

Covid-19 and the environment: worries for today, lessons for the future

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ABSTRACT

The essay highlights the multi- and inter-disciplinary approaches to COVID-19 pandemic through the lens of the environmental law debate. Firstly, the study addresses environmental and human interconnections, recalling the most advanced and authoritative scientific assessments. In the following parts the environmental law principles are discussed, focusing on prevention and precaution, with the aim of proposing some key-questions related to several critical areas: 1) impact of lockdowns on GhG emissions, 2) extraordinary measures on future environmental legislations, 3) constitutional values/fundamental rights, 4) common shared environmental principles and 5) new forms of bottom-up participation (e.g. digital activism).

KEYWORDS

Covid-19 Pandemic – Environmental Law – Precautionary Principle – Principle of Preventive Action

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1. The first impact of COVID-19: experiencing (again) human fragility

The global crisis induced by the spreading of the COVID-19 virus all over the world represents not only a threat for the survival of millions of people, but also a cultural and moral shock for the whole mankind. We have suddenly discovered that our intrinsic fragility (inscribed in every human DNA) cannot be completely protected by technology, a flourishing economy, or any 'securitarian' approach (coming from international organisations, the State or corporate powers).

The close relation between the COVID-19 Pandemic and environmental degradation also appears evident, for several reasons. Within the international debate several voices have underlined the link between the economic crisis brought by the Pandemic and environmental degradation. Adam Tooze, an historian from Columbia University, has recently suggested that we are living through the first economic crisis of the Anthropocene. Lawyers are not very familiar with this word: Anthropocene designates the contemporary geological era where humanity's ecological impact is determining a change in the atmosphere and, more generally, a degradation of the natural basis of life on Earth. But nature has started blowing back on us in random and calamitous ways. According to Tooze, 'the great acceleration that defined the Anthropocene may have begun in 1945, but in 2020 we are facing the first crisis in which the blowback destabilises our entire economy'.¹ Moreover, if the 'climate change crisis' requires to the common man an effort to watch at the over-

¹ A. Tooze, 'We are living through the first economic crisis of the Anthropocene' *The Guardian* (London, 7 May 2020) <<https://www.theguardian.com/books/2020/may/07/we-are-living-through-the-first-economic-crisis-of-the-anthropocene/>> accessed 4 September 2020.

all picture (because the causal link between climate change and natural disasters we are suffering today is less evident) ‘the remarkable thing about Covid-19 is that it brings the risks of the Anthropocene home to each and every one of us individually’, so that people themselves ‘have *en masse* decided on their own response to the threat, often ahead of their governments’ and ‘that was most dramatically reflected in the financial markets, which began a global run to safety’.²

2. Environmental degradation both causes and reinforces the diffusion of COVID-19

As legal scholars, we will not touch the medical debate about the scientific proof of a causal link between the pandemic and environmental degradation.

Here we can just report that, at the international level, there is a plethora of official documents, produced by United Nations related organizations, which are strongly underlining this connection. Back in 2016 the UNEP’s *Frontiers Report*, while recalling that ‘around 60 per cent of all infectious diseases in humans are zoonotic’, was warning that ‘never before have so many opportunities existed for pathogens to pass from wild and domestic animals through the biophysical environment to affect people causing zoonotic diseases or zoonoses. The result has been a worldwide increase in emerging zoonotic diseases and outbreaks of epidemic zoonoses’.³

This gloomy realization led to UNEP’s 2017 Resolution on Environment and Health, affirming ‘the strong interlinkages between environment and health, including health inequalities’, and the importance of ‘addressing them jointly by implementing the 2030 Agenda for Sustainable Development’.⁴ More recently, in the UNEP Statement on COVID-19, the executive director, while warning that ‘as we continue to relentlessly encroach on nature and degrade ecosystems, we endanger human health’ has officially stated that ‘75 percent of all emerging infectious diseases are zoonotic, i.e. viruses originating from the transfer from animals, whether domesticated or wild, to humans’.⁵

² Ibid.

³ UNEP, *UNEP Frontiers 2016 Report: Emerging Issues of Environmental Concern* (United Nations Environment Programme 2016) 18.

⁴ United Nations Environment Assembly of the United Nations, Environment Programme, Third session, Nairobi, 4-6 December 2017 UNEP/EA.3/Res 4, 2017; in the resolution it also explained ‘that human, animal, plant and ecosystem health are interdependent; emphasizes in this regard the value of the “One Health” approach, an integrated approach which fosters cooperation between environmental conservation and the human health, animal health, and plant health sectors’ (ibid. para 24).

⁵ F. Coimbra, *The Executive Director’s Statement to the 150th Meeting of the Committee of Permanent Representatives*, 30 April 2020 <<https://www.unenvironment.org/news-and-stories/speech/executive-directors-statement-150th-meeting-committee-permanent/>> accessed 4 September 2020.

From a different perspective, decades-long scientific assessments about environment and climate change, mainly conducted under the IPCC (the Intergovernmental Panel on Climate Change, another UN organization), have highlighted their interrelation. The current emergency introduced new elements of analysis, and several studies about the exposure to air pollution and COVID-19 mortality have been conducted, enhancing the concerns on the nexus between pollution and the diffusion of viruses. In Europe, and notably in Italy, the gravity of the pandemic in highly polluted and industrialized areas (i.e. Milan industrial district) confirms the evidences of these studies.

3. The effects of COVID-19 on the environment: the two sides of the same coin

The COVID-19 crisis has forced a sudden and general slowdown of many activities all over the world. Lockdowns have determined the closing of schools, universities and of a large number of productions and commerces considered as non-essential. Industrial production has been reduced and the impact of transportation has substantially dropped, from the international flights to the everyday routine of commuters and housekeepers. This has resulted in a considerable reduction both of carbon emissions and of global warming. In fact, according to the International Energy Agency, world's CO₂ emissions are expected to fall by 8% this year because of the global economic downturn. But there is another important effect. If, for centuries, humans have pushed wildlife into smaller and smaller corners of the planet, nature is pushing back. Wild boars have descended onto the streets of several cities like Barcelona and Haifa, mountain goats have invaded a town in Wales. Whales were freely moving into the Mediterranean seas, while dolphins could be found in the once overcrowded Bosphorus, near Istanbul. In sum, 'nature is taking back her rights'. But how long will this positive effect of COVID-19 on the environmental state of the planet last? What will happen when the pandemic eventually and hopefully subsides? It is most likely that carbon and pollutant emissions come back quickly, and in a certain way, they are already coming back. In many countries, the urge for economic recovery induced governments (following the example of United States) to announce plans to lower environmental standards or other related measures. This attitude has been harshly censured by the UN Special Rapporteur on human rights and the environment, David Boyd, stating that 'these actions are irrational, irresponsible, and jeopardize the rights of vulnerable people'. According to Boyd, 'such policy decisions are likely to result in accelerated deterioration of the environment and have negative impacts on a wide range of human rights including the rights to life, health, water, culture, and food, as well as the right to live in a healthy

environment'.⁶ So we are bound to face a serious 'environmental crisis' following the COVID-19 crisis.

A crucial arena to understand the direction of the economic recovery during and after COVID-19 is climate change action, the core of the environmental policies for today and for the years to come. The pandemic has delayed the UN Climate Change Conference COP26, set to take place in Glasgow in November, which has been be rescheduled for 2021. But here the good news is coming from the European Union that appears to be firm in its commitment to keeping up the pressure on an important reduction of carbon emission, with ambitious targets set for 2030 (and a promised carbon neutrality for 2050). In fact, EU has recently announced a € 750 billion recovery plan to pull EU economies out of the deep economic downturn caused by coronavirus. At the heart of the plan, the EU proposes to more than quadruple to € 40 billion the 'just transition fund', a specific monetary tool for climate transition, aimed at moving coal-dependent regions away from fossil fuels.

4. The use of environmental principles in the COVID-19 crisis: prevention or precaution?

The debates on the emergency measures and on the restrictions to individual rights and liberties normally fail to take into account a basic element: we are not facing an 'ordinary' emergency, like earthquakes, floods, fires or other natural disasters, against which we have 'disaster management' protocols and rules. The situation we are experiencing is not even comparable to the 'political' emergencies often referred to in many constitutional texts, arising from wars, invasions, armed uprisings, terrorist attacks. All these contexts require, in fact, the application of preventive measures (thus the application of the preventive principle) against an already experienced and known 'evil'. On the contrary, COVID-19 puts us in a different scenario, confronting an 'enemy' that we don't see and don't know. For environmental lawyers and managers this is a typical 'precautionary principle scenario'. In environmental matters (but this applies, of course, also to health problems), when we have enough scientific knowledge about a danger (e.g. air pollution), the preventive action principle leads legislators and administrators to prevent or limit the damages to the environment. In such cases, scientific evidence facilitates the adoption of preventive measures. When we run into a context of scientific uncertainty, as in the case of COVID-19, we need to apply the precautionary principle. This principle does not refer to a generic 'family man' precaution, but it is inspired by an anticipatory approach synthesized in the 1992 Rio Declaration on Environment and Development (Principle 15): 'Where there are threats of

⁶ Cf. <<https://news.un.org/en/story/2020/04/1061772/>> accessed 4 September 2020.

serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation’.

To frame properly the present situation, it is necessary to take a step back and recall some of the environmental law principles, and in particular the so called ‘triad’ of the environmental management principles traceable in European Union law: the ‘polluter pays’ principle, the principle of prevention and the precautionary principle. In their historical development (in EU law, but also in domestic environmental law all around Europe), these principles articulate the stages of the evolution of the relationships between law and science in environmental matters.

The ‘polluter pays’ principle calls upon lawyers and scientists to intervene when the environment has been damaged, by means of a cure aimed at restoration of the equilibrium, on the basis of a ‘curative model’.⁷ Normally it cannot restore the environment damaged or destroyed, but just offers a compensation (in most of the cases a pecuniary one). The principle of prevention, on the other hand, represents a step forward since it identifies the impact of human activities on the environment not as episodic and resolvable *a posteriori* (according to the curative model), but as a constant condition of individual and societal action. Environmental problems should thus be dealt with in advance, by prevention, with specific procedures such as for example the environmental impact assessment (EIA). This preventive approach is still based on a complete confidence in technical-scientific evidence as an instrument for the resolution of all environmental problems.

On the contrary, the precautionary principle intervenes at a different stage and is essentially based on the impossibility for legal or political actors to rely, in certain circumstances, on objective scientific data. In this sense, it is a typical post-modern legal principle. When confronted to unknown risks one becomes aware of the incapacity of science to apply solutions to environmental (and health) problems always and in every case. This demonstrates the insufficiency of the curative and preventive models illustrated above. Here the precautionary principle plays an emergency role, requiring the public actor called upon to tackle a situation of necessity to make choices in any event, even if not supported by scientific certainty. In such cases, one of the main elements of the precautionary principle arises: the re-expansion of political and administrative discretion regarding choices having an uncertain technical and scientific content. The precautionary principle brings out the changed legitimization between science and politics, placing the responsible political and administrative parties at the forefront of difficult decisions.⁸

⁷ For a complete assessment on the genesis of this principles see N. De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules*, Oxford University Press 2002).

⁸ On this important function of the precautionary principle see D. Amirante, *Codification and Technical Rules in Environmental Law: Reflections on the French Experience* in A. Biondi, M. Cecchetti, S. Grassi, M. Lee (eds), *Scientific Evidence in European Environmental Rule-Making. The Case of the Landfill and End-of-Life Vehicles Directives* (Kluwer Law International 2003).

Thus, what are the exact contours of the precautionary principle? Although there is an endless bibliography on the subject, I shall just make reference here to one of its best descriptions, contained in the Communication by the EU Commission on the precautionary principle.⁹

According to the EU Commission, ‘the precautionary principle should be considered within a structured approach to the analysis of risk which comprises three elements: risk assessment, risk management, risk communication’.¹⁰ The Commission warns out that ‘the precautionary principle, which is essentially used by decision-makers in the management of risk, should not be confused with the element of caution that scientists apply in their assessment of scientific data’, to conclude that the ‘implementation of an approach based on the precautionary principle should start with a scientific evaluation, as complete as possible’.¹¹ With regard to the measures to be taken, the EU also indicates an accurate shortlist. Thus, the measures based on the precautionary principle should be: ‘1) proportional to the chosen level of protection; 2) non-discriminatory in their application; 3) consistent with similar measures already taken; 4) based on an examination of the potential benefits and costs of action or lack of action (including, where appropriate and feasible, an economic cost/benefit analysis); 5) subject to review, in the light of new scientific data; 6) capable of assigning responsibility for producing the scientific evidence necessary for a more comprehensive risk assessment’.¹²

Are national states adopting the mainstream protocol of the precautionary principle, evaluating the gravity of the potential risk, declaring the social acceptability/non-acceptability of the risk, embracing proportional measures with respect to the risk, in a context of scientific uncertainty?

Within Europe not all the States have developed such strategies, but we can mention the example of Italy, one of the worst affected countries by COVID-19 in the old continent and the first Western country to enforce strict lockdown measures. The Constitution of the Italian Republic (1947) does not devise any rule for the declaration of the state of emergency (except for art. 78 on the declaration of the *state of war*). The state of emergency was then declared on January 31st in pursuance of a statutory provision: the *Civil Protection Code* of 2018,¹³ which allows the government to take ‘any necessary measure’ within the limits of the ‘general principles of the legal system’.

⁹ Cf. European Union, *Communication from the Commission on the precautionary principle*, COM/2000/0001 (02/02/2000), <<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52000DC0001/>> accessed 4 September 2020.

¹⁰ Ibid. 2.

¹¹ Ibid. 3.

¹² Ibid. 4.

¹³ Cf. Legislative-decree no. 1, 2 January 2018: the *Civil Protection Code* identifies the national civil protection authority in the President of the Council of Ministers, assigning him (art. 5) powers to adopt ordinances; the same *Code* then devises (art. 7) different levels of emergency: among them the most severe are the emergencies of national importance that must be addressed with extraordinary means and powers during defined periods of time. To deal with the national state

On February 23rd, the first of many such measures was approved: the *decreto-legge* 6/2020, which has empowered the competent authorities (indicated in art. 1, para. 1) to adopt ‘every containment and management measure adequate and proportionate to the evolution of the epidemiological situation’, leaving ample room for discretion; art. 2 provides that further containment and emergency management measures can be approved, in order to prevent the spread of the epidemic, even outside these cases. The latter are indeed taken through the legal instrument devised by art. 3, para. 1: the Prime Ministerial Decree (*D.P.C.M.*), i.e. decrees issued by the Prime Minister, which are administrative in nature and that set out in detail the rules on prohibited activities. Several more administrative acts have been established by individual ministries, like the Ministry of Health.¹⁴

Therefore, in the absence of specific constitutional provisions, all emergency measures have implemented in Italy in accordance with the law-decree 6/2020 (*decreto-legge*, a sort of ordinance enacted by the government in case of ‘necessity and urgency’¹⁵), followed mostly by administrative acts. In a speech to the Chamber of Deputies (*Camera dei deputati*) on April 30th 2020, the head of government Giuseppe Conte has justified such measures with an explicit reference to the precautionary principle, applied on the basis of the risk-analysis conducted by a Technical Committee appointed on purpose. In this case the experts were not ‘dictating’ measures to the government but drawing the scenario of possible risks. After some initial criticism coming from the opposition parties, this precautionary attitude of the Italian government has been largely accepted by the public opinion.

5. Guidelines for an investigation

In the light of the aforementioned issues, several aspects concerning the link between COVID-19 and environmental emergencies may stimulate the current legal debate, highlighting a variety of critical concerns, with some special focuses.

of emergency, the President of the Council of Ministers can adopt ordinances (art. 25), in derogation from any current provision, as long as they comply with the general principles of law and with the European Union law.

¹⁴ In fact, Law 883/1978 – the law that established the Italian National Health System – is still a fundamental legal basis for these administrative acts, as art. 32 states: ‘the Minister of Health can issue *ordinances of contingent and urgent nature*, regarding hygiene and public health and veterinary police, with efficacy extended to the whole national territory or to part of it comprising several regions’.

¹⁵ Cf. Art. 77, Constitution of Italy: ‘When in extraordinary cases of necessity and urgency the Government adopts provisional measures having the force of law, it must on the same day present said measures for confirmation to the Houses which, even if dissolved, shall be summoned especially for this purpose and shall convene within five days. The decrees lose effect from their inception if they are not confirmed within sixty days from their publication’. Law-decree 6/2020 has thus been confirmed, modified and converted into Law 13/2020.

5.1. Specific Environmental laws, regulations, measures and protocols during the COVID-19 emergency

The unexpected spread of the COVID-19 resulted in the adoption of extraordinary rules with different legal strengths and aims. For instance, in South-East Asia (e.g. South Korea, Hong Kong, Singapore) protocols have been adopted since the SARS and the MERS epidemics in the Early 2000; in other cases, to the complete absence of a legal regime, legal systems replied with the application of already existing environmental legislations, considering the pandemic as a form of ‘natural disaster’ (e.g. India). In either case, we are observing diverse kinds of ‘legal efforts’: national, regional, and international. This scenario raises three main interrogatives: how are single states or regional institutions/organisations (like EU, ASEAN, SAARC, etc.) taking into account environmental concerns during the emergency? Are they consciously referring to the precautionary principles applying its codified rules, i.e., ‘uncertain risk’ evaluation and proportionality of measures? Is there any different or analogical application of environmental legislation to cope with the emergency?

5.2. Impact of the lockdown on GHG emissions and administrative assessments/regulations

As previously underlined, science is emphasising the nexus between the environment and the actual emergency, especially referring to the rate of mortality cases in high-polluted areas. This is one aspect of the issues that merges COVID-19 and the environment. The forced lockdowns and the complete stop of production activities allowed scientists to get data on the quality of air after the reduction of the GhG emissions. This could accelerate the efforts for energy transition, while for others this is a chance to reasonably increase pollution according to the pre-emergency standards. This raises two main questions: is there any specific legal assessment to deal with the pollutant activities during or after the COVID-19 emergency? Is there any change in state or regional policies especially referred to GhG emissions?

5.3. Impact of extraordinary measures on future environmental legislation and climate change policies

The global pandemic, the states of emergency, and the national responses have repeatedly originated, ‘rollbacks’, in environmental laws and regulations. In some cases, such legal downgrade affected environmental policies; in others, the current situation accelerated the ongoing and silent reversion to the previous regimes. In other words, we are witnessing to some attempts in using the COVID-19 as a pretext for environmental law downgrades. Nevertheless, this trend is just the negative side of a more complex phenomenon.

Despite of serious risks of an environmental/climate change regulation collapse, the impact of the lockdowns on GhGs emissions produced an expansion in protection measures, extending them to previously neglected law areas. In these cases, legal systems must deal with environmental issues in a more pertinent way, stimulating future legislative actions and not mere policies or soft-law arrangements. At the same time, we have to note that, globally, renewable energies have been more ‘resilient’ than fossil fuels during this crisis.

This may encourage more investments in this sector, considering it a priority in the future (public and private) expenditure to redress the economic system.

5.4. Impact on the constitutional values/fundamental rights

In many established democracies COVID-19 crisis encouraged a blatant authoritarianism, favouring the tilt of the state power towards executive branches. In some cases, especially in South America, this strong change in democracy's dynamics created human rights and humanitarian issues (e.g. Brazil, Ecuador).

The new emergency approach also led to a different understanding or interpretation of constitutional rights. In fact, many rights and duties could possibly be remodelled or implemented, considering the environmental issues and discussing the role of the human-kind and the outcomes of its activities. Furthermore, the emergency set another variable in the twofold link between rights and health, going further the single understanding of the environment in a 'right-or-duty-key', but also as part of the triad health/environment/rights. The adoption of this perspective will produce a new legal ratio: every time there is a right or a duty related to health, it will encompass the environment. From this – probably brave – assumption, it would be interesting to investigate the new role of the environment according to the previous constitutional schemes, also in the light of public and individual health.

5.5. Impact on common and shared environmental principles

In the last fifty years, international community's efforts produced a body of shared principles regarding many aspects related to the environment. These instruments, whether they are implemented or neglected, have been able at least to demonstrate the seriousness of specific issues (i.e. Ozone Layer Depletion, Protection of Flora and Fauna, Climate Change, etc.), reinforcing state and supranational efforts. From these aspects, some questions arise: is the already existing body of environmental principles able to cope with the Covid-19 pandemic? Are new forms of principles unavoidably or expected? There will be effects on the implementation of environmental law principles in state legal systems through explicit legislations or innovative systems of litigation?

5.6. Proliferation of Digital Activism (talks and digital climate strikes)

The unpredicted crisis also made unusual responses, such as new forms of top-down concerns and bottom-up participation. According to this last assumption, in recent times environmental activism promoted the development of the 'environmental democracy' concept, an intersection of recognised principles (access to justice, information, participation) and the civil society's demands. The worldwide imposed lockdowns strengthened distances and barriers among countries and people, also influencing climate strikes. This phenomenon led the shift to different forms of participation, from the 'real' and 'individual' to the digital ones. From this trend three fundamental questions arise: does digital activism set the decline of environmental movements or a new step forward? How is civil society re-shaping its own participatory interests? Is this a form of 'environmental democracy'?

Such ideas have a significant impact in opening a legal debate, concerning three main areas: national, international, and comparative law. According to the aforementioned—and still recent and open—issues, the debate may evolve on the evaluation of the legal measures adopted within single state jurisdiction or more of them, with the aim of setting a comparative inquiry, highlighting nexuses, analogies, differences, approaches and new developments or declines.