COVID-19 AND THE ENVIRONMENTAL PREDICAMENT

Abstract

The contemporary idea of politics, and everything else that has been caught up in the whirlpool of interconnectedness has linked local and global issue into every а comprehensive whole. Therefore, issues like human rights, environment, terrorism that were once seemingly confined to the boundaries of a state have now transcended their territorial space and have emerged as global issues. Any kind of response on the part of the international community to deal with these issues need to reconcile the severity of these issues with the globalized central feature of capitalist modernity. i.e.. self-seeking individuals. unhindered economic growth, materialism, development, a drive towards homogeneity and overt form of interconnectedness. This work is an attempt to understand and analyse these issues in the context of a relentlessly globalized world.

Keywords: Covid – 19, Environmental Quandary, Plastic Materials, Waste Management, Population.

Author

Moutusi Paul Choudhury

Assistant Professor Department of Political Science St. Xavier's College (Autonomous) Kolkata, West Bengal, India. moutusi.paulchoudhury@gmail.com

I. INTRODUCTION

The narrative arc of global politics has undergone unpredictable changes owing to unexpected discontinuities from established tendencies like covid. Therefore, predicting how important issues like environment, human rights, and terrorism might shape international relations is probably a task best left to mysteries and physics (Doran, Zeiss, 2000). Nonetheless, apart from these uncertainties that has almost become the hallmark of global politics, there are certain issues like environment and human rights concerns are gradually shifting from being a 'polite fiction' to having significant impact on global politics. Again, terrorism, since September 11 has resurfaced as an issue that potentially redefined the idea of security. Therefore, the present generation has been grappling with the impact of these issues – actual and potential. It doesn't take a psyche to determine the adverse consequences if we don't undertake a concerted effort to deal with global environment crisis, a faltering human rights account and a resurgent problem of terrorism.

Analysing these issues, and their impact on global politics, in the light of one of the most tumultuous events that the present generation is likely to experience ever again. An event that has shaken our understanding of stability and security. The global pandemic – Covid-19 has left many countries in a condition of economic shambles, exposed faltering health care system of not just third world countries but also the developed nations. But more than anything else, the pandemic has exposed the problem of an overtly interconnected world – evident by the spread of the deadly virus. But on the other hand, it has also reemphasized the positive impact of greater co-operation and concerted effort on a global scale, as shown by the development of covid vaccine at a global level by the co-ordinated efforts of all the countries – developed as well as developing. Covid-19 altered the way global politics is perceived, where conflicts and co-operation are also shaped by this pandemic. In fact, with spread of the deadly virus, our definition and conceptualization of power has changed. Nations with all the wealth is no longer powerful, rather developing countries who dealt with the pandemic with more innovative efforts are shaping the new definition of power.

The spread of covid-19 is also a remainder of our powerlessness in the face of nature and death. Today, men are more use to the idea of a foreseeable world where risks are managed and brought under control through technological innovations powered by innovations in science. However, the idea of a free-floating virus wreaking havoc had been unfathomable for mankind. The present crisis has created a potent fix of fear and apprehension regarding how the future will unfold. The brooding shadow of the pandemic has taken a long time to lift and people are still reeling under the impact of various health related issues that has intensified after the pandemic.

Developed countries that were well equipped to deal with the contagion have also come to terms with their limitations in the face of such a crisis. Britian was the first country to approve a newly developed vaccine and get a large number of its population vaccinated, still the deadly grip of the disease was impeccable. For most of the Southern countries, the dependency on the developed world for scientific knowhow required for the development of the vaccine slowed their ability to contain the virus fast. However, when the immediate threat of the pandemic was dealt with, the world was faced with challenges that in normal times would have dominated global political arena. Among them perhaps – though not always recognized as important by those who are at the helm of constructing the security narrative – is the global environment crisis.

II. THE ENVIRONMENTAL QUANDARY

In recent years, extreme weather conditions have necessitated heightened attention on the cost of an ever-warming world, the narrowing window to cut emission and prevent catastrophic global heating of the climate. Environmental crisis has never appeared more prominently in the agendas of the states, private corporations, non-governmental organizations, and hybrid-governmental systems. Each have recognized the importance of staving off this crisis and have come with innovative measures. Yet all these initiatives are falling short of the ever-escalating ecological problem. It requires re-envisioning the complex relationship between the society and the environment. The Paris Agreement on Climate Change (2015) for the first time committed all countries to setting targets to reduce greenhouse gas emission. Such commitments need to be renewed by all global players to substantially make a positive impact on the environment. In this regard, the role of scholars of global environmental politics is important, as it is on them to set the directions for a revitalized research agenda on the area.

However, the persistence of old environmental problems compounded with the new ones due to the outbreak of the pandemic. The novel coronavirus has caused unprecedented impact across the globe at social, economic, political, environmental, and health care level. The initial effect of the pandemic on environment owing to shutdown of industrial facilities, power plants, decreased vehicles on road had a visibly positive impact – such as lower level of pollutants, reduction in noise pollution etc, because of low commercial activities (Lodeiro, Martinez, Santos & Oliveira, 2020). But these encouraging effects were short lived as countries across the world had to come to terms with the adverse-affects of various practices of covid times.

The use of alcohol-based sanitizers, mass disinfectants were the order of the day. Other alcohol-based solutions that were and still are widely used are isopropanol or ethanol and anti-bacterial soaps that generally contains triclocarban and triclosan are common in every house-holds. Triclosan is a known health hazard and known to give rise to anti-biotic resistant strains of bacteria (Yueh & Tukey, 2016). These chemicals can cause endocrine disruption, liver cancer, and have severs neurological effects (Yueh & Tukey, 2016). These chemicals adversely affect not just human beings but also the environment as they do not degrade easily and remains in the environment and contaminates the aquatic life.

1. Pollution due to Plastic Materials: The pandemic has changed the way we live and these changes are here to stay for a very long time. Sanitizers, gloves, face-shields, and single use masks are critical for not just people in general, but they have become an absolute imperative for front-line workers. The necessary use of masks, gowns, PPEs, have led to an abrupt surge in the use of plastics and this trend has led to an increase in plastic pollution worldwide. Therefore, increased use of plastic and their safe disposal has become a matter of grave concern. Apart from increased plastic pollution, biomedical waste generation worldwide due to the pandemic and the recurrent health concerns that followed the pandemic has also become a matter of grave concern (Lodeiro, Martinez, Santos & Oliveira, 2020). India at present is producing approximately 550 tons of biomedical waste per annum. All these factors are bound to have a hostile effect on the eco-system because every component of the eco-system is intertwined with each other. In order to deal with the debilitating affect of the virus, it became a must for every person to regularly wash hands using soaps and use sanitizer which eventually goes to the water

bodies. These soaps and alcohol containing products are toxic to aquatic life. Such products are also harmful to soil. The extensive use of single-use masks has also become a major issue. Large number of these masks have ended up in streets, public places like parks, scattered across roads and sidewalks. As these plastic products like masks and PPE kits reach oceans, they are likely to pose a serious threat to marine life (Lodeiro, Martinez, Santos & Oliveira, 2020).

2. Waste Management: The global problem of hazard and toxic waste management has compounded manyfold due to the pandemic. Apart from the waste generated due to the use of products to deal with the virus, hazardous waste is dangerous byproduct of a wide range of human activities including manufacturing, farming, construction, hospital and even house-hold activities (Luhar, Luhar & Abdullah, 2022). On a global scale human produce more then 400 million tons of waste. Less then 50% of this waste is not recycled. The global market for waste is \$ 410 billion, but disposing this waste safely is an expensive undertaking. Thus, the developed countries usually ship it to other poorer parts of the world – known as dumping, which has emerged as a big problem for the developing countries of the South (Luhar, Luhar & Abdullah, 2022).

The global waste management system was one of the most impacted sectors during the COVID-19 period, wherein the most pronounced and adverse ecological impacts were noticed (Luhar, Luhar & Abdullah, 2022). Moreover, the capacity of health care facilities was overloaded by infected patients; hence, patients were advised to selfisolate and quarantine at their residences, which deepened the issue of household hazardous waste. In regard to testing, treatment, as well as following-up of the protocols, different public health protection directives and measures essential to prevent the spread of this pandemic have altogether resulted in a surge in the exigency for and the enhanced use of essential personal protective gear, such as face masks, rubber boots, hand gloves, white gowns, hand sanitizers, etc.; personal protective equipment (PPE), goggles, protective face shields/face screens; protective clothing; disposable life support equipment; general plastic supplies; medical-use gear such as test kits, syringes, plastic containers, bandages, tissues, etc., thereby leading to a substantial escalation in waste (Klemeš, Jiang, 2020). This kind of idiosyncratic and novel hazardous waste use was recorded to amount to 3.40 kg/day for each COVID-19 patient, which was also found to be higher in some developing nations and provinces such as Hubei, China, with a roughly 600% increase (Klemeš, Jiang, 2020). As a result, the addition of such abnormal and unexpected wastes generated from the COVID-19 pandemic added fuel to the dilemma of the pre-existing challenge of environmental contamination, leading to escalating concerns for the global waste management sector and environmentalists, too (Boucher, 2019).

The Sixth Global United Nations Environmental Outlook (GEO-6) 2019, made the most comprehensive assessment of the state of the environment across the globe. It outlined some of the most pressing problems facing the earth – issues like, overpopulation, urbanization, consumption, climate change and rising temperature, over exploitation of the natural resources leading to the loss of bio-diversity and increased stress on the eco-system. Substantially growing global energy demand and although the renewable power production has increased over the last decade; it is yet to meet the necessary requirement (Global United Nations Environmental Outlook 6 Report, 2019). **3. Population:** The dramatic increase in world population (9 billion by 2030 of which 3 billion will be middle-class consumers) is expected to put unprecedented pressure on natural resources and therefore, there is a growing argument in favour of a circular economy, that will support sustainable development. A circular economy is where industrial system and natural resources are used in a restorative and regenerative manner. The underlying principle of a circular economy is that there is no waste due to recycling and production of new useful materials from used ones (Global United Nations Environmental Outlook 6 Report, 2019).

Rapid population growth was triggered by dramatic reductions in mortality, especially in the less developed regions, where average life expectancy at birth increased by over 20 years during the second half of the century. As a result, world population has increased by nearly two- and one-half times since 1950, with the global rate of growth peaking at 2.04 per cent per year during the late 1960s. Annual increments of 86 million persons during the late 1980s were the largest in history. The world added its most recent billion people in just 12 years (from 1987 to 1999), the shortest period in history for an increase of 1 billion (Worldometers, Current World Population).

Owing to declining fertility, however, global population growth has decreased significantly. Between 1965-1970 and 2000-2005, world fertility declined from 4.9 births to 2.7 births per woman. Estimates suggest a current growth rate of 1.2 per cent per year and an annual net addition of 77 million people. Despite fertility declines to relatively moderate levels, the number of births continues to increase owing to the growth in the number of women of childbearing age. While in 1965-1970 the average annual number of births in less developed regions was 101 million, today this number is estimated at 120 million. World population is expected to continue growing. Based on the medium-fertility variant, which assumes replacement-level fertility of 2.1 children per woman, global population is projected to reach 9 billion people in 2043 and 9.3 billion in 2050. However, future population size is sensitive to small but sustained deviations in fertility levels. For example, a low-fertility variant, in which fertility reaches about half a child lower than in the medium-fertility variant, results in a population that declines to 7.9 billion in 2050. In contrast, a high-fertility scenario, in which fertility reaches about half a child higher than in the medium-fertility variant, produces a population of 10.9 billion in 2050 (Population, Environment and Development, The Concise Report, United Nations New York, 2001).

III. CONCLUSION

The circumstances of the COVID-19 epidemic across the world have proved debilitating. However, some of the unexpected environmental benefits such as a substantial fall in carbon footprints; air and water contaminants; coal and energy consumption, etc., together with major global infrastructural modifications are noteworthy but the downsides in the form of the environmental harm linked largely to the indiscriminate waste management sector in many parts of the world during the pandemic are alarming in the approaching post-pandemic world (Jambeck, 2017), which can be summarized as follows:

• A larger quantity of hazardous medical and other waste generation and its systematic management alongside the health and safety crises associated with the handling,

collection, transportation, and final methodical disposal of such wastes from society to the individual;

- The possible health hazards associated with frontline workers, health care workers, informal waste collectors, and the general public living in the vicinity of the waste disposal yards alongside the financial issues;
- The unexpected surge in perilous waste and plastic safety gear and packaging will adversely influence the common recycling competence and other waste clearance processes which presents a key long-standing negative impact on the terrestrial and marine environment;
- The new PPE contamination on land and in coastal areas has led to a novel situation for handling and dumping as well as probable issues for the health of the general public living in contact with such haphazardly disposed items.

The twentieth century has been a century of unprecedented population growth, economic development and environmental change. Therefore, negotiating an effective and equitable long-term global agreement on climate change continues to remain an extraordinarily difficult challenge for the international community today. Apart from problem of waste management, dramatic increase in world population has put tremendous pressure on environment, that is further compounded by the pandemic. It would need a determined effort on the part of the world community to create an integrated mechanism to deal with the problem of environmental degradation.

REFERENCES

- [1] Doran, W. John & Michael R. Zeiss, *Soil health and sustainability: managing the biotic component of soil quality*, Applied Soil Ecology, Vol. 15 (2000) pp: 3–11.
- [2] Lodeiro, Carlos, José Luis Capelo-Martínez, Hugo M. Santos & Elisabete Oliveira, *Impacts of environmental issues on health and well-being: a global pollution challenge*, Environmental Science and Pollution Research International. 2021; 28(15): 18309–18313, Published online 2020 Aug 6. doi: 10.1007/s11356-020-10265-6
- [3] Yueh, Mei-Fei & Robert H Tukey, *Triclosan: A Widespread Environmental Toxicant with Many Biological Effects*, Annual Review of Pharmacology & Toxicology 2016;56:251-72. doi: 10.1146/annurev-pharmtox-010715-103417
- [4] Luhar, Ismail, Salmabanu Luhar & Mohd Mustafa Al Bakri Abdullah, *Challenges and Impacts of COVID-*19 Pandemic on Global Waste Management Systems: A Review, Journal of Composites science, Vol. 6(9), 2022, 6(9), 271; https://doi.org/10.3390/jcs6090271
- [5] Klemeš, J.J.; Fan, Y.V.; Tan, R.R.; Jiang, P. Minimising the present and future plastic waste, energy and environmental footprints related to COVID-19. Renew. Sustainable Energy Reviwe, 2020, 127.
- [6] Boucher, J.; Billard, G. Review of Plastic Footprint Methodologies, Portals. In The Challenges of Measuring Plastic Pollution—Field Actions Science Reports; IUCN: Gland, Switzerland, 2019; pp. 68–75.
- [7] Global United Nations Environmental Outlook 6 Report, 2019, available at: https://www.unep.org/resources/global-environment-outlook-6
- [8] Worldometers. Current World Population. Available online: www.worldometers.info (accessed on 1 September 2022)
- [9] Population, Environment and Development, The Concise Report, United Nations New York, 2001, available
 https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/202
 0/Jan/u
- [10] Geyer, R.; Jambeck, J.R.; Law, K.L. Production, use, and fate of all plastics ever made. Science Advances. 2017, 3.