

8. *European Commission. Circular Economy Action Plan for a cleaner and more competitive Europe. URL: [https://ec.europa.eu/environment/pdf/circular-economy/new\\_circular\\_economy\\_action\\_plan.pdf](https://ec.europa.eu/environment/pdf/circular-economy/new_circular_economy_action_plan.pdf)*
9. *Організаційно-правові аспекти циркулярної економіки. 2019. URL: <https://bit.ly/31azpGy>*

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## **INTERNATIONAL ECONOMY UNDER CONDITIONS OF CLIMATE CHANGES: PANDEMIC AND POST-PANDEMIC PERIOD**

During the pandemic countries were forced to close down their borders and as such supply chain and income were affected. To deal with the changes circular economy and ecological security which are key in the fight against climate change were embraced. As the economies open ecological security and the circular economy will continue to be pursued seriously by firms and nations. Further the pandemic halted sustainability initiatives meant to curb climate change and highlighted the loopholes in EU Regional Policy in challenging regional inequality.

### **1、 Ecological Security of the Society and Circular Economy in Pandemic Conditions**

A healthy and resilient ecosystem aids in hindering flooding, wildfire, and any other natural disasters. As illustrated by the Covid-19 pandemic unsafe natural environment exploitation can also have an enduring impact on economic growth and the health of the population. Additionally, when the ecosystem is damaged water and food security as well as political stability are also impacted. Currently what is required is a reevaluation of how healthy ecosystem preservation is prioritized by societies to underpin human well-being and health. The outlined concept referred to as One Health or Planetary Health structure considers systems of food production, practices of land use, and biodiversity management as changing interconnections among people, animals, and plants that constitutes an ecosystem (Brewington, 2020). The ecological and health issues facing the world currently can be dealt with only through extensive

use of the stated approach. A covid-19 pandemic can be perceived as an example of the outcomes of failure to comprehend the interconnections found in Planetary Health. Public experts stipulate that a mix of unsafe food markets, unsafe wild animals' exploitation, and natural habitats encroachment generated conditions for the pandemic's outbreak (Brewington, 2020). Consumption and collection of wild foods are significant to rural people. However, when wild animals are introduced into a population and kept in unsafe conditions it creates ripe conditions for the emergence and movement of diseases into the human population. The conditions are evident in Asian wet markets. Similarly, destruction and disruption of habitats like unregulated and unplanned urban growth into farmland or natural habitat enable close contact between humans and wild as well as domestic animals. Without adequate public health measures, close contact generates excellent conditions for an infectious disease to move into the human host from animals. For example, rapid fragmentation and deforestation in West and Central Africa resulted in Ebola virus transfer to the local population from fruit bats. Islands are quintessential to the link between the well-being of humans and the management of natural resources (Brewington, 2020). Several islands depend on tourism income and imported foods for survival. Since the pandemic forced islands to close their borders to freight ships and travelers, the supply chain was interfered with forcing islands to adopt. For instance on Tonga island residents were given seeds to plant fruits and vegetables rather than relying on New Zealand imports (Brewington, 2020). The island represents a suitable example of adaptation to food insecurity resulting from the pandemic and move towards sustainable, healthier practices of agriculture. The pandemic impact on the islands provides hope for resilience and adaptation via better environmental practices. Therefore Planetary Health via ecological security is key post the pandemic.

Further, the pandemic triggered a move towards a circular economy by highlighting the weaknesses in the global supply chain and human impact on the environment. The global economy deeply depends on an interconnected supply chain maintained by over 100 billion tons of raw material that go into the system annually (Kechichian & Mahmoud, 2020). For decades the supply chain had been unsustainable and a few months after the virus broke it was evident that the global supply chain is fragile. A circular economy offers a solution to improving the resilience of the supply chain. Since the circular economy is built on the principle of keeping materials and products in use, designing out pollution and waste, and natural systems regeneration it can help in addressing the Sustainable Development Goals. If implemented it could enhance nutrient and water security as well as material resilience or security while mitigating climate change. Although the pandemic impacted the economy negatively, the earth began healing immediately. Cities across India started seeing the Himalayas as pollution cleared for the first time in years. At Venice canals, Dolphins came back and the levels of CO<sub>2</sub> decreased by approximately 17 percent (Romano, 2021). In the

short duration that people stayed at home, there was a noticeable change in the environment highlighting the need for a circular economy. Further, the circular economy was embraced through reuse, remanufacturing, and recycling practices. Raw materials were used in firms' production lines to create masks for compulsory use by citizens of countries like Brazil (Kechichian & Mahmoud, 2020). Due to supply-chain and manufacturing shortages in the health sectors sterilizing agents were employed in N95 masks decontamination to give them a second life and in Amsterdam, the Doughnut Economic model was implemented to decrease food waste by 50 percent as of 2030 (Kechichian & Mahmoud, 2020). Due to the significance of the circular economy during the pandemic, it will be a key component of post-pandemic recovery plans.

## **2、 Sustainable development and global climate change**

The 13th Goal of UN Sustainable Development is combating climate change and its effects. The goal seeks to integrate climate change initiatives into the policies of nations as well as improve institutional capacity, awareness-raising, and education on climate change early warning, impact decrease, adaptation, and mitigation (UN, 2022). Also, the goal calls for the application of commitments made at the United Nations Framework Convention on Climate Change and the promotion of measures that can enhance the capacity for effective management and planning of climate change in Small Island Developing States and least developed nations. The results document of The Future We Want Rio Conference highlights climate change as an urgent and inevitable global issue with long-term consequences for every country's sustainable development (UN, 2022). In the paper, member states outline their concerns regarding the persistent increase in greenhouse gases emission and every nation's vulnerability moreso developing nations to climate change's severe impacts. Due to the stated concerns, Member States have encouraged wide participation and cooperation of every nation in an appropriate and effective international action against climate change. There are calls for countries to work together in fighting climate change to ensure global sustainable development.

The pandemic significantly affected climate change adaptation and mitigation efforts globally. The activities of individuals who work in climate-based sectors were ruined by the pandemic because of the sudden stop to in-person climate-based meetings and decrease in personal communications. The Covid-19 pandemic negatively impacted the works associated with the sixth Assessment Report of the Intergovernmental Panel on Climate Change preparation (Filho et al, 2022). Also, it negatively affected the 26th Conference of the Parties of the UN Framework Convention on Climate Change scheduled for Glasgow but had to be postponed by eliminating personal exchanges and interactions during meetings (Filho et al, 2022). There were communication delays as more time was focused on covid based issues, climate actions were delayed, funding was decreased and planned deliverables were

suspended. Such challenges caused by the pandemic delayed sustainable initiatives meant to curb climate change.

### **3. European Union Current Threats and Opportunities for Regional Policy During and after the Pandemic**

Regional policy is the tool through which European Union invests locally. Addressed to every European Union cities and region, the policy has measures to enhance jobs and economic growth as well as enhance life quality via strategic investment. Due to the indicated form of European Union solidarity individuals in less developed areas can capitalize on opportunities created by the largest global markets (European Union, 2022). The regional policy of the European Union invests in individuals by promoting access to opportunities for social inclusion, education, and employment, supporting medium-sized and small businesses development, and bettering the environment via key investment projects. Also, the policy strengthens innovation and research through jobs that are research and investment-related as well as modernization of energy production and transport to counter climate change with emphasis on innovative infrastructure for transport and renewable energy. Due to regional policy, less developed areas in Eastern Europe are catching up with the other EU regions, Member States' convergence has increased and employment has grown (European Commission, 2022). However, less developed and middle-income areas in the south-western and southern EU are facing economic decline or stagnation, regional employment disparities are higher than before 2008 and regional internal disparities have increased within the rapidly growing Member States (European Commission, 2022). During the pandemic migrants found in low-income, nations were highly likely to contract the virus and thus highly represented in Covid-19 deaths and cases. They lived in unsafe and overcrowded houses, held informal jobs, and were minimally aware of Covid-19 preventive measures (European Commission, 2021). Nevertheless, they were not incorporated as priority groups by the rich EU Member States when issuing directives on immunization. The exclusion of migrants resulted in failure to create particular initiatives to reach them and failure to vaccinate migrants. Due to the high disparity in vaccination, the regional policy may be characterized as benefitting only particular groups in EU nations. Still, since the policy has been linked to a plunge in social exclusion and poverty it can be applied to increase access to healthcare in migrant communities in wealthy EU nations. Also, because of a lack of investment in research and development and weak innovation systems in regions that are least developed the innovative divide in the EU has increased (European Commission, 2022). The regional policy can also be applied to reducing the divide in access to vaccines by channeling investment to vaccine based R&D.

That said it is pertinent to assert that the pandemic triggered a move towards a circular economy, fostered actions towards ecological security, stopped sustainability initiatives meant to curb climate change, and outlined highlighted the loopholes in EU

Regional Policy in challenging regional inequality. Therefore, post-pandemic, nations and firms are expected to invest more in a circular economy. Also, individuals, communities, firms, and countries are expected to embrace sustainable approaches to maintaining ecological security. Moreover, talks and measures about sustainability initiatives towards climate change will resume and EU Regional Policy is expected to invest in R&D on vaccines and reduce regional inequality across the EU.

### References:

1. Brewington, L. (2020). *Covid-19 Pandemic Prompts a New Look At Ecological Security*. <https://www.eastwestcenter.org/system/tdf/private/ewwire061brewingt on.pdf?file=1&type=node&id=38521>
2. European Commission. (2022). *New Cohesion Report shows that differences between EU regions are narrowing thanks to EU support*. [https://ec.europa.eu/regional\\_policy/en/newsroom/news/2022/02/02-09-2022-new-cohesion-report-shows-that-differences-between-eu-regions-are-narrowing-thanks-to-eu-support](https://ec.europa.eu/regional_policy/en/newsroom/news/2022/02/02-09-2022-new-cohesion-report-shows-that-differences-between-eu-regions-are-narrowing-thanks-to-eu-support)
3. European Commission. (2021). *Challenges in the equitable access to COVID-19 vaccines for migrant populations in Europe*. [https://ec.europa.eu/migrant-integration/library-document/challenges-equitable-access-covid-19-vaccines-migrant-populations-europe\\_en](https://ec.europa.eu/migrant-integration/library-document/challenges-equitable-access-covid-19-vaccines-migrant-populations-europe_en)
4. European Union. (2022). *Regional Policy*. [https://european-union.europa.eu/priorities-and-actions/actions-topic/regional-policy\\_en](https://european-union.europa.eu/priorities-and-actions/actions-topic/regional-policy_en)
5. Filho, W. L., Hickmann, T., Nagy, G. J., Pinho, P., Sharifi, A., Minhas, A., . & Abubakar, I. R. (2022). *The Influence of the Corona Virus Pandemic on Sustainable Development Goal 13 and United Nations Framework Convention on Climate Change Processes*. *Frontiers in Environmental Science*, 10, 784466.
6. Kechichian, E. & Mahmoud, N. (2020). *The circular economy can support COVID-19 response and build resilience*. <https://blogs.worldbank.org/psd/circular-economy-can-support-covid-19-response-and-build-resilience>
7. Romano, O. (2021). *Can the Circular Economy Become the New Normal in Cities?* <https://www.oecd-forum.org/posts/can-the-circular-economy-become-the-new-normal-in-cities>
8. UN. (2022). *Climate Change*. <https://sustainabledevelopment.un.org/topics/climatechange#:~:text=Sustainable%20Development%20Goal%2013%20aims,global%20response%20to%20climate%20change>