Biodiversity conservation to sustainable consumption: Discerning the root causes of the environmental crisis

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In the last few decades, environmental issues at different scales have become an integral part of our everyday lives. International relations and political discourses are increasingly shaped by various environmental challenges (Danish 2007; Stavins et al. 2016). It does not require any special mention that we are going to witness a multi-layered socio-environmental and humanitarian crisis in the form of climate change in the next few decades. The long-term impact will deeply affect the lives and livelihoods of the marginalized population living in fragile regions (Islam and Winkel 2017). Along with this, air pollution, particularly in the urban areas, is rising (Health Effects Institute 2019), severe water scarcity is surfacing in many water-rich parts of the world (World Economic Forum 2015), forests and biodiversity are getting destroyed at an unprecedented rate (Roe et al. 2019). For the last half a century, the ill effects of mindless development are captured through different measures indicating the rapidly degrading state of the natural environment. Reduction in biodiversity and wilderness became one such very popular measure of the degrading environment during the 1970s and 1980s, which is prevalent to date.

Following that problematization, conservation of biodiversity is often touted as one of the most effective ways to address the multifaceted environmental crisis. We witnessed the implementation of a wide range of projects across the world to conserve various critically endangered species as well as biodiversity hotspots. These projects mostly aim at reducing direct human impacts or scope of interventions on these sensitive landscapes so that rejuvenation of the biodiversity can happen. To ensure adequate both biological as well as physical space, most of these approaches severely restrict human access to such regions. Considering in places like in the Global South, most of such biodiversity hotspots had people living within them for centuries in a somewhat sustainable or balanced manner, conservation approaches impacted the daily life, livelihoods, and the wellbeing of those communities the most by restricting their access to these regions (West et al. 2006). In recent times, there is a change in the discourse towards acknowledging the historical presence of humans in so-called pristine regions and even adopting participatory approaches to conservation. While there is a need to conserve this rich biodiversity hotspot, the process of conservation raises questions or rather serious ethical concerns, particularly in the context of the Global South where people

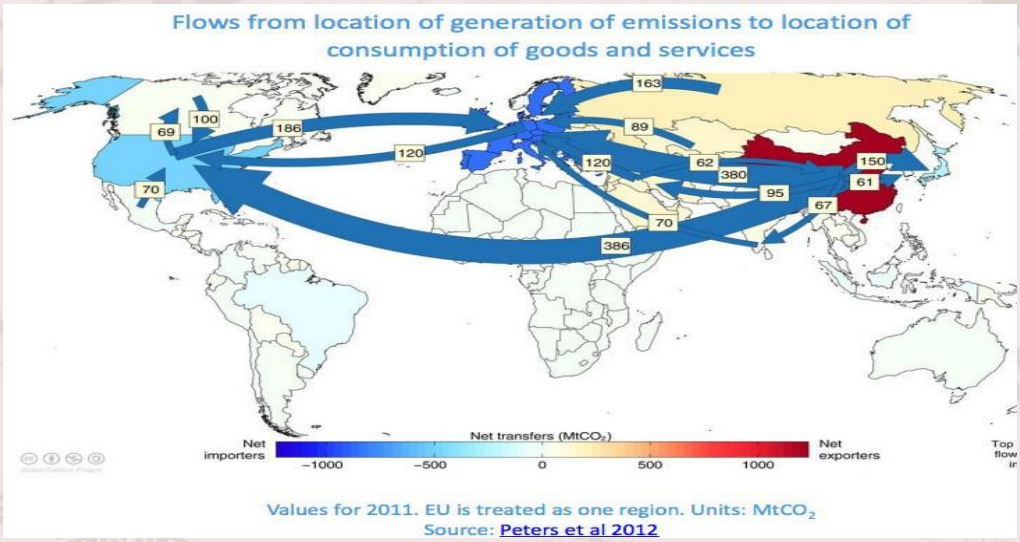
lived in such landscapes for generations and seem to have an innate understanding of living sustainably. I am not going to delve further into the ethical conundrums associated with such conservation efforts. Instead, let us understand how far these approaches could help us address the root causes of the multi-layered environmental crisis. Moreover, whether these approaches act counterproductively in giving a false sense of accomplishment at various levels and thus, disable us from critically approaching those root causes. Oftentimes, we see, the conservationist approach fails to enable the strong proponents (like the conservationists and ecologists endorsing the idea of conservations) of this approach to examine their ways of living or day-to-day consumption choices critically enough. With this premise, in the following, I systematically discuss why the rapid loss of biodiversity is just the tips of the iceberg of the multidimensional environmental/climate crisis that is and, more so, going to manifest itself through diverse pathways and fundamentally challenge the existence of life on earth (UNEP 2015). To tackle these multifaceted challenges concerning environmental sustainability and social justice, we must gain an in-depth understanding of the root causes of these environmental issues.

Early in the environmental debate, population growth (primarily in developing countries) was argued by some to be the most obvious and significant cause of environmental degradation (Chenoweth and Feitelson 2005)—what has been called a neo-Malthusian explanation. Critics of such neo-Malthusian thinking, however, pointed to the role of other factors, such as overconsumption in so-called developed countries, failures of science and technology, institutional failures, and so on. The IPAT framework[1] (Ehrlich and Holdren 1974), although criticized for its simplistic formulation and for being confirmed by definition, made it easier for scholars to highlight the role of consumerism or luxury consumption practices in influencing environmental degradation to a large extent (Wilk 2002). Indeed, Grabowski (2007, p. 1) poetically describes the current society as "a society consumed by consumerism".

Historically, when production, consumption, and disposal were largely localized, the environmental impacts of consumption were visible to consumers and producers. But in a highly globalized world, it is difficult for consumers to be aware of the ramifications of their consumption choices, both upstream and downstream (Princen et al. 2002). Upstream ramification indicates emissions that happen due to the accumulation of raw materials for production, for example, raw materials from Central Africa are converted into goods in China. The downstream ramification occurs in the post-production stage. For example, a product is manufactured in China, gets consumed in the US, and then sent off as toxic waste to West Africa. Both these ramifications put a huge toll on the global 'commons' (atmosphere or oceans), and consumers are increasingly 'isolated' from these environmental externalities. A response to this distancing has been the development of various footprint indicators that try to capture the impact of individual consumption on the environment. Some indicators are all-encompassing, such as the ecological footprint (Wackernagel et al. 1999), while others are resource- or impact-specific, such as the water footprint (Hoekstra 2009). The emergence of

[1] IPAT is an equation that puts forth that environmental impact (I) is the product of three factors: population (P), affluence (A) and technology (T).

climate change as a major environmental problem has led to the emergence of the 'carbon footprint' as an important indicator.



The globalized supply chains of consumption and trade and its environmental impacts

So far, it becomes clear the ways in which production processes aid to the environmental issues and how the rising environmental footprints can mean that certain lines of production and consumption cannot continue the business as usual if we were to manage or lower the environmental impacts. One can say that production happens as a response to the existing consumption need and if we have identified the required course of action to handle the environmental issues, then let us understand the ways to reduce consumption and, in turn, production both macro as well as micro-economic point of views. For that, let us first trace the history of economic models or regimes as these evolved through changing socio-political needs and more importantly, technological innovations.

Economics emerged as a distinct field of study that branched out of moral philosophy in the late 18th century or early 19th century with the seminal work of Adam Smith (Common and Stagl 2005). That stream of economics is called classical economics. The basic postulate for this stream was that the means of production (primarily land or productivity of land) could increase linearly, but the human population grows exponentially, inducing an impending food shortage and social crisis (Common and Stagl 2005). This means that economics as a discipline needs to find a way to distribute a limiting resource among competing demands. Thus, the question of just distribution was at the very center of how economic models were designed. As just distribution was at the core of their formulation, the concern of justice was also an integral part of economic policy formulation. However, with the industrial revolution radically expanding the means of production (like industrially produced fertilizers increasing productivity) with the help of fossil fuels, the entire idea of natural limits fell apart. This provided a strong belief that technological innovation will take care of everything (be it natural limits like productivity or externalities like pollution or deterioration of environmental components).

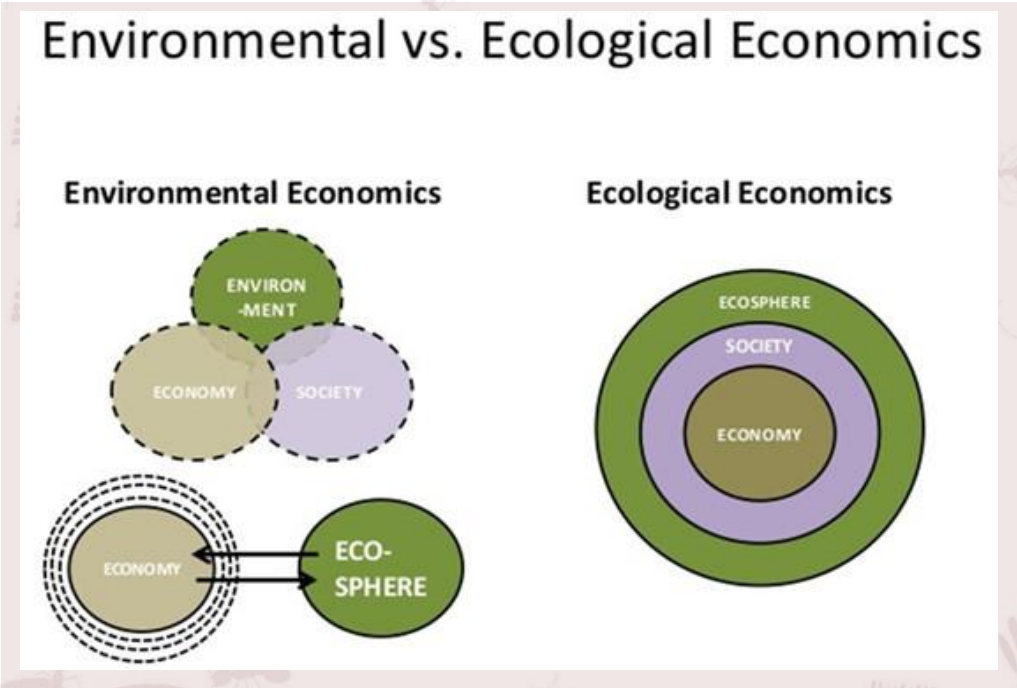
With this firm belief taking root, we see around the early 20th century, the stream of neo-classical economics emerged (Common and Stagl 2005). In the core formulation of this stream, there was no idea of limits as technology or technologically produced human-made capital is considered to be good enough to deal with any concern related to limits. So this stream focused only on efficiency -- producing more and more with less and less inputs became the de facto motto. With this excessive focus on efficiency, the focus on justice faded away (Daly and Farley 2011). It became implied that there is no need to worry about just distribution; rising technological efficiency will allow us to produce infinitely, and thus producing more is the solution to meet the ethical dilemma of giving enough to those who do not have enough to meet their basic needs. This understanding necessities that economies should always look to grow so that they provide enough to the people at the margins – which, unfortunately to date, are the majority in most countries. Now, as growth (that too almost perpetual) becomes an imperative that economies should achieve, neo-liberal economic policies (based on that neo-classical economic understanding) came as a rescue. In neoliberal economic policies, the biggest driver of economic growth is appropriately tapping into the supposedly insatiable wants of consumers. To elaborate further, this stream conceptualizes consumers (or the framing that economists like to categorize human beings as) as rational economic beings who maximize private utilities endlessly and completely aware of their (supposedly insatiable) wants. The goal, therefore, is to provide consumers enough choices to exercise their wants, and if that can be ensured adequately, then consumer demands for novel consumer products are always going to be on the rise. Rising consumer demands will ensure a faster circulation of money through the economic system, increasing the size of an economy. So it is evident that consumer demands act as the primary driving force through which economies are growing all around the world. Without this driving force, we might go into a severe recession[2], as seen in the recent experience with the COVID-19 pandemic (Bhar 2020). From the prevailing macro-economic point of view curbing consumer demands of environmentally impactful consumption patterns may have severe consequences to the current neoliberal model.

Image:https://www.cartoonstock.com/directory/o/overconsumption.asp

To realize the importance vested on keeping up the consumer demands for running this growth-bandwagon that economies are on, one does not need to resort to any theory. This will become evident if one takes a moment to reflect on the number of messages one gets subjected to on different media

[2] A tweet (https://twitter.com/theponzifactor/status/1244823729760112640) nicely captured this: "It's funny how the economy is about to collapse because people are only buying what they need." Another prominent example is when president GW Bush told US citizens to *shop* after the 9/11 terrorists attack on the World Trade Center. It was supposedly to counter the economic recession that was predicted after the attack.

platforms that try to ignite consumer demands or examine the prevalent definitions of our success, happiness, or the good life that move around consumer possessions. For example, it becomes evident how different advertisements selling beauty products basically sell a certain beauty standard (fairness is an important criterion in this regard in India) and the protagonists of the advertisements who initially fail to meet that standard are shown unsuccessful and thus unhappy, but that changes radically after the concerned product is used. This last point highlights how macro-economic policies percolate into individual priorities and give rise to feedback mechanisms, which will only augment this belief that infinite growth is what we all need and consumerism is the most effective way forward in that direction. I delve further into this percolation later in the essay, but let us now ask: does infinite growth in a finite planet at all possible?



Ecological economics puts forth the argument that 'one cannot have infinite growth in a finite planet', and advocates for a better conceptual understanding of the economy as not being independent of the ecological system but entirely embedded in it (Farley and Malghan 2016). Ecological economics is distinctly different in its basic postulates, conceptualization, and proposed approaches from environmental economics -- the sub-discipline of neo-classical economics that deals with questions of environmental resources and externalities (Daly and Farley 2011). Ecological economics highlights that conceptual understanding which vouches for embedding three relevant concepts: scale, sustainability, just distribution (Farley and Malghan 2016). The concept of scale captures that economy, as embedded within the socio-ecological systems, cannot simply keep growing infinitely. It inherently brings back the idea of limits that went missing the neo-classical economic framework discussed above (Farley and Malghan 2016). By incorporating the concept of scale, ecological economics manages to set in

the discussion on just and equitable distribution of the available developmental space[3] among different countries and also invoke the idea of sustainability so that we leave an inhabitable abode for the generations to come. This conceptual understanding eventually presents a potent critique of the current growth-obsessed economic system, which, as discussed, heavily depends on the insatiable consumer desires as the driving force propelling its supposedly perpetual growth (Farley and Malghan 2016).

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By now, we understand the prevailing consumerism that we see in every nook and corner of society is not an anomaly, rather it is the way the present economic model is designed. Here, let us ask whether we can bank on individual consumers to help us tackle the mounting environmental impacts arising from the production of various goods and services. In other words, do we have any hope if we approach the problem micro-econometrically? Unfortunately, things in that regard are not great as well. Currently, the large sections of the Global South (which is home to 85% of the world's population) still struggle their way through in abject poverty, or their basic needs remain unmet. In this context, the development studies' discourses are, understandably, centered on how to lift the sections out of the vicious cycle of poverty to meet their basic needs. Even when there are some discussions on how to define a decent living consumption as a bundle of goods and services which is more than mere basic needs, and provides one enough to realize human flourishing, it is important to ask whether these (both basic needs as well as decent consumption approach) standards can ever become aspirational. Or whether achieving these standards would satisfy people to live happily. As consumerism is conceptualized as the indispensable driving force of the present neo-liberal economic model, the socio-political system ensures that the consumerist outlook percolates successfully to socio-cultural priorities and value system. In other words, what types of notion of good life are expected to be percolating in the society at large when a tiny, however influential, and often highly celebrated section of society is living a life of abundance and material comforts. For example, we see how with economic liberalization in India, the once celebrated outlook of simple living and high thinking promoted by Gandhi and practiced by a large section of the population got replaced by that of living life of all possible material comforts through exercising endless choices. It is no wonder that such a standard of living would become aspirational when promoted through all directions. The aspiration to become a global citizen drives people to let go of frugality. Moreover, the above discussed strong belief that 'technology is going to take care of everything and there will be a time when everyone will have enough' is clearly the underlying understanding that consumerism is based on and promotes. This makes people living at the margins believe that it is a matter of time when they are also going to enjoy material extravagances that a few are currently enjoying,

[3] An example of a developmental space can be GHG space which indicates the amount of GHGs can be accommodated in the atmosphere has a limit before humans or other life forms seize to survive.

without critically asking: does one really need that level of material opulence and whether that opulence translates into proportionate wellbeing.

Now, it is evident that this is not environmentally possible to meet the aspirations of world's 90% population to enjoy the environmentally-unsustainable standard of life that the top 10% is enjoying at the moment. Therefore, along with the efforts to lift people out of abject poverty to a decent standard of living, it is equally important to bring those belonging in that 10% down to socio-environmentally accepted upper limits of decent living consumption. This can never be achieved only through hard or explicit measures of economic taxes and subsidies or by imposing government regulations. As discussed, these economic priorities have already percolated into socio-cultural values and priorities through political interventions. Thus, a sustained socio-cultural shift in valuing alternative definitions of the good life has to happen to realize a sustained change in this regard. For actualizing the above proposal along with changes in the systemic factors (like the way economies are organized, to the way the political system tends to favor the economic centers of power), individuals also need to play a critical role in ensuring those systemic shifts again start reflecting in socio-cultural values and priorities. Even a group of us upholding alternative conceptions of good life could set in a self-inducing process of reforms in socio-culturally held notions of a good life – eventually leading to a lasting impact.

Now coming back to the point, we began the essay with: is the excessive focus on biodiversity conservation, without acknowledging the way the consumption patterns of the privileged sections of society impact the environment, misplaced and counter-productive? The discussions establish that even though the loss of biodiversity is one of the manifestations of multifaceted environmental challenges that we are facing, the root cause of environmental degradation runs much deeper. We also discussed how the root cause is to do with how the economies are organized and how our day-to-day consumption choices and definitions of the good life we uphold socio-culturally.

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