelong learning, development, 21st century, SDGs, education, conservation, sustainability

Introduction

The importance of lifelong learning is not a new idea, as various global goal-setting exercises over the years have drawn attention to lifelong learning as integral to development. Previous agendas such as Education for All (EFA) (WEF 2000) and the Millennium Development Goals (MDGs) (UN 2015b), for instance, already foreshadowed the present agenda of the Sustainable Development Goals and called attention to the need for a lifelong learning approach in addressing social and environmental issues. In 2015, the United Nations Educational, Scientific and Cultural Organization (UNESCO)[1,2,3] followed the UN in identifying lifelong learning as an integral part of its own new agenda, the Education 2030 Framework for Action (FFA), and has worked to promote lifelong learning as an integral part of the SDGs. The United Nations 2030 Agenda increases the number of goals, from 8 in the Millennium Development Goals (MDGs) set for 2000–2015 to 17 SDGs for the next 15-year period, and deliberately designates education as one specific development goal (UN 2015a). It expands the focus from schooling to lifelong learning, making adult education and higher education as well as technical education part of the spectrum embraced by the international community in the achievement of sustainability (Benavot,2017).

Yet, naming SDG 4 as a specific education goal took a great deal of planning and negotiation. There was an intense two-year consultation process involving stakeholders and Member States in shaping the future education agenda; this consultation culminated in the World Education Forum (WEF) which convened in Incheon, Republic of Korea, in May 2015. The Forum's outcome document, Education 2030 (UNESCO 2016), encompasses both the Incheon Declaration and the above-mentioned Education 2030 Framework for Action (FFA), the purpose of which is to help in the implementation of SDG 4. With its 10 specific targets, the education goal addresses objectives to be met by 2030. Global indicators have been determined as well, to measure progress in all countries, with due attention given to cultural and national variances. The Incheon Declaration signals the international community's commitment to SDG 4, and tasks UNESCO to provide guidance and leadership to the education goal (UNESCO 2016). The UNESCO Institute for Lifelong Learning (UIL) has long been engaged with the agenda of lifelong learning across the lifespan through its many programmes to support literacy, policy development, adult learning, and education. Its early interest in lifelong learning is vindicated by two seminal reports, Learning to be: The World of Education Today and Tomorrow (Faure et al. 1972) and Learning: The Treasure Within (Delors et al. 1996).As the only organisational unit in the UN family that holds a global mandate for lifelong learning, UIL categorises and collates national lifelong learning policies and strategies, conducts international research on lifelong learning, and supports nation states in their efforts to foster learning. The institute's online Collection of Lifelong Learning Policies and Strategies, for instance, presents a unique effort to provide leadership on this important front. Anotherplatform for discussion is UIL's publication series on lifelong learning policies and strategies.

The articles featured in this special issue of the International Review of Education – Journal of Lifelong Learning (IRE) support the role of lifelong learning in the Sustainable Development Goals and take the process one step further to examine the ways in which lifelong learning is conceptualised, enacted, and monitored in the 21st century. This special issue provides a forum for examination and gives space to policy and practice, which are central to UIL's promotion of policy dialogue and the enabling of

strategic action, on the development and implementation of SDG 4 and its 10 targets. The contributions look closely at the intersection of education and development, and the implicit acknowledgement that education is integral to the achievement of several of the SDGs in addressing poverty, inequality, social development, and economic growth.

Clearly, there is a need for supporting lifelong learning issues, given some of the global issues we are facing at the end of this decade and indeed in this millennium, such as displacement of populations, illiteracy, economic inequity, and a need for new qualifications and skills. Contributors to this issue theorise and analyse their understanding of lifelong learning considering the increasing global emphasis on measuring implicit links between development and areas such as education (SDG 4), health (SDG 3) and gender (SDG 5). The primacy of lifelong learning in the achievement of these goals is underscored by the recognition in the SDGs of lifelong learning as the master concept for education policies and as the organising principle of education. Based on the renewed focus on lifelong learning at the global level, this special issue of IRE analyses and interprets the 2030 Agenda in terms of the meaning and implications of lifelong learning for all for a full and abundant life.

The authors challenge existing notions of lifelong learning and argue for its benefits beyond education and learning. At the core of their discussions are the ways in which governments and policymakers understand and implement lifelong learning in various contexts. The importance of this exercise is underscored by Member States' call for assistance with addressing the SDGs and for updating and formulating their own lifelong learning agenda and policy action for 2030.

As guest editors, we are very much aware that, over time, this journal has given a great deal of attention to conceptualising lifelong learning. An earlier special issue on the future of lifelong learning (Carlsen and Haddad 2013)is a case in point. The present special issue draws on those earlier discussions and responds to the current need for workable lifelong learning policies and strategies considering the United Nations 2030 Agenda. It is our hope that practitioners, researchers, and policymakers will be aided through this current dialogue in moving forward with the fulfilment of SDG 4 and other goals.

The authors, international researchers, and policy specialists, were chosen for their expertise in various areas of lifelong learning. Their articles help to further the dialogue on the 2030 Agenda and the SDGs, and deepen our thinking and practice of lifelonglearning, as well as contributing to the on-goingdiscourse on development and education in the 21st century. This special issue strengthens this journal's contribution to international efforts in lifelong learning.

Yet, as editors and authors, we are aware of many gaps that we could not possibly fill. For instance, a glaring omission is attention to the role of popular education and informal learning, which are components of a full lifelong learning platform. Popular education has long been the central venue for lifelong learning in many countries, not only in the Global South, but in spaces where civil society is most threatened. This could be explored in future, not least in relation to SDG target 4.7, which strives to ensure that by 2030, all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global

citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development (UN 2016).

To complement this special issue, we recommend that its readers learn from distinguished scholar activists Shirley Walters and Astrid Von Kotze (Walters and von Kotze 2018)who have published their insights on popular education and lifelong learning in the noted journal Studies in the Education of Adults.

This special issue features five articles, each one emphasising a different aspect of lifelong learning and its links to the SDGs. We begin with two articles which draw on the Recommendation on Adult Learning and Education as a basis for their analysis (UNESCO 2015)

The first article, "Lifelong learning challenges: Responding to migration and the Sustainable Development Goals" is by Leona English and Peter Mayo. It focuses on migration, one of the largest issues affecting many countries worldwide, both in terms of migration between countries and within countries. Irrespective of whether they are migrants, refugees or temporary workers, people on the move are highly vulnerable and in need of a lifelong learning response to enable them to develop and live full and productive lives. English and Mayo argue for processes that address the "disposability" (Bauman 2006, p. 40)and precocity of migrants. They critique the neo-liberal impulses that undergird resistance to inclusion, and offer the possibility of genuine inclusion into receiving countries.

Andreas Fejes continues this theme in his article entitled "Adult education and the fostering of asylum seekers as 'full' citizens" by looking at asylum seekers in his own country of Sweden, arguing that adult education is required to help these displaced persons become full participants in Swedish democracy. In making his argument, Fejes ably draws on Foucauldian theory to analyse policy reports as well as interviews with project managers and study circle leaders who are involved with the government programme [Swedish from Day One], which is designed to help asylum seekers learn the language and integrate themselves into Swedish society. The Foucauldian lens allows Fejes to look critically at the effects of this seemingly benign programme, which may in fact position the asylum seeker as less than a full citizen in this receiving country. Fejes' critique allows the reader to think about programming in more complex ways.

The third article, entitled "Examining the application of the lifelong learning principle to the literacy target in the fourth Sustainable Development Goal (SDG 4)", also looks at language and assumptions about literacy and numeracy. Ulrike Hanemann focuses especially on the literacy and numeracy target 4.6 of SDG 4 to determine the extent to which it reflects the lifelong learning perspective guiding UNESCO's Education 2030 Framework for Action (FFA). The target envisages a minimum proficiency level equivalent to levels achieved at successful completion of basic education. Building on her many years of experience as a programme specialist at UIL, Hanemann utilises a framework that unpacks "lifelong literacy" and discerns three closely interrelated dimensions, namely (1) literacy as a lifelong learning process; (2) literacy as a life-wide process; and (3) literacy as a part of sector-wide reforms to foster lifelong learning systems. Having analysed this target, she argues that an expanded vision of literacy has not yet taken hold. She concludes that there is still a long way to go before literacy (and

numeracy) are tackled from a lifelong learning perspective, which would potentially have a transformative effect on the achievement of the SDGs.

Ellen Boeren's article, entitled "Understanding Sustainable Development Goal (SDG) 4 on 'quality education' from micro, meso and macro perspectives", brings to the fore the global educational policy focus on analysing achievement through the narrow lens of indicators, benchmarks, and targets. Like Hanemann, Boeren resists narrow and limited frameworks being used to measure growth and achievement. Employing structure and agency theory, she examines the 10 targets that comprise SDG 4 from a range of micro, meso and macro perspectives. By breaking the targets down, she demonstrates that reaching indicators, benchmarks, or targets – the dominant approach in current global education policy making – is a rather complex task. Boeren's analysis reveals that a stronger approach is needed, one in which there is shared responsibility for the achievement of SDG 4 among individuals, education and training institutions and regulating governments in UN Member States, with the challenge being how to affect this model.

KjellRubenson too is concerned with the issue of measurement. In his article entitled "Assessing the status of lifelong learning: Issues with composite indexes and surveys on participation,"he draws attention to the increasing global concern for exact measurement of lifelong learning. Rubenson reviews the two leading surveys on adult education and learning, the Organisation for Economic Co-operation and Development (OECD)'s Programme for the International Assessment of Adult Competencies (PIAAC) and the European Union's Adult Education Survey (AES), as well as the defunct Canadian Composite Learning Index (CLI). He asks critical questions of whether lifelong learning or learning for work (i.e. the skills agenda) are being measured in these assessments, and he raises issues such as lack of clarity around terms and the absence of context in these measurements. He argues that the narrow boundaries around the indicators used in assessing lifelong learning need to be broadened so that nations can have a clearer understanding and picture of lifelong learning and suggests UIL might take the lead in putting this into practice.

In sum, these five articles raise critical issues concerning the achievement of the SDGs, especially SDG 4. The contributing authors offer caution in how education is identified and measured in various contexts, including in local, national, and international arenas. While lifelong learning remains a bona fide goal, the articles in this issue encourage us to continue to raise questions about how lifelong learning is understood, how it is enacted and how it is measured. In becoming a commonplace term, and positioned at the core of new strategies to respond to our rapidly changing world, lifelong learning runs the risk of losing its sharp edge and its potential to transform our world. We harness it to tackling industrial disruption, addressing new socio-economic developments in relation to the fourth industrial revolution with automation, artificial intelligence, and big data, and supporting transversal skills development and social cohesion. In the next decade, as the international community focuses on the SDGs, we would do well to sharpen our critical thinking capacity and to continue with our scrutiny, providing sound research to support promotion of lifelong learning opportunities for all.

DISCUSSION

Sustainable development goal 4 (SDG4) calls for ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. Today, over 50 per cent of the global population, i.e. about 3.5 billion people, live in the world's cities. This figure is projected to rise to almost 5 billion by2030. In what way can our cities fulfil the SDGs especially SDG4 One way ofdoing this is by creating infrastructure, and facilities, and fostering developmentof lifelong learning-cradle to grave-of all citizens irrespective of age, religion,gender, and ethnicity. There are now several initiatives towards this direction,promoted by the UN bodies especially UNESCO. Present status of UNESCO Global Network of Learning Cities (GNLC)GNLC is a global network providing inspiration, know-how, and best practicesfor nurturing learning cities across the globe. This network supports theattainment of all 17 Sustainable Development Goals (SDGs) especially SDG4and SDG11 ("make cities inclusive, safe, resilient and sustainable"). GNLCpromotes lifelong learning in the world's cities by encouraging policy dialogueamong member cities; forging links, fostering partnerships; providing capacitydevelopment; and developing tools to monitor progress made in buildinglearning cities.

What is a learning city?

1. A learning city is one that promotes lifelong learning for all its citizens by:

2. Mobilizing its resources to promote inclusive learning (basic to higher

Education);

3. Revitalizing learning in families and communities;

4. Facilitating learning for and in the workplace;

5. Extending the use of modern learning technologies;

6. Enhancing quality and excellence in learning; and

7. Fostering a 'culture of learning' throughout life.

8. Through its manifold activities, a learning city promotes individual

Development, social inclusion, economic growth, cultural progress, andSustainable development.

Why do we need learning cities?

Lifelong learning (LLL) is assuming urgent importance in today's disruptiveworld-a world in flux due to technological innovations such as AI, the vagaries ofclimate change, and sudden emergence of pandemics such as COVID-19.Several studies have proved that lifelong learners are better prepared to adaptto changes in workplace, personal lives, communities, and society.LLL, and the learning society have a crucial role to play in empowering citizensand ensuring a smooth transition to sustainable societies.One effective way, as envisaged by UNESCO, for nurturing a learning society isby building learning cities across the world, both developed and developingworld.

How can learning cities support equity & inclusion?

A learning city can support equity and inclusion by:

1. Promoting education and learning opportunities for all, especially the

Vulnerable groups;

2. Offering online courses on diverse topics relevant to the local community;

3. Establishing migrant colleges, enabling migrant workers to gain professional

Growth;

4. Providing career guidance, especially for women;

5. Establishing mobile libraries especially for people with disabilities, older

People, and preschool children;

6. Making use of cultural centres e.g., museums that serve as learning sites;

And

7. Creating civic participation networks that encourage citizens to take part in

The city's decision-making process, through the wide use of social media andModern technologies etc.

Indian Cities in GNLC-

In 2022, three Indian cities were among the 77 cities from 44 countries that weareadded to GNLC. These are Warangal in Telangana, and Thrissur andNilambur in Kerala. Other cities outside India included Sharjah, Durban, andKyiv etc. Altogether, 294 cities from 76 countries are now members of theGlobal Network of Learning Cities (GNLC).It's high time for all of us to work in coordination to ensure that our city, Imphal,becomes a learning city and joins the UNESCO GNLC in the near future.Learning in the 21st century must move beyond the confines of space and time. To usher a knowledge society, learning must become ubiquitous, asynchronous,and multi-modal. That is, learning must occur outside the classrooms too, mustcontinue throughout life ("cradle to grave"), and must be provided via a plethoraof platforms: lectures, MOOCs, text, audio, video, animation, games, drama, andcultural activities etc. Only by doing this, can we ensure equitable, inclusive, andsustainable development for the citizens of our city. Towards this objective, thegovernment may work in concert with NGOs, CSOs, farmers' bodies, privatecompanies, and citizens' groups etc., catalysed by knowledge workers in thecity' higher education institutions e.g., MU, DMU, MTU, NIT, and MUC etc.

RESULTS

Lifelong learning plays a pivotal role in achieving Sustainable Development Goals(SDGs) by fostering a culture of continuous education, empowerment, and Inclusivity. Here are key aspects of its role:

1. Eradicating Poverty (SDG 1):

Lifelong learning equips individuals with skills that enhance employability andincome-generating opportunities, contributing to poverty reduction. It supportsentrepreneurship, vocational training, and financial literacy, empoweringcommunities to break the cycle of poverty.

2. Ensuring Quality Education (SDG 4):

Lifelong learning aligns with the goal of ensuring inclusive and equitablequality education. It promotes accessible and diverse learning opportunities,including formal education, vocational training, and community-basedprograms, fostering a culture of continuous skill development for people of allages.

3. Promoting Gender Equality (SDG 5):

Lifelong learning is a catalyst for gender equality by addressing educational Disparities. It encourages women's participation in various educationalprograms, empowering them economically and socially. Lifelong learning alsochallenges traditional gender roles and stereotypes, fostering a more inclusive society.

4. Facilitating Decent Work and Economic Growth (SDG 8): Lifelong learning contributes to economic growth by preparing individuals for adynamic workforce. It supports skill development, entrepreneurship, andadaptability, ensuring that people can access meaningful employmentopportunities in evolving industries.

5. Reducing Inequality (SDG 10):

Lifelong learning addresses societal inequalities by providing education andskill development opportunities for marginalized and vulnerable populations. Itpromotes social inclusion, bridges educational gaps, and empowersindividuals to actively participate in social and economic life.

6. Promoting Sustainable Cities and Communities (SDG 11): Lifelong learning fosters community resilience and sustainable urbandevelopment. It encourages environmental awareness, civic engagement, andthe acquisition of skills relevant to sustainable living. Lifelong learnerscontribute to building communities that prioritize environmental sustainability and social cohesion.

7. Supporting Climate Action (SDG 13):

Lifelong learning contributes to climate action by promoting environmentaleducation and sustainable practices. Individuals engaged in lifelong learningbecome advocates for environmental conservation, helping communitiesadapt to climate change and reduce their ecological footprint.

8. Strengthening Partnerships for the Goals (SDG 17):

Lifelong learning encourages collaborative partnerships among governments,educational institutions, businesses, and civil society. By fostering a culture ofshared knowledge and expertise, it supports the development andimplementation of sustainable policies and practices.In essence, lifelong learning is a cross-cutting tool that underpins variousSustainable Development Goals. It empowers individuals to adapt to change,engage in sustainable practices, and actively contribute to the socio-economic

andenvironmental well-being of communities, aligning with the broader agenda ofachieving sustainable development globally.

CONCLUSION

The objective need for the competitive development of the country, the formation ofan innovative economy put forward a new system of requirements for a person as alink in the economy. Gradually, the need is realized even for an establishedspecialist to update knowledge and change the scope of professional activity severaltimes throughout his life, constantly adapting to changing socio-economic conditions,to the situation on the labor market, and to changes in the knowledge-based economy It is important to note that back in the middle of the last century, knowledgedoubled every 50 years, and this allowed a person who received an education to besatisfied with the professional education he received once throughout his working lifeAt the beginning of the 21st century, experts argued for the need to updateknowledge every six years. Today, experts say that the amount of knowledge isdoubling every three years and will double every 11 days in the coming yearsIn the specialized literature, there is even a special unit for measuring theobsolescence of a specialist's knowledge—the so-called "competence half-life" [which reflects the length of time after graduation from a professional educationalinstitution, when, as a result of the obsolescence of the acquired knowledge, as newinformation becomes available, the competence of a specialist decreases by 50%.
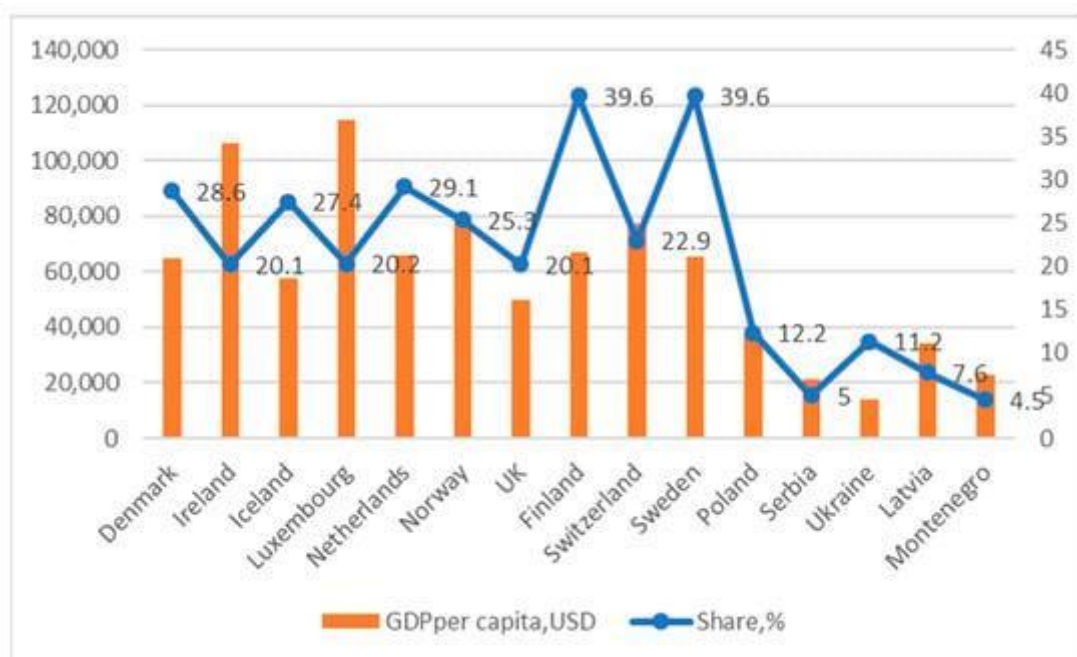
Accordingly, the competitiveness of the country is determined by how quickly aperson can again meet the needs of the economy at a particular stage. Today, population aging is observed in almost all countries. According to UNestimates, in the next 15 years, the number of elderly people (60 years and older)will increase by 56% on a global scale: from 901 million people in 2015 to more than1.4 billion by 2030 [20]. If these predictions come true, by 2030, for the first time inhistory, the number of elderly people will exceed the number of children under theage of 9, and by 2050, teenagers and young people aged 10–24 at the same time, adults will be forced to work longer than previous generations.Finding ways to improve their skills and professional reorientation due totechnological changes and globalization

will become a vital necessity for them andfor ensuring the country's competitiveness. Adults will also look for new learning Opportunities to continue their professional and personal development, and thecountry must look for ways to educate adults so that they can respond competentlyto the changing economy and ensure their competitiveness The most competitive economies in Europe are also the most innovative andthose where the share of adults in education is high compared to other countries(Figure 3). Switzerland, Sweden, Denmark, Finland, the Netherlands, and Germanyare leaders in innovation in the world, as well as examples of successfullyfunctioning adult education systems.Figure GDP per capita and the share of the population (18–64 y.o.) involved inlifelong learning in European countries in 2022. Source: Built by the authors.What they all have in common is that they all have strong knowledge-basedeconomies. They are characterized by a strong research and developmentsector with good international connections and a broad and constantly renewedtalent base. GDP per capita illustrates the level of economic development of thecountry, and the share of participation in adult education, in turn, has the samefluctuations as GDP, which gives reason to assert that the level of economicdevelopment of the country is related to adult education and vice versa (Figure 3).The awareness of the importance of the implementation of lifelong education isprompted by numerous external factors , mostly documents and initiatives of theUN, UNESCO, initiatives of the International Labor Organization, the Council ofEurope, and the European Commission, as well as resolutions, conventions,recommendations approved by many global and regional forums on lifelongeducation issues as a key element of lifelong learning. The 2030 Agenda forSustainable Development, adopted by all United Nations Member States in 2015,provides a shared blueprint for peace and prosperity for people and the planet, nowand into the future. At its heart are the 17 Sustainable Development Goals, which arean urgent call for action by all countries—developed and developing—in a globalpartnership. According to this strategy, it is necessary to achieve three forms ofgrowth: sustainable growth, which implies promoting a resource-efficient, green, andcompetitive economy; smart growth, which means the development of a societybased on knowledge and innovation; and inclusive growth, which implies a high-employment economy. International institutions create indices based on which they measure and rank countries according to various aspects, including competitiveness. The methodologyof measuring the competitiveness of the economy of the World Economic Forum isbased on the Global Competitiveness Index. The competitiveness of economiesis monitored through the 12 pillars of competitiveness. The index is calculated for alleconomies in the same way, and the final value of the index is a simple average ofthe 12 components. Such indicators are:

1. Institutions;

2. Appropriate infrastructure;

3. Stable macroeconomic framework;

4. Good health and primary education;

5. Higher education and training;

6. Efficient goods markets;

7. Efficient labor markets;

8. Developed financial markets;

9. Ability to harness existing technology;

10. Market size—both domestic and international;

11. Production of new and different goods using the most sophisticated

Production processes;

12. Innovation As the Industrial Revolution 4.0 continues, all competitiveness factors areconsidered to equally affect the competitive position of an economy regardless ofincome level, so each pillar can be considered as a potential priority.However, the analysis of the foundations of competitiveness in the WEF reportsclearly shows that in many countries the main reasons for slow development andgrowth are the inability to use the new opportunities provided by the fourth industrialrevolution in the form of modern information and innovative technologies, and the "old" problems of social development in the form of «poor» institutions, infrastructure, and skills available to workers As already mentioned, information and innovative technologies and skills are thefundamental drivers of competitiveness. In addition, the quality of the institutionalenvironment largely determines the level of innovation and the development of physicaland human capital, which are the main sources of income inequality (GDP) incountries. It is important to say that the prevailing view in science is that the educationsystem, as a key factor in the competitiveness of the modern economy, plays anessential role in socio-economic development.

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