Five Steps Towards A Global Reset: Lessons From COVID-19

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Abstract

COVID-19 has stimulated calls for a "Global Reset" to address major global challenges and "build back better." This Intelligence Briefing makes the case that the experience of COVID-19 itself, and in particular the role of multiple systems in the cause, severity and effects of the pandemic, shines light on the vital steps needed to advance a Global Reset. It brings together the evidence that the causes, severity and effects of the COVID-19 pandemic emerged from the interconnections between multiple systems, notably environmental, health, political, social, economic and food systems. It then uses this evidence to identify five practical steps needed to advance a global reset. First, train systems leaders. Second, employ a new cadre of "systems connectors." Third, identify solutions across systems. Fourth, manage trade-offs for the long- and short-term. Fifth, kickstart system redesign for co-benefits. Implementing these steps will be extraordinarily challenging given the short-term imperative to recover. But for any business, organisation, government or UN agency serious about addressing long-term sustainability challenges, the opportunity is there to use these five practical actions to press the global reset button.

Key words: COVID-19; systems; connections; build back better; systems leadership; trade-offs; food systems; economy

Introduction

Major challenges to global sustainability have been met with numerous calls to do things differently. The Sustainable Development Goals call for "bold and transformative steps" (UN, 2015). The 2019 Global Sustainability Report concluded that to achieve sustainability, "transformations" will be needed across a range of different systems (IGS, 2019). The Financial Times believes it's "Time for a Reset"—of capitalism itself—to ensure that corporations pursue profit with purpose rather than with undue costs to environment, society and health (FT, 2019).

Many across business, government, civil society and academia now see the COVID-19 pandemic as the opportunity for change—to "build back better." In their "Manifesto for a healthy recovery from COVID-19," the World Health Organization (WHO) argues that COVID-19 highlights the "false economy" of short-term policy-making and argue longer-term approaches are necessary for a "healthier, fairer, and greener world" (WHOa, 2020). In the context of the inequalities revealed by COVID-19, the UN Secretary General is proposing a "New Social Contract" (UN, 2020). On the basis that "the inconsistencies, inadequacies and contradictions of multiple systems—from health and financial to energy and education—are more exposed than ever," the World Economic Forum echoes the Financial Times in appealing for "The Great Reset" (WEF, 2020).

Yet what should such a reset look like? This Intelligence Briefing proposes that resetting systems to resolve long-term challenges will require five proactive changes to the way things are currently done. It identifies these changes from the evidence that solving major challenges - from pandemics to poverty, climate change to malnutrition - requires multiple systems to work synergistically (Atkinson and Nabarro, 2020). Specifically, this briefing draws on the evidence that the causes, severity and effects of the COVID-19 pandemic emerged from the interconnections between different systems. This Intelligence Briefing brings this evidence together and uses it to identify five vital steps needed to enable a global reset.

The role in multiple systems in COVID-19

Although numerous uncertainties remain, the evidence indicates that the causes, severity and effects of COVID-19 cut across multiple systems, as did the responses to it (Nicola et al, 2020; Everard et al, 2020). This Briefing focuses on six: environmental, health, political, social, economic and food systems (Figure 1). These systems can also be thought of as subsystems of one system. For example, health, the environment, society, politics and economics are all subsystems of the food system (Parsons et al, 2020).

<<Figure 1. The multiple systems involved in COVID-19: Examples of causes, effects, responses and influences on severity > >>

Environmental system

More evidence is needed to understand the exact origins of COVID-19. But it is clear that, broadly speaking, its origins lie in human impacts on the environmental system driven by economic concerns. Activities like deforestation, human settlement, mining and building transport infrastructure have led to closer interaction between animal pathogens and human populations, facilitating the transfer of viruses between animals and humans, as was the case for COVID-19 (Cheval et al, 2020; UNEP, 2020; Andersen et al, 2020). Evidence shows that 71.3% of new infectious diseases, including COVID-19, have transferred to humans from wildlife, with the number increasing significantly over time (Jones et al, 2008). Researchers have concluded that the risk of transmission of these pathogens is higher when animals have had to adapt to human-dominated landscapes in the context of loss of habitat and biodiversity (UNEP, 2020). Intensive agricultural production has also led to higher levels of interaction between wildlife and livestock, again increasing the probability of transfer from animal to human (Jones et al, 2013). Human trade of wildlife has become more common, bringing humans into ever closer contact with animals, again facilitating spillover of viruses to humans (UNEP, 2020).

Human disruption of the environmental system also appears to play a role in the severity of the disease: researchers have hypothesised that pollution may worsen the effects of COVID-19 for individuals by impairing the "first line of defence of the upper airways" (Mehmood, 2020; Cheval et al, 2020). At the same time, the reduction of economic activity in response to the pandemic appears to have benefited air quality in built-up areas (Cheval et al, 2020). There are also some predictions that greenhouse gas emissions are lower as a result (Le Quéré et al, 2020). On the other hand, the increased use of nonrecyclable materials in protective equipment in the health system may worsen water pollution (Cheval et al 2020). Environmental systems thus play a key role in the origins and severity of COVID-19 and are, in turn, impacted by the responses to contain it.

Health system

Once the coronavirus arose and started to spread, the primary burden for responding to it lay with the health system. The WHO's diagnosis was that effectively managing the disease requires health system capacities to be in place to "detect, test, isolate and treat every case and trace every contact" (WHO, 2020b). Their formal guidance treatment called on countries to develop effective emergency response systems, building capacity to detect the disease and care for patients, ensure hospitals have the necessary staff and supplies, and deliver life-

saving medical interventions (WHO, 2020c). As put by the WHO Director General, "the best defence against any outbreak is a strong health system" (WHO, 2020d).

Yet many countries faced major challenges in testing, tracing, providing critical care, and accessing sufficient human resource capacity to do so (Chersich et al, 2020). There were widespread reports from around the world that health systems were, as a WHO spokesperson put it, "collapsing under the pressure of too many cases" (CNCBC, 2020). Despite evidence that protective equipment is effective in preventing transmission to the health workforce (Liu et al, 2020), supplies have been inadequate (WHO, 2020e), and many healthcare workers have died. There is also concern that other necessary health services are being compromised as a result of capacity being taken by the COVID-19 response (WHO, 2020f). By being key to the response, health systems capacity thereby influenced the severity of the disease within and between countries (Walker et al, 2020).

Political system

Primary responsibility for implementing the response to COVID-19 lay with the political system. With a clear imperative to react, politicians everywhere were affected. Underpinning decisions at the international, national and municipal levels around how to respond were concerns about the human cost, the burden on health system and the trade-offs involved. Along with policy choices about health systems, the primary policy to alleviate its severity was "social distancing" (WHO, 2020g). Policymakers in at least 160 countries imposed "lockdowns" to limit person-to-person transmission (Hale et al, 2020). While lockdown policies varied significantly in their type, stringency and timing, common measures included restrictions in meeting people outside of the household, limits on public gatherings, closing schools, physical distance measures and travel restrictions (Hale et al, 2020).

Political leadership appeared to be key to in influencing the effectiveness of the response (Forman et al, 2020). In some countries, such as Brazil, the UK and the US, policy responses were widely criticised for being inadequate and blamed for high numbers of deaths. By contrast, the rapid and comprehensive political response in countries such as Denmark, New Zealand and Vietnam appears to have mitigated the severity (Hinchman et al, 2020; Potter, 2020). While empirically measuring the relationships between the lockdown response and incidence rates is tricky (Hale et al, 2020), political choices about the degree of social distancing measures do appear to have influenced the severity of the virus (Thu et al, 2020). Geopolitical interests also played out at an international scale as national governments and the UN agencies jostled for political power and influence.

Social system

The lockdown measures implemented to reduce the spread of COVID-19 had major effects on social systems since people were unable to interact as before. It was already well-established prior to the pandemic that social isolation is a major risk factor for a range of poor health outcomes (e.g. Leigh-Hunt, et al 2017). Demand for mental health helplines reportedly surged during lockdown (e.g. Smith and Lim, 2020) and evidence showed that enforced quarantine led to anxiety, depression and post-traumatic stress (Brooks, et al., 2020). Experts voiced concern about mental health problems unleashing a "second pandemic" (Choi et al 2020). There were also reports of increased levels of domestic abuse and child abuse (Bradbury-Jones and Isham, 2020; Taub, 2020).

Yet the social system also responded positively to COVID-19. There are numerous examples of self-organised community groups and community kitchens, of neighbours supporting vulnerable people, carrying out food shopping and collecting medical prescriptions, and people connecting via electronic platforms. Another aspect of the social system, however, influenced its severity: social attitudes influenced if people actually adhered to social rukes (Pedersen and Favero (2020). It has been reported from the United States, for example, that social attitudes towards science affected degree of compliance with lockdowns (Brzezinski et al, 2020). Social systems were thus profoundly affected by COVID-19, but also played a role influencing its severity and the response to it.

Economic system

As described in the environmental system, human economic activity played a major role in the origins of COVID-19; it was also one of the systems most severely impacted. By cutting consumption and reducing people's ability to work and produce, social distancing measures sent economic shock waves throughout the global economy (World Bank, 2020; Gopinath, 2020b). In the United States, for example, total retail sales fell 8.7% in March 2020 (Warren, 2020). With clothing seeing the greatest decline (50.5%), this had major repercussions for economies that supply these clothes, with millions of jobs reported to be lost in Bangladesh, Cambodia, China and Vietnam (Nortajuddin, 2020). China's economy is reported to have declined by 6.8% in the three months of 2020, the country's first recorded contraction (Kuo, 2020).

With global GDP growth falling 3% in April and 4.9% in June 2020, the International Monetary Fund (IMF) is predicting losses to the global economy of over $12 trillion in 2020–21 (Gopinath, 2020a) and the worst economic depression since the 1930s (Gopinath 2020b). In response, they are recommending that "fiscal policy should urgently provide sizable support for affected people and firms during the pandemic" (IMF 2020b). Governments everywhere have put into place fiscal stimulus packages and monetary policies (IMF 2020a, Hale et al, 2020). Global fiscal support of over $10 trillion and easing of monetary policy is

reported to have prevented fallout from being even worse, especially in higher-income nations (Gopinath, 2020a). The negative consequences of lockdowns on economic activity was also a major driving force behind political decisions about how and when to "re-open" economies.

Economic downturns also impacted heavily at the household level through loss of jobs and income (e.g. Tran et al, 2020), exacerbating existing inequalities given risks were greater for pooorer households (e.g. Qian and Fan, 2020). The policy response has been a range of measures to support families financially. As of June 12, 2020, 173 countries had enacted 621 such measures, including cash transfers and in-kind food and voucher schemes (Gentilini et. al, 2020).

Food system

At the very start of the pandemic, consumer stockpiling in many countries led to food shortages in shops. While the impact was short-term, social distancing measures then had longer-term ripple effects across the system. By shutting down food service outlets, small stores and markets, limiting the movement of the food workforce, restricting transportation, and influencing consumer demand, lockdowns affected the ability to produce and sell food (FAO, 2020; Swinnen and McDermott, 2020; Haddad et al, 2020). At the same time, innovations such as e-commerce and local direct producer-consumer marketing initiatives sprang up to keep supply chains moving (Hawkes, 2020).

The impact on the food system was intimately connected to the impact on the economic system, in part because the food system is an economic system. In addition, the economic impact of the pandemic on the ability of household to afford food compounded problems of production and supply to affect food access. In this context, national and local governments, businesses and community groups put into place food vouchers and meal schemes for people negatively affected economically and vulnerable and self-isolating groups (C40, 2020). Despite these efforts, international bodies have voiced major concerns that COVID-19's dual economic and food system impacts could prompt a widespread food crisis. The FAO/WFP (2020) predict a food crisis in at least 27 countries "as the pandemic's knock-on effects aggravate pre-existing drivers of hunger." Research suggests there could be a 14.3% increase in the prevalence of wasting among children under age 5 (Headey et al, 2020). It is also being reported that the re-focusing of health systems on the pandemic combined with budget shortfalls has reduced capacity to deliver basic undernutrition interventions (FAO/WFP, 2020).

While much of the focus has been on the impact on the food system, the food system also played a major role in the severity of COVID-19. Before the pandemic, unhealthy diets were

estimated to be the second leading single cause of global ill-health and premature mortality in the world (Gakidou et al, 2016). During the pandemic, it emerged that conditions directly associated with unhealthy diets - obesity and non-communicable diseases – raise the risk of complications of COVID-19. Evidence indicates that obesity, especially more severe obesity, is associated with increased death rate and/or treatment requiring invasive ventilation (Palaiodimos et al, 2020; Goyal et al 2020, Busetto et al 202; Tan et al, 2020; PHE, 2020). Hypertension, diabetes and heart diseases – all of which are influenced by diets – have also been found to increase risk of complications and hospitalization (Cummings et al 2020; Wiersinga et al, 2020). The food system wasn't just affected by COVID-19: it played a major role in its severity.

Implications for a global reset

The evidence in this Intelligence Briefing illustrates how the existence and severity of COVID-19 was a function of activity in multiple systems and the interconnections between them. By bringing together the evidence on the original causes, cross-system effects, severity and response to COVID-19, it becomes possible to see how the different systems combined to influence the burden of COVID-19 (Figure 1). Two systems – economic and environmental – had an interconnected role in the origins of the pandemic. The economic system was the "first cause" through disrupting the environmental system. All systems influenced the severity of the disease – how many people contracted it, the extent to which there were complications and mortality - indicating that every system has a role to play in mitigating it. All system also effected each other: responses implemented to address problems in one system inevitably led to effects on others. Lockdowns, for example, had negative spillovers on economic, social, and food systems. Political leaders thus had to make choices about trade-offs between one negative effect over another, choices that influenced the severity of the disease. Historically, political choices have favoured short-term over longer-term goals, as reflected by the prioritisation of economic goals over reducing the risk the transfer of pathogens from animals to humans. Similarly, choices about the food system have failed to prioritise diet-related health, also influenced the severity of COVID-19.

The role of multiple systems and the interconnections and contradictions between them over the short- and long-term provide important lessons on what is needs to happen to effectively and sustainably manage global challenges more broadly. Five actions emerge as vital to enable change (Table 1).

Step 1. Train systems leaders. If people with responsibility for solving global challenges cannot think in a systemic way, they will not be able to understand nor apply solutions across multiple systems. Systems leadership skills are thus paramount in moving the reset forward (Nabarro, 2020). Systems leadership is "a set of skills and capacities that any individual or

organization can use to catalyse, enable and support the process of systems-level change" (Dreier et al, 2019: 4). It requires an "understanding of the complex systems shaping the challenge to be addressed," the ability to "see and explain whole systems as well as their components" and "to engage with systems from multiple perspectives at the same time" (Atkinson and Nabarro, 2019). This mindset is necessary to enable working across system boundaries "with the explicit goal of creating change on complex, systemic issues" (Dreier et al, 2019: 4, 7; Atkinson and Nabarro, 2020b). Such a mindset is not typical among decision-makers and managers, given the focus of past decades on linear, competitive and often inward looking leadership, with the main goal of maximising organisational performance. Building systems thinking skills is thus a crucial role for universities and leadership training programmes everywhere.

Step 2. Employ a new cadre of systems connectors. Without the human capacity in organisations, businesses and governments to engage and connect with other systems, the ability to implement change will be severely limited. Building this function into existing jobs will not be sufficient given the evident complexity of the work. What is needed instead are a new cadre of professional "system connectors" whose job it is to make connections across multiple systems. These "system connection managers" can be thought of as the double-headed arrows in diagrams of complex systems. They would be charged with solving specific problems, not fixing systems per se. Food systems, for example, contain multiple problems (e.g. diet-related ill health, malnutrition, climate change, water, livelihoods, etc.), each of which needs a connector to work across sub-systems to solve the problem.

Step 3. Identify solutions across systems. The first task of the systems connector is to identify what needs to change in each system to prevent, mitigate and treat the problem across all relevant systems/sub-systems. Given the build-up of evidence in recent years, many of these solutions will already be known; the task is to bring them together and place them within a multi-systems context. This step is important for establishing the roles each system would ideally play in solving the problem. However, because acting in one system effects on others, an ideal solution in one system may have negative knock-on effects in another, as shown very clearly in the case of COVID-19. The next step is thus to identify and manage trade-offs.

Table 1. Five Vital Steps for a Global Reset

Step		Why	How
One	Train system leaders	People with responsibility for solving global challenges need to be able think in a systemic way in order to understand the need for and apply, solutions across multiple systems	Systems leadership training becomes standard in all universities courses; existing leadership training programme incorporate systems thinking skills; schools teach critical thinking skills across the curriculum
Two	Employ a new cadre of system connectors	Human capacity is required to identify interconnections, understand other systems, and collaborate internally and externally to effect change and ground the reset in everyday operations	Create roles in organisations, businesses and governments explicitly designed to address a named global challenge by managing interconnections between systems
Three	Identify solutions across systems	Preventing, mitigating and managing the human impact of global challenges requires changes across multiple systems	Gather evidence and use systems analysis techniques to identify the roles of different systems in solving the problem,
Four	Manage trade-offs	Interconnections between systems means there will always be trade-offs which require active management over the short- and long term in order to balance the different effects and interests involved	Engage intensively across systems to find win-wins where possible and identify new incentive structures that could enable them.
Five	Kickstart system redesign for co-benefits	Not all trade-offs can be managed since there maybe inherent conflicts between the way different systems are designed	Identify opportunity spaces where synergies can be created, advocate and implement actions to force the hand of redesign, and facilitate the process

Step 4. Manage trade-offs. Managing trade-offs involves making hard choices about the relative costs and benefit of one impact over another. The huge challenge for reset will be how to take the longer-term view for sustainability and human wellbeing when there are so many short-term political and economic interests at play. In the case of COVID-19, for example, fiscal stimulus packages have mitigated some of the negative economic consequences. Yet their goal has tended to be to re-stimulate demand – i.e. to get people

consuming again. While this will have short-term benefits, over the long-term it places further pressures on the environmental system.

Managing trade-offs also extends beyond making tough decisions about costs and benefits to recognising and managing a minefield of vested interests, power relations and contradictions and conflicts between different systems. For example, government regulation in the food system of the marketing of foods associated with obesity makes sense as an action to increase resilience to COVID-19 over the longer-term. Yet this threatens the economic system in terms of food businesses attempting to recover in the shorter-term. The dilemma here is that the trade-off involves *other* systems managed by a different set of people and interests (thus the need for systems connectors). New ways of acting will be needed to engage intensively to find win-win situations where possible, identifying what incentive structures are needed to enable win-wins, and negotiating compromises where necessary using system leadership skills.

However, there will be cases where trade-offs are intractable. For instance, the current economic system is inherently reliant on consumers consuming more than is sustainable for environment, health and society. As put by the Global Sustainability Report 2019, "creating economic growth just by increasing consumption of material goods is no longer a viable option at the global level" (UN DESA, 2019). There can thus be no ultimate win-win over the long-term; there is an inherent and intractable conflict, an indicator that the design of the economic system is fundamentally flawed and cannot be managed by trade-offs alone. Rather, the system needs to be redesigned so that it inherently produces co-benefits for other systems.

Step 5. Kickstart systems redesign for co-benefits. Lack of feasibility in managing trade-offs is an indicator that for sustainable, longer-term solutions, systems need to be redesigned to achieve different goals in synergy with one another (Parsons and Hawkes, 2018). Policymakers, businesses and organisations need to "proactively act to identify potential co-benefits during the [policy] design stage and shape implementation criteria to maximise impact" (Hepburn, 2020). Crucial in this regard is identifying opportunity spaces that can be leveraged in the short-term to force the hand of a systems redesign in the longer-term. One example to kickstart the process now would be imposing conditionalities on businesses in return for COVID-19 financial support packages. For example, in the United States, politicians proposed that the economic rescue package require airline companies to cut emissions by 2050 to 50% below 2005 levels (a goal to which the industry is already committed) (Tollefson, 2020). It was not adopted by US Congress, showing the limitations imposed by lack of political leadership. Nevertheless, there are many opportunity spaces; a key role of systems leaders and connectors is to identify them and to act within their own

powers, recognising that part of systems leadership is recognising “it’s up to us” and “I can make a difference” (Dreier et al, 2019).

The lessons drawn from the evidence on the role of multiple systems in COVID-19 are not necessarily new. The importance of addressing root causes and social determinants of health has been part of the dialogue for decades (CSDH, 2008). Much of the sustainability conversation has been about the need to give greater priority for longer-term goals. Indeed, this was the core of the Sustainable Development Goals (UN, 2015). The call for systems leadership and managing trade-offs likewise preceded COVID-19 (Dreier et al, 2019; IGS, 2019).

But the context is new. So if businesses, organisations, governments and international agencies are really serious about a global reset, now is the time to put these five steps to work, regardless of who else is doing so. The steps essentially provide a mechanism to hold them accountable: if they are not taking them, they are not doing enough. With the short-term imperative to recover, though, this will be extraordinarily challenging. Given how hard it will be, those who are already taking such steps should share their experiences to enable others to learn from them, so advancing the collective courage needed to press the global reset button.

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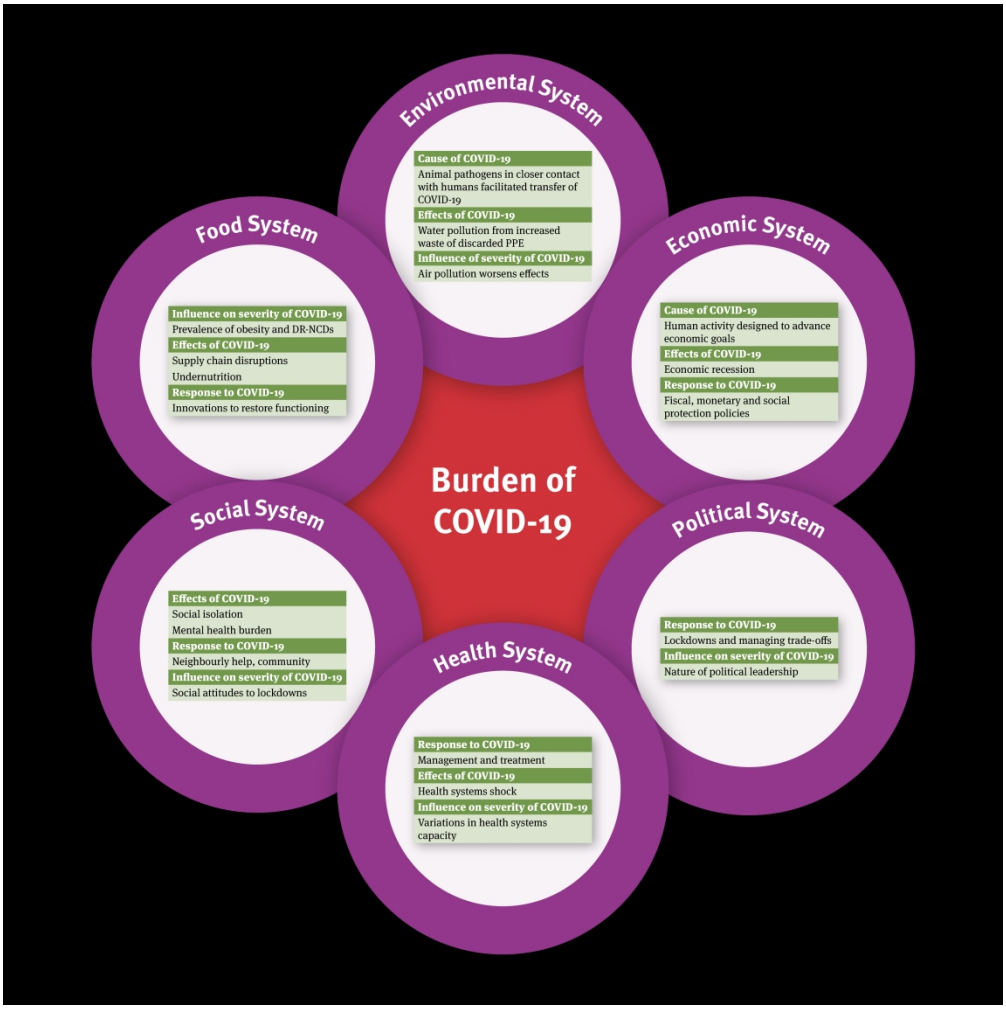

Figure 1. The multiple systems involved in COVID-19: Examples of causes, effects, responses and influences on severity

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