

EGU21-15801

<https://doi.org/10.5194/egusphere-egu21-15801>

EGU General Assembly 2021

© Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.



How the COVID-19 pandemic is teaching us to tackle the climate crisis

Jan R. Baiker, Nadia Castro-Izaguirre, Christian Huggel, Simon Allen, Fabian Drenkhan, and Veruska Muccione

EClim Research Group, Department of Geography, University of Zurich, <http://eclim-research.ch>

More than one year after its first appearance, COVID-19 has spread to almost all territories around the world –including more than 93 million confirmed infections and 2 million reported deaths. The real numbers are probably substantially higher as unreported cases remain particularly high in countries with weak state welfare and institutions. To date the COVID-19 pandemic has had a strong impact on social, cultural and economic life, stretching from physical isolation to the exacerbation of global famines, and to the largest global economic recession since the Great Depression in the 1930s. It is therefore important to analyse and monitor in detail how this pandemic is being approached and managed by the different governments and in their specific environmental and socio-cultural contexts. Given the slow-onset character of climate change in developing clearly visible effects on a short term, the respective actions to tackle multiple impacts on natural and social systems lack priority and are often delayed. Nonetheless, the climate crisis is considered to be a comparatively fundamental existential threat to humanity.

Based on an extensive literature review, here we analyse the interactions between the COVID-19 pandemic and the climate crisis as compound impacts, i.e. systemic risks that have to be taken into consideration in national emergency programs and in disaster risk management. Human populations with limited resources and capacities tend to be more vulnerable to such exceptional crisis, and as such COVID-19 is exacerbating existing inequalities at national, regional and global levels. Nevertheless, the national responses to the pandemic and their accuracy are not only related to resources and capacities; there are also important political and social factors at play. For instance, the pandemic spread has triggered migration from cities to rural areas and, as a consequence, could lead to higher social-ecological pressures and accelerated land-use change dynamics including e.g. deforestation, changes in water provision and wetland loss in the rural areas. In turn, these impacts would most likely exacerbate the climate crisis. However, some of these risks can be transformed into long-term opportunities, such as a growing implementation of Nature-based Solutions in order to increase the resilience of ecosystems, virtual solutions that reduce travel and emissions (changing working conditions), renovation and diversification of the tourism sector towards more sustainability, and an increase in uptake of sustainable solutions (e.g., car-free days, improved / less energy consuming material and food supply-chains, agroecological production, etc.).

As a “stress test” this pandemic outbreak and ongoing crisis has already taught us several important lessons that should be considered for dealing with the climate crisis. These include the need and opportunity to redesign social-ecological systems as a whole, aiming for transformational change as a globally coordinated and locally implemented effort at all socio-political levels, in the framework of actions based on the principles of the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change.