

Sustainability First Essay Competition

“How do we build from the current corona crisis towards a more sustainable future?”

As the world mobilizes its resources to tackle the COVID-19 pandemic, economists and advocates are becoming increasingly worried that policymakers will place sustainability issues on the back burner. Though the pandemic is a black swan event¹, it is important to remember that at its core, it is an environmental issue – a zoonotic disease that jumped into our species due to illegal wildlife trade and loss of natural habitats. While climate change is environmental as well, unlike the coronavirus, it is a grey rhino event² – imminent and a lot more destructive. Therefore, it is necessary that sustainability be an essential part of the measures taken by nations to recover from the pandemic.

This essay will argue how governmental policy and institutional change can help the world build a more sustainable future from the current crisis. Focus will be placed on the mobilisation of investments from the fiscal stimulus packages towards sustainable development. The argument will then diversify to encompass other policy measures as well. Throughout the course of the essay, the analysis will be suited and applied to the scope of public utilities, particularly energy and water, to show how the coronavirus pandemic has given us an opportunity to address sustainability issues in those sectors.

The first step towards sustainable recovery from the pandemic is the reassessment of our definition of ‘economic recovery’. From closed shopping malls to restricted air travel, steps taken to contain the virus have pushed economic activity to a standstill. As of 14th April 2020, the International Monetary Fund projects a 3% decline in the global economy due to ‘the Great Lockdown’ under the assumption that the virus fades in the second half of the year³. To stimulate economic activity, governments around the world have increased spending to unprecedented levels. The IMF estimated that by mid-April, these revenue measures amounted to \$3.3 trillion along with an additional \$4.5 trillion in the form of loans and equity injections.⁴ Before we discuss the efficacy of these measures, it is important to understand our goals and question the indicators that we prioritise. Most nations wish to recover the GDP growth rate and that is where the fundamental problem lies. Why? Primarily because the aforementioned level of fiscal spending is seen only once in a generation as it drains government savings. The 21st Century, however, poses a plethora of social and ecological challenges beyond COVID-19 such as land degradation, food insecurity and climate change- challenges which lay excluded in the myopic goal of reviving GDP growth. Therefore, in order to recover sustainably, we need to reorient policy towards a model which encompasses these pressing challenges. The ‘Doughnut model’ proposed by Oxford Economist Kate Raworth is best suited for this purpose and should be pursued by governments across the world.

Doughnut economics emphasizes on balancing economic activity in the Goldilocks zone between a social foundation, below which people are deprived of basic needs, and an ecological ceiling above which we damage Earth’s life-giving systems. It replaces the goal of GDP growth with sustainable development and urges nations to take policy decisions which are dynamic, distributive by design and acknowledge that the economy is embedded in a greater ecological

¹ Taleb, Nassim Nicholas. *The Black Swan: the Impact of the Highly Improbable*. Taylor and Francis, 2017.

² Wucker, Michele. *The Gray Rhino: How to Recognize and Act on the Obvious Dangers We Ignore*. St. Martins Press, 2016.

³ *Global Economic Effects of COVID-19*. Congressional Research Service, 1 May 2020, fas.org/sgp/crs/row/R46270.pdf.

⁴ *Global Economic Effects of COVID-19*. Congressional Research Service, 1 May 2020, fas.org/sgp/crs/row/R46270.pdf.

structure.⁵ The large fiscal stimulus packages may just be a one-time opportunity for governments to finance and adopt this model. Nations must follow the lead of Germany and South Korea in developing ‘Green Stimulus Packages’⁶ and recover from the pandemic keeping humanity’s broader challenges in mind.

A Green Stimulus Package must consist of both short and medium-term solutions to boost the economy, create jobs and counter the economic shock. The short-term solutions should follow three principles in order to be effective. The first is that they must be pro-poor. This means that they should create a large proportion of labour-intensive jobs. Second, they should be shovel-ready, meaning that chosen projects should not require extended planning. Finally, they should be sustainable. With the general principles in place, we see that projects such as reforestation, land restoration and sustainable agriculture all adhere to these principles and are great options for state investment. These strategies would be particularly effective for developing countries and could be followed by the creation of other service-oriented jobs such as those of conservationists and recyclers.

While the short-term solutions aim to counter the immediate unemployment and uncertainty caused by the pandemic, I believe that medium-term solutions should focus on compensating for the lack of demand and investment from the private sector. This would require large investments in domestic projects which aim at reviving the major sectors of an economy, such as construction, heavy industry and energy. Such fiscal measures have already been adopted in packages announced by German Chancellor Angela Merkel and Malaysian Prime Minister Muhyiddin Nassin. These funds should be channelled into the sustainable construction of the next generation of infrastructure- infrastructure which will lie well within the rings of our doughnut model.

Over the last decade, the world has undergone massive urbanization with over 50% of the population now living in cities. However, almost 60% of the area expected to be urban by 2030 is yet to be built.⁷ The processes used to create this infrastructure will have far-reaching ecological and social impacts. From buildings and public transport that are ill-equipped for social distancing, to hospitals which are unable to rapidly expand capacity, the pandemic has highlighted entrenched flaws in our urban planning. Therefore, the projects that are financed by the stimulus packages must build structures that are not only environmentally responsible, but also meet this urban demand in ways which would make us better equipped for such health emergencies in the future.

From photovoltaic cells to green roofs, efficient sanitary fittings to smart building fabrics, energy and water conservation, along with biodiversity enhancement should be at the centre of all schemes aimed at the construction industry. Likewise, sustainable construction should be a driving factor in awarding public infrastructure projects to private companies. The low interest rate loans and tax cuts must support companies willing to use and manufacture recycled materials, reduce construction waste, etc. to promote the practice of these methods. Adopting these policy measures simultaneously will further countries on the path of developing a sustainable future.

⁵ Raworth, Kate. *Doughnut Economics*. Random House UK, 2018.

⁶ Wettengel, Julian, et al. “Germany’s Top Politicians, Companies Throw Weight behind Green Stimulus.” *Clean Energy Wire*, 14 May 2020, www.cleanenergywire.org/news/germanys-top-politicians-companies-throw-weight-behind-green-stimulus.

⁷ Raworth, Kate. *Doughnut Economics*. Random House UK, 2018.

The high inflow of fiscal spending could finally provide an opportunity to adequately invest in a resource from which benefits exceed hundreds of billions of dollars annually: water. Research highlights that annual global economic losses due to water insecurity amount to \$260 billion due to inadequate water sanitation and supply, along with an additional \$94 billion due to the insecurity faced by irrigators.⁸ According to the OECD, benefit-cost ratios for investment in water and sanitation has been reported as high as 7:1 in developing countries.⁹ Though the economic figures build a strong case for investment in water, we have still not seen adequate financial inflows into the sector. This is primarily due to the under-valuation of water by investors such as land use planners and the capital-intensive nature of its infrastructure.

Presently, water is an advantageous investment because it allows governments to tackle several issues in a single stroke. Spending on water sanitation, groundwater storage and the like will firstly act as an economic stimulus for sectors such as construction, energy, etc. It is important to note that water projects often have a significant impact on the environment and correcting these externalities is often costly. With the decreased concerns about fiscal deficits, governments can utilize this opportunity to promote organisations which provide ecosystem services and catalyze the growth of that industry. Finally, the long gestation period of water projects is particularly advantageous as it allows investment to serve a dual purpose. In the medium-term, investment acts as a fiscal stimulus whereas in the long-term, it allows governments to value water appropriately. How? By the time governments begin supplying water from purification projects, for example, it is likely that the economic blow of the pandemic would have softened. This would allow governments to introduce policies which reflect the true value of water (possibly increasing prices) without exasperating the present crisis.

These policies would price water after including its economic value derived from productive uses (drinking, irrigation, etc.) as well as its ecological value derived from supporting biodiversity, storing groundwater for shortages, etc. Currently, the latter is often ignored. Measures like the *Bellagio Principles of Valuing Water*¹⁰ should be adopted and developed by governments, as they place a value on water by considering its diverse benefits. Only through the correct valuation of water can countries boost financial flows into the sector and mitigate the overexploitation of this resource. With changing rain patterns and unforeseen droughts, it has become all the more necessary to make this correction.

Having analysed how sustainable development can take place in the context of public infrastructure and water, let us now understand how we can pursue the doughnut model in the energy sector. The record low prices of renewable energy coupled with the low oil prices due to the pandemic¹¹ can catalyse the growth of clean energy sources. According to the lead analyst of the *New Energy Outlook 2019*, “Solar photovoltaic modules, wind turbines and lithium ion batteries are set to continue on aggressive cost reduction curves of 28%, 14% and 18% respectively for every doubling in global installed capacity.”¹² This has fuelled the rise of solar and wind energy as the cheapest energy sources in many countries. For example, wind

⁸ *Financing Water - Oecd.org*. www.oecd.org/water/Policy-Paper-Financing-Water-Investing-in-Sustainable-Growth.pdf.

⁹ *Financing Water - Oecd.org*. www.oecd.org/water/Policy-Paper-Financing-Water-Investing-in-Sustainable-Growth.pdf.

¹⁰ *BELLAGIO PRINCIPLES ON VALUING WATER Preamble*.

sustainabledevelopment.un.org/content/documents/15591Bellagio_principles_on_valuing_water_final_version_in_word.pdf.

¹¹ Sharma, Gaurav. “Oil Has Recovered From Record Lows But \$40 Prices Unlikely Before Q3 2020.” *Forbes*, Forbes Magazine, 25 May 2020, www.forbes.com/sites/gauravsharma/2020/05/25/oil-has-recovered-from-record-lows-but-40-wti-prices-before-q3-2020-covid-19-unlikely/#7abbbb93f9a.

¹² Cullinane, Danica. “Wind and Solar Energy Now Cheapest Forms of Power in Two-Thirds of the World.” *Small Caps*, 19 Sept. 2019, smallcaps.com.au/wind-solar-energy-cheapest-power-two-thirds-world/.

energy is now the cheapest source of energy in 9 countries including Germany, Canada and the United Kingdom. Solar energy too has also topped the charts as a cheaper alternative to coal in nations like France and South Africa. These trends make it evident that it is more affordable now than ever for governments to invest in renewable projects.¹³

Oil prices have also hit a record low as a joint result of reduced demand due to the pandemic and geopolitical tensions between the Russian Federation and the Middle East. According to the International Energy Agency, fuel aids, in the form of policies that lower the prices of fuel for consumers, cost governments around the world an estimated \$500 billion annually.¹⁴ Due to the current low price of oil, governments can redirect this investment to renewable energy. Coupled with the increased affordability of solar and wind energy projects, these investments can help reinvigorate the energy sector. Therefore, the pandemic's impact on the oil market can be harnessed to shift public funds from non-renewables into renewable energy, allowing countries to develop sustainably two steps at a time.

While the policy measures highlighted above do promise a sustainable future, it is important to note that they could be rendered ineffective if not complemented with a social safety net which allows individuals to take up the green jobs being created. The pandemic has pulled at such nets around the world and revealed the weak strings all across. After 20.5 million people filed for unemployment in the U.S.A. by April, the unemployment system gave in. From its archaic code to ingrained barriers preventing the distribution of benefits, revamping the system revealed problems that had been left unnoticed for decades. Such barriers exist in systems across the world and contribute to the friction that prevents labour from moving into green sectors. Governments can improve these social nets by developing two schemes in particular: portable benefits and training programs. Portable benefit schemes allow workers to access pensions, medical aid, etc. from a non-employer group (Eg. The Freelancers Union). By making them independent of an employer, it makes it easier for workers to move between jobs. Training programs, on the other hand, allow individuals to re-skill for upcoming jobs. With solar installers and wind technicians already recognized as the fastest growing professions in the U.S.A¹⁵, focusing on retraining workers in fields like water quality mechanics and solar cell technicians, governments can complement their investment into green sectors with a workforce ready to take up the available jobs.

Having analysed the fiscal stimulus packages, let us now look at broader policy changes that will help countries create a sustainable future. The first measure is a worldwide crackdown on illegal animal trade. According to the WWF, illegal wildlife trade not only targets highly endangered species, but is more to obtain animals in a more environmentally damaging way¹⁶. Stronger law enforcement and stricter deterrents can play a huge role in the protection of species as well as prevention of future pandemics. Secondly, governments can issue conditional loans or bailouts which require companies, especially in the aviation and heavy industry sectors, to meet certain green targets by a given date. This could include percentage reductions in waste generated, carbon emissions, etc. Such loans could ensure that the funds given to these companies percolate to green sectors as well. Finally, emphasising on the circular economy while rebuilding damaged supply chains would contribute to a significant reduction in the total

¹³ Cullinane, Danica. "Wind and Solar Energy Now Cheapest Forms of Power in Two-Thirds of the World." *Small Caps*, 19 Sept. 2019, smallcaps.com.au/wind-solar-energy-cheapest-power-two-thirds-world/.

¹⁴ "Low Oil Prices: An Opportunity for Fuel Subsidy Reform." *IGC*, 19 Jan. 2016, www.theigc.org/blog/low-oil-prices-an-opportunity-for-fuel-subsidy-reform/.

¹⁵ Abigail Hess. "The Fastest-Growing Job in the US Is Expected to Grow 105% by 2026-Here Are the Other 19." *CNBC*, *CNBC*, 6 Mar. 2019, www.cNBC.com/2019/03/06/here-are-the-20-fastest-growing-jobs-and-how-much-they-pay.html.

¹⁶ "Unsustainable and Illegal Wildlife Trade." *WWF*, wwf.panda.org/our_work/wildlife/problems/illegal_trade/.

waste generated worldwide. The circular economy creates an ecosystem of materials by designing production processes that exploit interdependencies across sectors and create feedback loops for materials¹⁷. By emphasising on raw material reuse, it can make noteworthy contributions to improving the health of the planet.

In conclusion, let us sum up the arguments to understand how the world can build a more sustainable future from the current crisis. Firstly, and most crucially, countries must shift their priorities from recovering GDP growth to building a dynamic balance under the doughnut economic model. With this goal set, they must channel the funds from their stimulus packages towards short-term solutions which provide immediate benefits to the poor and the environment. A major portion of this expenditure must also go towards medium-term solutions such as investments in the renewable energy and construction sectors. The pandemic also provides an opportunity to invest in water and correct how it is valued. Countries should complement the aforementioned expenditure with improved social security nets to allow people to take up green jobs. Along with the fiscal stimulus package, governments can also adopt other measures such as regulating wildlife trade and developing a circular economy which would help develop a sustainable future. We have before us an opportunity to pivot away from the grey rhino and define the future of not just our species, but our planet. We must not waste it.

(2369 words)

¹⁷ Wilson, Georgia. "Circular Economy: the Future of Supply Chain." *Supply Chain Management | Supply Chain Digital*, Supply Chain Digital, 27 Feb. 2020, www.supplychaindigital.com/supply-chain-management/circular-economy-future-supply-chain.