COVID-19: lessons for sustainability?

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This briefing belongs to the ‘Narratives for Change’ series, which explores the diversity of ideas needed to move our society towards sustainability and fulfil the ambitions of the European Green Deal. The briefing reflects on the lessons learned from the COVID-19 pandemic. It asks how these lessons can be applied to our quest for sustainability and how we can govern our societies in a way that respects planetary health as a precondition for human and economic health.

Key messages

- COVID-19 can be seen as a ‘late lesson’ from an early warning. Environmental degradation increases the risk of pandemics. COVID-19 emerged and escalated through the complex interplay between drivers of change, such as ecosystem disturbance, urbanisation, international travel and climate change.
- The pandemic has shown that our societies have immense potential for collective action and change when faced with a perceived emergency.
- Thus far, the unprecedented agency shown by governments in responding to COVID-19 does not seem to have greatly served the cause of sustainability.
- Human health and environmental integrity are intertwined. A transition to a sustainable society and economy is necessary to protect human health.
- To ‘build back better’, society and governments must reflect on what to do differently and what to stop doing altogether.

COVID-19: a ‘late lesson’ from an early warning?

Thanks to the COVID-19 pandemic, 2020 was a year of involuntary as well as voluntary change. While there is still no consensus on how the infectious agent SARS-CoV-2 emerged, the study by Cheng et al. (2007) has been put forward as an example of an early warning. They wrote:

> “Coronaviruses are well known to undergo genetic recombination, which may lead to new genotypes and outbreaks. The presence of a large reservoir of SARS-CoV-like viruses in horseshoe bats, together with the culture of eating exotic mammals in southern China, is a time bomb. The possibility of the re-emergence of SARS and other novel viruses from animals or laboratories and therefore the need for preparedness should not be ignored (Cheng et al., 2007, p.683).”

Concerns about the risk of pandemics have been raised in the past by various institutions and governments (EEA, 2010, 2015), with some countries developing specific plans and strategies. However, following the 2009 influenza A (H1N1) pandemic, the World Health Organization warned that the world would be ‘ill-prepared’ to respond to a severe pandemic threatening public health (WHO, 2011). It was proved right.

Human progress depends on the ability and willingness to learn from the past. The way early warnings of environmental and human hazards emerge, and how they are dealt with, provides us with many ‘late’ lessons (EEA, 2001, 2013). These lessons can help pave the way towards more resilient and better-prepared societies. Previous EEA reports describe cases of unintended environmental hazards caused by the use of chemicals or other activities (EEA, 2001, 2013). These late lessons mainly highlight the need for precautionary approaches and how to strike a balance between desired economic opportunities and uncertain environmental harm.

The potential lessons from COVID-19 seem to run deeper than that. The COVID-19 pandemic is a stark reminder that our identity is deeply entangled with that of the Earth’s ecosystems. The idea that we are a part of nature and not separate from it is a concept that our sophisticated societies seem to have forgotten.

Pandemics in an age of globalised societies

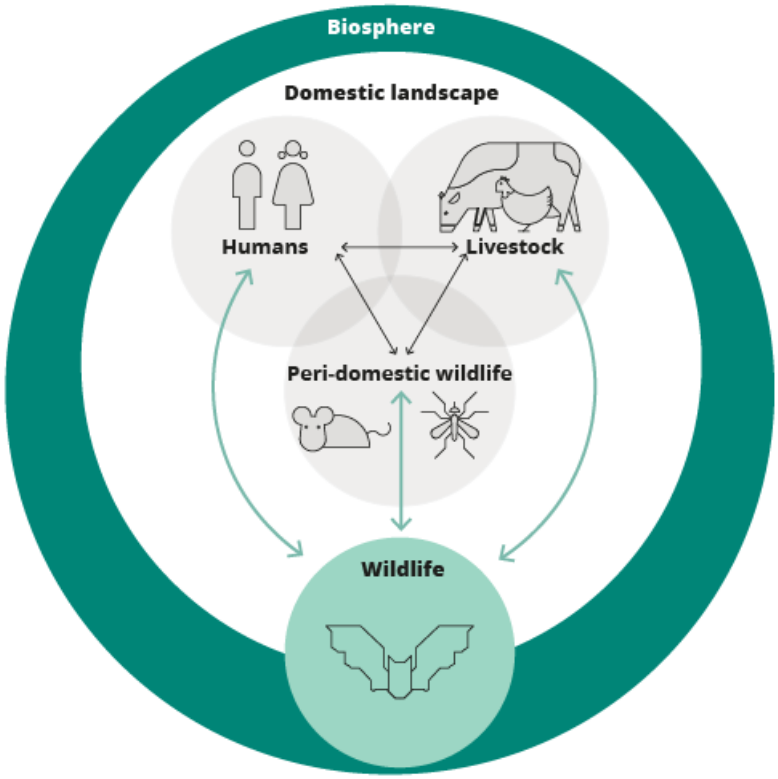
Plagues and pandemics have occurred throughout human history (Waltner-Toews, 2020). However, today’s globalised societies and economies, and the way we interact with the natural environment, affect the way pandemics develop. There is little doubt that new pathogens are often created at the interfaces between wild and domestic animals and humans, and that these sometimes manifest as zoonotic disease (Figure 1). According to the United Nations Environment Programme (UNEP, 2020),

‘60 per cent of known infectious diseases in humans and 75 per cent of all emerging infectious diseases are zoonotic’, while at least six outbreaks of novel coronaviruses were observed in the last century.

Several interacting drivers underpin the emergence of zoonotic diseases by creating novel and diverse contacts among wildlife, livestock and people. These include (1) population growth and rapid and uncontrolled urbanisation, (2) increasing demand for animal protein, with a consequent increase in exploitation of wildlife, agricultural intensification and trade, (3) inadequate husbandry practices and (4) poorly managed informal wildlife and fresh produce markets, and industrial meat processing plants (UNEP, 2020). It is also clear that today’s high levels of international trade and travel make pathogens spread faster, as ‘diseases can now move around the world in periods shorter than their incubation periods’ (UNEP, 2020).

Although the exact origin and natural reservoir of SARS-CoV-2 remains unknown, pandemics like COVID-19 are likely to be the outcome of the mechanisms described above. This is a stark example of how human health and the natural environment are intertwined.

Figure 1 Pathogen flow at the interface between humans, livestock and wildlife



Source: EEA (2020a), adapted from Jones et al. (2013)

More attention is also being paid to these complexities in policy fields outside epidemiology and public health, as health crises like COVID-19 have far-reaching implications for people and society at large. The Council of Europe recently addressed the relationship between pandemics and democracy, freedom of expression and the rule of law. It reminds us that the COVID-19 crisis should not be used as a pretext for restricting the public's access to information, and that emergency measures taken by Member States should not undermine EU's founding values of human rights, democracy and the rule of law (Council of Europe, 2020).

The EU Biodiversity Strategy for 2030 (EC, 2020a) and the Farm to Fork Strategy (EC, 2020b) explicitly relate COVID-19 to current levels of biodiversity loss. The sense of urgency accompanying COVID-19 appears to open a window of opportunity for heightened awareness. Numerous commentators, activists and researchers are discussing if and how the heightened awareness created by COVID-19 can be harnessed to increase environmental awareness (Beattie and McGuire, 2020) and reframe economic models (Barlow et al., 2020; The Economist, 2020). This also extends to nation states and inter- and supranational organisations such as the Directorate-General for Research and Innovation (DG Research and Innovation, 2021), the Organisation for Economic Co-operation and Development (OECD, 2021) and a number of major non-governmental organisations (for example the European Environmental Bureau (EEB, 2021)), which are involved in formulating post-COVID transformation strategies.

Where there's a will, there's a way

One positive thing that we've learned from COVID-19 is that contemporary societies are in fact able to 'act with necessary force' when required (Mahmood and Sanchez, 2020). New regulations can be quickly enforced, with certain social practices and economic activities even being prohibited. Airports, restaurants, sports arenas and schools can be closed overnight if the reason is considered legitimate (at least when it is seen as temporary). EU Member States have willingly taken measures against COVID-19 that have had enormous economic costs, along with creating the risk of economic recession and severe unemployment.

Can a similar level of responsiveness be mobilised for achieving transitions to sustainability (Scharmer, 2020)? The World Health Organization's estimate of seven million annual deaths due to air pollution would also justify strict measures. In light of COVID-19, it is hard to see how economic costs per se or the risk of recession can continue to be used as valid arguments against environmental action or transformations towards sustainability.

The post-corona planet: have we changed?

The global community will need years, if not decades, to assess the full extent of COVID-19 and its implications for our society, including its impacts on inequalities, health and the well-being of citizens

(EEA, 2020b).

Unprecedented national lockdowns, travel restrictions and the closing of national borders in the first half of 2020 and since have led to short-term improvements in the environment in Europe. Reductions in traffic, shipping and aviation led to sudden improvements in air quality and noise levels, with the concentration of nitrogen dioxide (NO_2) in some cities declining by up to 60% compared with the same period in 2019 (EEA, 2020c). The pandemic also had the immediate effect of encouraging people to choose more active modes of travel. The increase in cycling in particular has prompted cities to become more bike friendly, including by introducing new cycling infrastructure (Kraus and Koch, 2021; Nikitas et al., 2021). A reduction in human activity gave habitats the chance to recover and species the opportunity to occupy new spaces and niches (EEA, 2020d). Moreover, preliminary data show that EU greenhouse gas (GHG) emissions decreased by 10% from 2019 to 2020 (EEA, 2021a).

On the other hand, the need for protective and other disposable equipment has led to an increase in the production and consumption of plastics, and thus plastic waste (Ford, 2020; EEA, 2021b).

> ‘There is no use in trying to restore the status quo ante.’ (DG Research and Innovation, 2021)

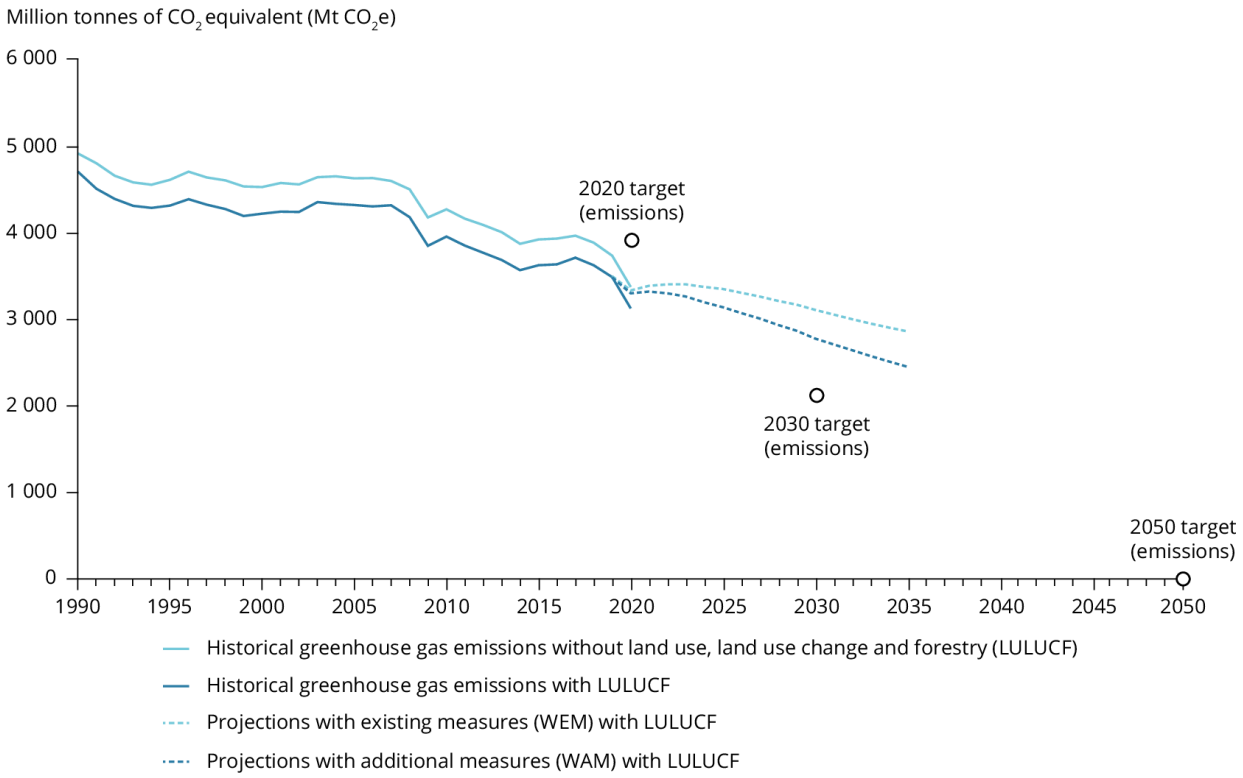
It is not only citizens who have had to change their habits. Policymakers also had to react quickly to the pandemic and its socio-economic impacts. The European Commission responded swiftly with NextGenerationEU, a recovery plan to ‘help build a post-COVID-19 EU that is greener, more digital, more resilient and better fit for the current and forthcoming challenges’ (EC, 2021). Taken together with the EU’s long-term budget, the volume of resources mobilised for the climate and environment is unprecedented. This creates hope for imagining a different future, one removed from the ‘old normal’ of unsustainability. Yet, it remains to be seen whether resources will be invested effectively.

As a society, we should learn from past experiences. The 2008-2009 financial crisis led to lower emissions, but the effect was short-lived (Peters et al., 2012). Now, once again, the imperative to emerge from economic recession and the apparent resilience of unsustainable political and economic priorities provide little hope that the post-corona planet will be more sustainable, unless there is an active and conscious change in social and economic practices.

Unfortunately, early signals are not encouraging. With the resumption of social and economic activity, concentrations of airborne pollutants are increasing, and in some cases returning to pre-pandemic levels (EEA, 2020d). Warnings have already been issued about a swift rebound in global energy demand and GHG emissions post COVID-19 (IEA, 2021; Tollefson, 2021), while nationally determined contributions at the global scale (Liu and Raftery, 2021) lack the necessary ambition to keep global warming within the 2°C degree target, let alone 1.5°C. On the European scale, recent

projections suggest that GHG emissions might bounce back to pre-pandemic levels unless additional measures are put in place (Figure 2) (EEA, 2021a).

Figure 2 Historical trends and projections of greenhouse gas emissions



Source: EEA (2021c)

More info here...

During the pandemic, we have struggled with and learned to cope with the crisis. For a time, we changed our daily actions and reoriented our priorities, valued things differently and perhaps appreciated the natural world around us more. Yet, the question remains as to whether we have changed in any fundamental way.

Now is the time to change

The COVID-19 pandemic has revealed the systemic frailty of our global economy and society (EEA, 2020e). It is not going too far to say that we are currently living in a world characterised by multiple global crises: a health crisis, an economic and financial crisis, a climate crisis and a crisis in nature (EEA, 2020e). One thing that the history of pandemics has taught us is that more pandemics should be expected (Waltner-Toews, 2020) and we should at the very least be prepared.

> ‘COVID-19 is not only a wake-up call, it is a dress rehearsal for the world of challenges to come […] The pandemic has taught us that our choices matter. As we look to the future, let us make sure we choose wisely.’ A. Guterres (2020), Secretary-General of the United Nations

Taking the early warning from Cheng et al. (2007) seriously would mean considering a range of measures globally, including tackling illegal wildlife trade, closing down illegal food markets, tightening the regulation of industrial meat production, changing social and cultural food practices and, ultimately, changing unsustainable patterns of consumption, urbanisation and natural habitat destruction (IPBES, 2020).

As highlighted by the OECD (2021), returning to business as usual would mean missing a vital opportunity to tackle underlying and interconnected environmental, economic, social and relational challenges that pre-date COVID-19. A well-being approach could guide the process of ‘building back better’ (OECD, 2021), especially if underpinned by the realisation that environmental health is a prerequisite for public health.

We do not lack knowledge or ideas for action. The limiting factor is agency, the agency to address the driving forces underpinning this and other global crises.

The next crisis, whatever form it takes, is likely to reveal itself for what it is: yet another symptom of the same underlying problem — unsustainable human production and consumption (EEA, 2020e). It is this chronic problem that continues to express itself in challenges that are framed either as ‘issues’ — to be addressed in premeditated policy cycles — or as ‘crises’ — requiring extraordinary and emergency measures (Lakoff, 2017). Therefore, our societies’ governance approaches should address not only the underlying roots of the problems themselves, but also the increasingly frequent or even simultaneous emergence of what we used to think of as exceptional crises.

To address the sustainability problem we face, social and economic practices must change across different levels and aspects of society: the way we live our lives and the way we eat, move and power our societies cannot remain the same. While enduring COVID-19 lockdowns, French anthropologist and philosopher Bruno Latour proposed an exercise of reflection (Latour, 2020). He suggested that we consider which suspended activities we would like to see gone for good and which we would like to resume; which brand-new activities or habits we would like to develop in the aftermath of the pandemic; and how workers or entrepreneurs disenfranchised by a reshaped economy might be helped to transition into other, more sustainable or more resilient roles or activities.

While this exercise can be performed individually, it also gives rise to fundamental questions that deserve attention at institution level. Given the wide recognition that sustainability transitions depend

on certain practices being phased out (EEA, 2019), the exercise could even serve as inspiration for the further development and implementation of the European Green Deal.

COVID-19 triggered sudden and forceful action. Emergencies have their own dynamics and risks, not least to democracy and legality. Yet, we have seen that, where there's a will, there's a way. Reflecting on the unprecedented mobilisation and impact of responses to COVID-19 can inspire new ways of thinking and help humanity to seize the moment and make a change. If we can temporarily shut down parts of society to survive the threat of COVID-19, it seems entirely reasonable that we can make significant societal changes to prevent COVID-22, -25 or -30, not to mention the other threats due to climate change and environmental degradation that we will most likely face.

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