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УДК 339.9:330.35

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## **GLOBAL RECOVERY FROM PANDEMICS: SHOULD SUSTAINABILITY BE A CORE ELEMENT IN NATIONAL ECONOMIC SYSTEM DEVELOPMENT?**

*“The COVID-19 pandemic is a public health emergency – but it is far more. It is an economic crisis. A social crisis. And a human crisis that is fast becoming a human rights crisis.”*

*Secretary-General of the United Nations, Antonio Guterres*

The world has changed significantly within the past year. COVID-19 has impacted all spheres of people lives: personal, business activities, national economies and global economy. It has also affected on the implementation of UN sustainable development goals (SDGs) as what was planned many years ago is far more difficult to achieve now because of unpredicted circumstances to have appeared. International meetings agendas within the past year always include two issues: sustainability and the pandemics. As we are still facing challenges caused by the pandemics and have to adapt to governments' interventions, it is important to understand main tendencies of pandemic impact on countries' growth and development to assume how sustainability will look like after the pandemics and whether it should be vital in global recovery helping to achieve strategic

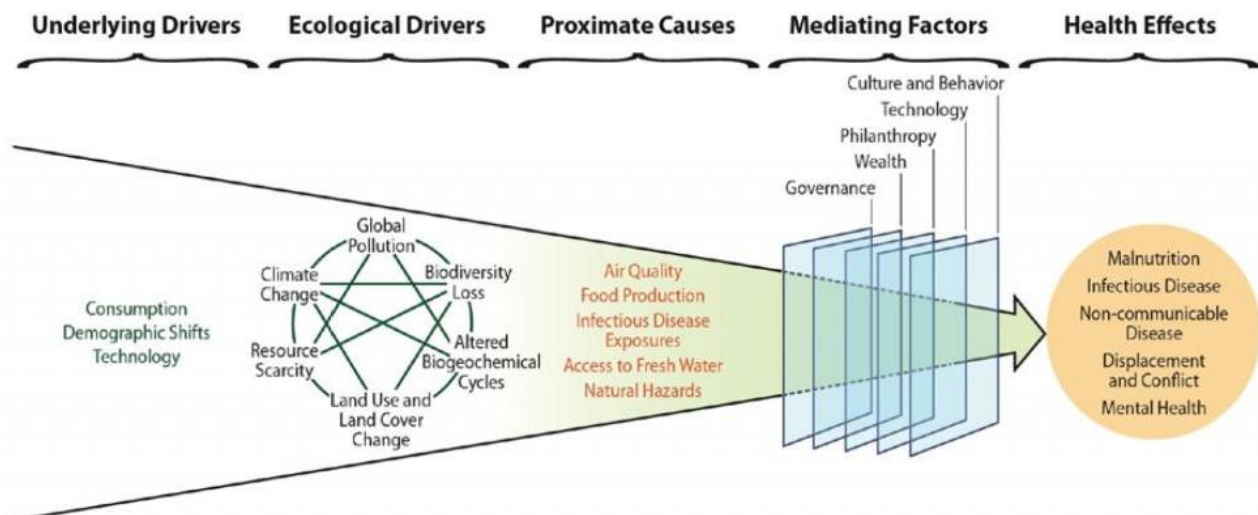
goals of national economies' development. It is also relevant in terms of governments policies' decision-making as it will have a huge impact on our everyday lives.

**Introduction.** Before the COVID-19 pandemic situation in healthcare sector was already difficult. According to the World Health Organization (WHO) and the United Nations Environment Programme (UNEP), around 25% of all global deaths are related to economic decisions affecting the environment; annually, 7 mln people die from poor air quality and 3.5 mln - from poor water quality; chemical exposure can cost nearly USD 1 trln in neurodevelopmental effects in middle and low-income countries [1].

Analysis of Google Trends shows that the most searched word in 2020 was “coronavirus” and searching results for “sustainability” remained consistent throughout this period as well. This particular fact points out people interest in this topic.

Often people misunderstand what “sustainability” means thinking it's only about climate and ecology. In fact, sustainability includes three aspects: economic, social and environmental. There is a tight link between sustainable and economic development as both depend on the quality of life and related improvements [2]. COVID-19 pandemic has changed people's lifestyles globally by affecting social, economic and environmental aspects of their lives [3]. Therefore overview of pandemic impact in each sphere is presented below.

Planetary health is often seen as a “cross-cutting solution” (see Figure 1) to achieve the SDGs and deliver on the 2030 Agenda [4].



As shown on the fig.1 the health affects have multiple underlying and ecological drivers, as consumption behavior, demographic shifts and technological development are at the bottom of this reason-cause relations, as well as global pollution, climate change, resource scarcity etc. As mentioned by the UNEP governance and resilient societies are the main mediators to decrease the level of negative affects of underlying factors. Therefore it is vital both for the regular ('normal') strategic country development and 'new normal' after-pandemic recovery the inclusion of all of these factors while implementing certain policies and initiatives.

**Economic aspect.** COVID-19 has led the world economy to a standstill. Experts agree that this is the worst global crisis since the Second World War which beat data of 2008-2009 financial crisis due to the sudden disruption of economic activity in both advanced and developing countries.

According to [5], COVID-19 affects socio-economic areas because of decline in global GDP, capital flows, fewer investment opportunities and decreased trade volumes.

The pandemic's short-term affect differs greatly across countries with significant differences it has on developed, developing and least-developed countries (LDCs). The effects may be damaging for people in countries which heavily depend on tourism, such as small island developing states, or on inflows of remittances, or on official development assistance.

It was noticed that the poorest countries in the world, for example Sub-Saharan Africa, have not been greatly impacted by the virus in terms of case numbers and deaths. Therefore it will not be

accurate to link deaths numbers with the level of a particular country economic development. At the same time comparatively low numbers of the above mentioned do not necessarily mean low economic impact as the attention should be paid not only to direct losses the pandemic caused but also indirect. COVID-19 is impacting the developing world, where capacities and resources are severely constrained. Disruptions to global supply chains and labour shortages posed uncertainties for agricultural production which is usually main sector of their economies.

Millions of people around the world lost their jobs and savings. This happened as a result of lockdown implementations, travel restrictions, shift to online workload etc. The International Labor Organization (ILO) findings show that the total amount of hours worked by workers around the world dropped in the second quarter by around 10.5 % which is equivalent to 305 million full-time workers with a 48-hour workweek [6]. Jobs losses directly cause reduction of income and therefore lead to poverty increase globally. Share of the world's population living on less than USD \$1.90 per day increased almost to 9% which equals to almost 700 mln people. Sub-Saharan Africa has been hit relatively less from a health perspective, although according to experts it will be the region hit hardest in terms of increased extreme poverty: 23 mln people pushed into poverty in Sub-Saharan Africa and 16 mln in South Asia [7].

The World Bank's poverty projections state that global recession will push 110 to 150 mln more people into extreme poverty by 2021 [8]. Low incomes and limited access to public safety nets, make populations in low income countries more susceptible to demand-sided effects of the pandemic. This also points out the importance of collaborative actions the G7 and G20 must immediately take aiming to help these countries to finance the post-pandemic recovery as well as to survive during it. Especially in terms of ecological aspect it is huge responsibility on developed countries in post-recovery period. Longer term, they must redouble efforts to foster sustainable economic systems, including fair trade and investment.

The United Nations Industrial Development Organization (UNIDO) indicated that within three months (from December 2019 to April 2020) Index of Industrial Production showed average loss in high-income (18%), upper-middle (24%) and lower-income (22%) countries [6].

Analyzing COVID-19 impact it is worth to be mentioned that as LDCs and developing countries have less access to Information and Communications Technologies (ICTs) (19.1% and 46.7% of population have access to Internet at home, relatively), it minimizes their possibilities to deal with the challenges which developed countries (87.0% of population have access to Internet at home) can work with (remote work, online studying, increase in e-commerce etc.) [6]. Despite the fact that use of Internet has increased globally in 2019 since 2005 (from 17% to 53% relatively), the proportion of people using Internet is not distributed evenly across the globe. As a result the digital divide has become more significant than ever in post-pandemic recovery.

At the industry level data shows that medium-high and high-technology industries (grouped by technological intensity reveal) have recovered faster from the crisis than industries with lower technological intensity. Some medium-high- and high-technology industries, such as basic pharmaceuticals, computer, electronic and optical products or motor vehicles, are already registering comparatively high rates of growth across the majority of country groups [9] which also points out that countries' recovery from pandemic differs greatly based on their current levels of development, where developed countries have significant benefits.

At the corporate level main problems companies face also differ greatly across industries although here are defined those in common for all with different share of importance: fall in demand; payment of wages; difficulty in financing; value chain disruptions; logistics problems. This requires different policy responses to be implemented by the governments to support companies in their recovery.

According to UNIDO survey [10] the *policies governments should implement to help companies to recover are as following: reduce tax rates or defer tax; reduce rent and lower utilities costs; reduce financing costs or improve loan terms; optimize exporting tax rebate services; temporary reduction of social benefits.* The COVID-19 impact on businesses made many governments to explore possibilities of making businesses more inclusive maintaining sustainable

growth. For example, the EU Recovery Plan for Europe [11] is aimed at investments in the greening of the construction sector, building more resilient healthcare systems [10]. European Commission President Ursula von der Leyen said that the recovery plan turned the challenge into an opportunity, not only by supporting the recovery but also by investing in future because the European Green Deal and digitalisation would boost jobs and growth. The Commission estimates that investment needs amount to at least €1.5 trillion in 2020-2021. Investment in key sectors and technologies are vital for successful Europe's future [11].

Countries all over the world are trying to recover from the pandemic using best alternatives available for them. One of them is work debt swap which is a relevant tool to be used (more than 100 countries asked loans from the International Monetary Fund (IMF). Adoption of large-scale debt swaps as part of post-COVID-19 recovery tools makes it possible to help in the following areas: debt, crises of climate change and biodiversity loss. Seychelles is an example of such measure to be taken. The mechanism works in the following way: money saved will be used as investments in poverty-reducing initiatives and programs such as climate-smart agriculture, renewable energy and afforestation. This mechanism will help to further stimulate growth and in long-term period – reduce the necessity for future debt. Such method works well linking climate change, biodiversity loss and poverty, which makes the process efficient and addresses the needs of the vulnerable population at the same time helping building resilience to crisis [12].

**Social aspect.** Every production system should aim at providing well-being for people by delivering goods and service in education sector, health, family, spirituality, leisure and ethics, not allowing overconsumption. There was noticed a positive relation between the level of well-being and sustainable behaviors, as with high level of well-being people are more likely introduce sustainable practices in their everyday lives, such as waste management and sustainable consumption habits [13]. In LDCs where population has low incomes and companies strive to maximize profits, both are less expected to deal with environmental and social issues as people activities aim at satisfying their basic needs where ecology doesn't belong to.

COVID-19 had a huge impact on social aspects of our lives: relationships, interactions, mindset etc. The fact that people had to spend several months under a strict lockdown and then adapt to quarantine norms such as social distancing has also influenced on their behavior in terms of both ways of spending free time and consumer behavior. Moreover during this period poor and disadvantaged groups suffered the most.

Thousands of migration workers were stuck at the borders, trying to get back home, lost their jobs and means for living. The negative pandemic impact in social aspect was also noticed on the mental wellbeing especially for health care providers, elderly and those with health issues.

It should be noticed the relation between changes in people psychological states and situation at the market as a result of such. As people stayed at home their needs and wants changed, thus consumer behavior also changed and caused supply changes at the market. Entertainment industry was one of the first one to “feel” the pandemic impact. At the same time online yoga activities and those aimed at providing inner peace and mental wellbeing reached high popularity.

Besides the above mentioned informal sector faces challenges as well. Huge share of population in developing and LDCs is involved in informal sector so millions of people not only lost their jobs, but also lost any possibilities to get certain financial aid from the government e.g. tax privileges for companies or financial support for those officially employed, and therefore additional risks were brought to people as well as countries' economies in large.

Another important indicator to be taken into account is Human Development Index (HDI). In pre-pandemic period there were noticed positive changes globally, although pandemic period had negatively influenced on the positive changes achieved before. At the same time countries with higher HDI level are noticed to be less unequal and have stronger social cohesion implying higher trust and capacity to create (prepare) safer communities. Therefore building strong communities in terms of creating a healthy environment provides better conditions to achieve efficient and productive society in turn.

The pandemic has also intensified existing inequalities and therefore created new forms of exclusion.

**Environmental aspect.** Although COVID-19 has shown negative impact on majority areas of people and countries' lives, it has also had a tremendous positive affect on ecological situation in the world. COVID-19 has led to a worldwide reduction in greenhouse gas emissions by almost 9% for the first half of 2020 compared with 2019 [14]. Taking into account the ecological dimension, low-carbon recovery could not only significantly reduce emissions, but also create more jobs and economic growth. The next decade is of great importance for climate action to be taken and warming threat depends on human actions which requires collaborative actions to reach net zero emissions by 2050 [14].

Moreover the way how organizations will transform their business activities into more sustainable while working on post-pandemic recovery. Investments in climate-resilient infrastructure and transition to a lower-carbon future will drive the recovery by providing job creation and increasing resiliency in the long run.

In a table 1 there are presented some of COVID-19 affects on environment.

Table 1

Effects of COVID-19 on environment [15]

Negative effects	Positive effects
<ul style="list-style-type: none"> <li>✓ Maximal effort and resources to deal with COVID-19 regardless of environmental costs</li> <li>✓ Fear-based excessive consumption</li> <li>✓ Increased technological and energy requirements</li> <li>✓ Decreased access for low-income patients and family</li> <li>✓ Impaired quality of life (untreated cancer, pain, and mobility impairments), psychosocial impacts (anxiety/depression), and financial strains (lost vocational activity)</li> <li>✓ Increase in consumption of personal protective equipment (PPE) and increased solid waste generation</li> <li>✓ Increased use of chemical disinfectants, with terrestrial and water pollution and occupational exposures</li> <li>✓ Single-use food and drink packaging and utensils</li> </ul>	<ul style="list-style-type: none"> <li>✓ Greater awareness of need for and efforts to conserve resources</li> <li>✓ Innovation on safe extended/reuse medical devices</li> <li>✓ Reduced travel with reduced emissions and more time for other activities/improved quality of life</li> <li>✓ Social investments to distribute electronics and internet access</li> <li>✓ Extending the use of single-use disposable PPE conserves resources and reduces environmental emissions</li> <li>✓ Local manufacturing leading to reduction of 'carbon miles' for transportation and improved supply chain resilience</li> </ul>

COVID-19 has made us realise how wasteful we are now that we have experienced our own vulnerability in particular to medical supply shortages. It is a sign to review and revise regulations that drive wasteful practices to preserve resources and meet basic needs for the most people possible. Locally made, robust, reusable medical equipment shifts healthcare away from a linear "take–make–waste" high-carbon economy towards the circular economy that keeps materials in use as long as possible and eliminates waste [16].

**Conclusion.** It is understood that the COVID-19 pandemic is not just a health crisis, but also a humanitarian and development crisis that is threatening deeply social, economic and environmental spheres of life. Therefore enormous actions should be taken both in ensuring availability of the essential health services as well as fiscal and financial measures to make macroeconomic policies work.

It has made us realize how fragile our systems are and how the entire world is connected where no country can face this crisis on its own. If we do not work together, humanity will suffer drastically. Therefore a targeted and collaborative approach is required.

Pandemic has also pointed out the importance of caring about the planet and how people activities cause the shutdown for the whole world. More businesses in developed countries started being social responsible in terms of helping the most needed groups of people as well as investing in circular economy and waste management practices.

Many experts both scientists and practitioners as well as policy makers have tried to do the predictions on how the situation will turn in the nearest and long-term period. Although as IMF mentions, one of the crisis peculiarities is uncertainty of its duration and intensity, which is still impossible to define today. It is also stressed on the impossibility of giving impetus to the economy with the usual measures [17].

It is our responsibility to look ahead and assess how the pandemic and the global recovery from it will impact the future of sustainable development. This period has shown the level of inequality and how urgently we need to build more sustainable and inclusive economies, because health of the economy, people and environment are closely linked and so a key part of rebuilding the economy aims at sustainable business practices and sustainable people behavior.

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УДК 330.111.42

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## **ПРИРОДНО-РЕСУРСНИЙ ПОТЕНЦІАЛ УКРАЇНИ ЯК ПЕРЕДУМОВА РОЗВИТКУ БІООРІЄНТОВАНОЇ ЕКОНОМІКИ**

### **NATURAL RESOURCE POTENTIAL OF UKRAINE AS A PREREQUISITE FOR THE DEVELOPMENT OF A BIO-ORIENTED ECONOMY**

Визначальним фактором цивілізаційного розвитку впродовж XIX–XX ст. були високі темпи зростання обсягів виробництва, масштабів споживання природних ресурсів і чисельності населення, і як наслідок – різке збільшення антропогенного навантаження на навколишнє природне середовище. Процеси деградації біосфери набули таких масштабів, що обумовило чітко виражені зміни глобальних її компонентів (земля, вода, ліси, повітря). В навколишньому середовищі України спостерігалися масштабні деструктивні процеси, що становлять реальну загрозу національній безпеці держави у багатьох сферах. Зокрема це: надмірне використання природних ресурсів, забруднення основних екологічних систем і