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Countering the Environmental Crisis Today - Why Thinking Beyond 'Sustainable Development' is Necessary

16

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Introduction:

In terms of the environmental crisis that we are staring at, the whole of humanity is standing at a defining moment today. It will not be an exaggeration if I say that the steps that we are going to take at this moment will decide the survival of the human species on earth. We are all aware of many signs that demand seriousness and urgency on our part. These signs are environmental pollution, climate change, severe loss of biodiversity, and ozone layer depletion.

Some argue that human interventions in different spheres are the sole responsible factor for the current environmental crisis. To a large extent, it is indeed true. However, it is important to see the context in which the humans were so powerful that they could make such an impact, unfortunately, most of it is detrimental to their survival on earth. The context that we are talking about here is the dominant development paradigm that was followed throughout the world since industrialization based on ambitions of limitless growth.

There is little to no consideration for finite natural resources in the conventional development paradigm where growth is equated with development. This development paradigm considers gross domestic product (GDP) and other indicators such as GDP per capita as markers of development. It assumes that if the GDP is higher, then it is possible to eradicate poverty and promote the development of the masses as the money eventually trickles down to them.

This assumption has not been proved to be true in almost all the countries where it is applied. On this backdrop, sustainability and sustainable development were suggested as a solution. The concept of sustainable development recognised the concern for future generations officially. This concept also acknowledged the finiteness of the environmental resources and the limit of the ability of the biosphere to absorb the effects of human activities (United Nations, 1987).

Sustainability can be considered a long term goal while sustainable development refers to 'the many processes and pathways to achieve it' (UNESCO, 2015). Our economy and society must be based on sustainability, which promises to counter the problems created by the growth-oriented development paradigm that is dominant in the world. Therefore, the way forward should be the development based on sustainability principles. But the bigger question is if this will be enough to halt and reverse the changes that have been caused in the environment.

Because in all these measures, we are not addressing the root cause of the problem. The root cause is our anthropocentric viewpoint that is at the heart of this obsession with growth. To address the root cause, we need a renewed understanding of and outlook toward the environment. This should be based on the understanding that growth that we are all obsessed with requires natural resources and natural resources are all limited. And therefore, we cannot aim for unlimited growth with limited natural resources. Also, we must realize that the root cause lies in the dominant anthropocentric viewpoint which only considers the instrumental value of everything in nature.

Nature of Environmental Crisis:

Right now, humanity is facing an unprecedented environmental crisis. This crisis is also a climate or ecological crisis depending on which aspect do you look at. The scale and severity of this crisis can be gauged from the fact that every aspect of human existence is already affected or is going to be affected shortly. This is environmental crisis has manifested itself in the following ways.

Climate Change: Climate change in itself is not a crisis as the climate on earth has undergone a change in the past. But what we are observing today is significant is a human-induced climate change which is taking place at an alarming pace. Scientists have predicted the temperature of the earth would rise to 1.5 degrees Celsius and this would cause “unavoidable increases in multiple climate hazards and present multiple risks to ecosystems and humans” (IPCC, 2022b).

Biodiversity Loss: Environmental crisis is also reflected through biodiversity loss which means that we are witnessing decreased diversity in terms of species, genes and ecosystem on earth. This was first notified at the first Earth Summit in 1992 when a great number of countries in the world accepted that “human actions were dismantling Earth's ecosystems, eliminating genes, species, and biological traits at an alarming rate” (Cardinale et al., 2012, p. 1).

Pollution:

Pollution related to air, water and soil is another manifestation of the environmental crisis. All kinds of pollution are indicative of the degradation of natural resources which is difficult or even impossible to reverse in the recent future. Apart from these, there are other issues linked with an environmental crisis such as ozone layer depletion, and habitat loss which is linked with biodiversity loss and soil erosion.

Origins of the Environmental Crisis:

We must look at the origins of the environmental crisis to understand how we must tackle these. The origins of the present environmental crisis cannot be understood without understanding the human-environment relationship. Unfortunately, the human species have played the main role in the ever-developing environmental crisis and it has the foremost responsibility to stop and reverse this crisis.

Although humans lived on the planet earth for a long, they started interacting with their environment actively and intensely only after what is known as the neolithic revolution. Before the neolithic revolution, the interaction of human beings with their environment was such that they could not modify or alter their environment significantly. Therefore,

it can be said that before neolithic revolution, human influence on the environment was insignificant.

Neolithic means the new stone age. The neolithic revolution signifies the transition of the human species from hunter-gatherer to more stable agricultural societies. During this time, humans not only discovered agriculture but also domesticated useful animals (Scanes, 2018, p. 103). With more stable societies, the population also started growing during this time (Scanes, 2018, p. 108). The Discovery of agriculture and domestication of animals show that the human species started modifying the environment for its comfort and convenience more intently and subsequently the increase in the population enhanced its magnitude.

The neolithic revolution was the beginning of the engaged relationship of the human species with their environment. Humans started using natural resources fully for agriculture and the rearing of animals. Therefore, I argue that the neolithic revolution is an important milestone to understand the origins of the environmental crisis that we face today. However, this does not mean that the neolithic revolution was one of the factors responsible for today's environmental crisis.

The industrial revolution that began in Great Britain is the second important milestone to understand the present environmental crisis. It is between the mid-eighteenth century and the mid-nineteenth century, Great Britain became the 'workshop of the world' (Jackson, 1996, p. 24). It provided the 'foundations for one of the most remarkable technical, economic and social transformations in recorded history' (Jackson, 1996, p. 24).

The industrial revolution in Great Britain led to a 'structural shift' in which, Great Britain's economy which was based on 'local craftsmanship and agriculture' that used to employ simple technologies and renewable resources changed to an economy based on 'predominantly on factory-based, manufacturing industry' whose raw material was supplied by mineral resources. (Jackson, 1996, p. 24). Thus, the industrial revolution started impacting natural resources substantially through increased extraction and consumption.

The industrial revolution based on technological inventions also led to the emergence of an economic system 'characterised by continued growth in the national income' (Jackson, 1996, p. 24). Until the industrial revolution, the economic growth rate in Great Britain and the other European countries was very slow (Kaldor, 1977, p. 193). This economic system was that of capitalism which is "the systematic pursuit of profit through accumulation of private investment capital in a market economy" (Jackson, 1996, p. 24).

Since the industrial revolution, capitalism has been the dominant economic system in most countries in the world although there are some exceptions in between. This economic system promoted the pursuit of profit through increased manufacturing in the factory system. Therefore, with increased consumption in the market economy, capitalism in a way, promoted and facilitated unrestrained extraction and consumption of natural resources.

Conventional Growth-Oriented Development Paradigm :

Indeed it has been observed from a large amount of economic data that “most people in the world have greatly improved their standards of living over the past two centuries, and human progress has been greater in those countries where capitalist institutions were strongest” (Van den Berg, 2004, p. 251). But it is necessary to see how ‘progress’ has been measured all through these years. It is safe to say that there was a lack of certainty in terms of measuring progress in countries around the world until 1934.

In 1934, Simon Kuznets presented the concept of Gross Domestic Product (GDP) to the US Congress (Costanza et al., 2009, p. 7). He also cautioned against ‘equating GDP growth with economic or social well-being’ (Costanza et al., 2009, p. 4). Economists have also warned that treating GDP as a general indicator of well-being is inaccurate and dangerous (Costanza et al., 2009, p. 6). Despite these cautions by Kuznets and other economists, “the GDP concept has historically been used to measure human wellbeing and progress” (Brinkman & Brinkman, 2011, p. 447).

To understand the origins of the environmental crisis, it is important to acknowledge the fact that the capitalist system and GDP work complementary to each other. It is not said that capitalism and the concept of GDP are bad, however, unhindered capitalism and inappropriate use of the concept of GDP indeed need to be considered to be the origins of the present-day environmental crisis.

The dominance of GDP as an indicator of progress has been unfavourable for the environment because transactions that take place in the economy from which GDP is calculated, are also impacted by the natural, social, and human capital. But the GDP only considers economic transactions. It does not consider the contribution of the natural, social and human capital (Costanza et al., 2009, p. 9). Especially the contribution from natural capital is immensely important and cannot be substituted, and the concept of GDP does not recognise it.

It needs to be acknowledged that the emphasis on GDP growth encourages the faster depletion of natural resources, degradation of ecosystems and reduction of services provided by these ecosystems (Costanza et al., 2009, p. 9). These ecosystem services such as ‘biodiversity habitat, reducing flooding from severe storms, filtration to improve water quality in rivers and lakes, and the sequestration of carbon dioxide and manufacture of oxygen’ are extremely valuable and irreplaceable but because these ecosystem services are not part market economy and therefore they are not counted in GDP (Costanza et al., 2009, p. 9).

Thus, I argue that emphasis on capitalism and GDP growth is responsible for the today’s environmental crisis. The development paradigm that equates development to economic growth measured in terms of GDP is dominant in the majority of the countries. An alternative was needed to counteract the problems posed by the growth-oriented development paradigm of GDP. This alternative was offered by the sustainable development paradigm.

Sustainable Development Paradigm – An Alternative :

It is claimed that the sustainable development paradigm offered the ‘coexistence of environmental quality, economic growth and social prosperity’ (Tampakoudis et al.,

2014). The report of the World Commission on Environment and Development (WCED) titled 'Our Common Future' (Brundtland Report), gave the conceptions of sustainable development for the first time in 1987.

The report defines the concept of sustainable development as "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987, Chapter 2). Sustainable development can also be seen as "a development paradigm as well as concept that calls for improving living standards without jeopardising the earth's ecosystems or causing environmental challenges such as deforestation and water and air pollution that can result in problems such as climate change and extinction of species" (Mensah, 2019).

Explaining the concept of sustainable development further, the Brundtland report notes that "Environment and development are not separate challenges; they are inexorably linked. Development cannot subsist upon a deteriorating environmental resource base; the environment cannot be protected when growth leaves out of account the costs of environmental destruction" (United Nations, 1987, Chapter 1).

The same report however also notes "Economic growth and development obviously involve changes in the physical ecosystem. Every ecosystem everywhere cannot be preserved intact. A forest may be depleted in one part of a watershed and extended elsewhere, which is not a bad thing if the exploitation has been planned and the effects on soil erosion rates, water regimes, and genetic losses have been taken into account" (United Nations, 1987, Chapter 2).

The report further states that "As for non-renewable resources, like fossil fuels and minerals, their use reduces the stock available for future generations. But this does not mean that such resources should not be used. In general, the rate of depletion should take into account the criticality of that resource, the availability of technologies for minimizing depletion, and the likelihood of substitutes being available" (United Nations, 1987, Chapter 2).

The sustainable development concept does not restrict itself to the concern about the environment, but it also considers social and economic aspects. Therefore, it can be said that the concept of sustainable development rests on three pillars. These three pillars are 'economic sustainability', 'social sustainability', and 'environmental sustainability' (Mensah, 2019, p. 9). By considering the three aspects, the concept of sustainable development broadens its purview to make it seemingly more comprehensive and meaningful.

Similarly, the concept of sustainable development acknowledges the undesired consequences of the growth-oriented development paradigm on the environment; it talks about 'reviving growth' and 'changing the quality of growth'; it talks about making growth 'less Material- and energy-intensive and more equitable in its impact' and thus it is clear that it proposes to modify the growth-oriented development paradigm. However, the sustainable development concept does not provide an alternative to growth-oriented development. Moreover, it does not question the use of GDP as an indicator of growth and development.

After the Brundtland Report, another event where the concept of sustainable development was discussed was the United Nations Conference on Environment and Development (UNCED), known as the Rio Earth Summit, in 1992. The conference reaffirmed the outcomes of the earlier conference in Stockholm. The declaration of the conference stated, “Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature” (United Nations, 1992, p. 3). Its argue based on the above discussion that although the sustainable development concept makes a commendable effort, this effort has not and will not succeed in stopping and/or reversing the environmental and ecological crisis that the world is facing today. It is because as stated sustainable development merely suggests improvements to the existing growth-oriented paradigms. These improvements will not be able to stop and reverse the crisis. It is because firstly sustainable development concept does not fundamentally question the practice of equating growth with development. Secondly, this concept as it is stated, continues with the anthropocentric viewpoint i.e., a viewpoint that places the human being at the centre and it even strengthens it. I argue that both these reasons are at the root of the present environmental crisis. Humanity is now has reached such a crossroads that it needs to ask fundamental questions and act on the root cause of the crisis.

Alternatives to Economic Growth Paradigm:

As stated, the sustainable development concept acknowledges that economic growth and development affect the environment and natural resources. However, it does not provide an alternative to it. It is said that “crises resulting from one paradigm cannot be overcome within the same framework. This suggests that new paradigms are needed to address the shortcomings of the conventional growth economy” (Harangozo et al., 2018, p. 172).

One of the alternatives to the conventional growth-oriented development paradigm is ‘degrowth’. Latouche states that the concept of degrowth exhorts us to “abandon the goal of exponential growth, as that goal is promoted by nothing other than a quest for profits on the part of the owners of capital and has disastrous implications for the environment, and therefore for humanity” (Latouche, 2009, p. 8).

Degrowth can be defined as “a planned reduction of energy and resource throughput designed to bring the economy back into balance with the living world in a way that reduces inequality and improves human well-being” (Hickel, 2021, p. 1106). Most importantly degrowth aims for abolishing economic growth as a social objective (Mastini, 2017).

Another alternative that is proposed is called the ‘steady state economy’. A steady-state economy has constant populations of people, constant stocks of capital and a constant rate of ‘throughput’—i.e., the energy and materials used to produce goods and services. (Czech & Daly, 2004, p. 598). Here it should be clarified that ‘constant’ does not mean absolutely unchanging at the finest level of measurement but it means “mildly fluctuating in the short run (which in political and economic terms may be defined as

approximately a decade or less) but tending toward a stable equilibrium in the long run” (Czech & Daly, 2004, p. 599).

These alternatives have been proposed on the fact that most environmentalist discourses including sustainable development do not critique the growth paradigm as stated earlier. The critiques even state that “the sole function of the 'sustainable development' that is ritually invoked in all political programmes is to 'maintain levels of profit and to avoid changing our habits by making an imperceptible change of direction” (Latouche, 2009, p. 12).

There are limitations to these alternatives. These shortcomings are to be analysed and addressed further by academics, scientists, policymakers and political decision-makers together. The first limitation is in terms of societal inertia. People, in general, are “locked into unsustainable lifestyles and may not be able (or wish) to change” (Harangozo et al., 2018, p. 179). The second limitation is that the concept of zero growth seems to be attractive only for wealthy countries as the wealthy countries have achieved growth sufficient to provide high living standards for their citizens. It is not attractive to poor and developing countries in the world (Harangozo et al., 2018, p. 179).

Problems with Anthropocentrism :

As discussed earlier, human beings are placed at the centre when it comes to the sustainable development paradigm, which is not a problem in itself. However, if it is looked at in the context of the prevailing environmental crisis, then we might see the problem in it. The ‘belief in humans and their existence as the most important and central fact in the universe’ is called Anthropocentrism (Cambridge Dictionary, 2022). It has been a dominant viewpoint in the world today. The sustainable development paradigm tends to strengthen this prevailing viewpoint.

Anthropocentrism promotes “the ethical belief that humans alone possess intrinsic value” and “all other beings hold value only in their ability to serve humans, or in their instrumental value” (Goralnik & Nelson, 2012, p. 145). According to Anthropocene, human beings are ends in and of themselves; all other things like other animals and other natural resources are means to human ends (Goralnik & Nelson, 2012, p. 145).

According to White, one of the origins of anthropocentrism can be seen in what Christianity told people about their relationship with nature. According to the story of creation in Christianity, the all-powerful God created Adam and Eve and then he created all animals and other things in nature, only to serve man’s purposes. Christianity established a dualism of man and nature and also “insisted that it is God's will that man exploit nature for his proper ends”

(White, 1967, p. 1205). Thus, Christianity put the human in a supreme position and legitimised the use of nature by humans.

As intellectual and cognitive beings, humans alone possess the abilities to think, formulate thoughts and express them. Humans also possess abilities to transform and modify nature around to suit their needs and convenience. I argue that only because humans have advanced abilities, does not mean that they wield limitless power to use

the nature around them for their benefit. Although it seems that because humans could make use of the things in nature, does it mean that they are not part of the nature around them, and they are superior to other living and non-living things in nature?

Alternative to Anthropocentric viewpoint:

The ecocentric viewpoint provides the answer to this question asked in the previous section. Ecocentric viewpoint places ‘humans as equals among species, participants in an interdependent world’ (Goralnik & Nelson, 2012, p. 151). Leopold in his book indicates how ecocentrism sounds in a practical sense. He says that it is not possible to prevent the ‘alteration, management, and use of these (natural) ‘resources,’ but it is possible to “affirm their right to continued existence, and, at least in spots, their continued existence in a natural state” (Leopold, 1968, p. 204).

This explains that although humans could use the natural resources by modifying them, the living and non-living things in the nature have right to exist and have an intrinsic value of their own. Leopold further asserts that the role of humans is not that of the conqueror of nature, but it is of the plain members and citizens of the community along with other living and non-living things in nature. Humans are supposed to respect other humans as well as nature (Leopold, 1968, p. 204).

Here it is important to recognise that there is a debate that if nature has an intrinsic value or only an instrumental value. Intrinsic value is “the value that an entity has in itself, for what it is, or as an end” (Sandler, 2012). On the other hand, “instrumental value is the value that something has as a means to a desired or valued end” (Sandler, 2012). The anthropocentric viewpoint does support the proposition that nature has an intrinsic value. It believes that nature has only an instrumental value, as nature acts as means to serve the desired ends planned by human beings. It is important to acknowledge that we need to change this belief if we want to stop and reverse the environmental crisis.

In this context, it will be useful to look at what deep ecologists have to say. Norwegian philosopher, Arne Naess coined the term deep ecology and differentiated it from shallow ecology. Naess states that shallow ecology stands for advocacy of issues such as the fight against pollution and resource depletion and their central objective is the health and affluence of people in developed countries (Naess, 1973, p. 95). Deep ecology stands for the well-being and flourishing of human and nonhuman life on Earth, and it believes that they have value in themselves (synonyms: intrinsic value, inherent value). Naess states that “these values are independent of the usefulness of the nonhuman world for human purposes” (Naess, 1986, p. 4).

Proposal for the Future:

There have been many warnings from scientists, researchers, and thinkers about the impending environmental crisis for a long, not just in 20th and 21st centuries but much longer back in history. For example, in 1661, English author John Evelyn warned that smoke pollution in London would shorten the lives of the residents (Evelyn, 1661). Similarly, there are pieces of evidence that scientists were involved in the research

related to the effects of greenhouse emissions since the 18th and 19th centuries (van der Veen, 2000).

Despite the awareness and then evidence, humans have not been able to avert the crisis. The very recent report by the Intergovernmental Panel on Climate Change (IPCC) notes that “Human-induced climate change is causing dangerous and widespread disruption in nature and affecting the lives of billions of people around the world, despite efforts to reduce the risks” (IPCC, 2022a).

There has been some action and thinking on the part of the UN and other multilateral organisations and governments, on how to avert the crisis. The concept of Sustainable development has been a result of such thinking. There have been other attempts to avert the climate crisis such as climate summits, mechanisms such as carbon trading and other initiatives in renewable energy.

We have seen that almost all the efforts in the direction to avert environmental crisis including the sustainable development concept did not question the deep-rooted growth paradigm which equated growth with development. It did not question deep-seated anthropocentrism in all discourses and actions that humans were making. All the mainstream discourses and actions never considered nature to have an intrinsic value.

It has been amply clear that such an approach has not been working. Therefore, we need to bring radical change in the approach. In this approach, preferences need to be given to the alternatives of an economy based on GDP and growth. The focus needs to be shifted from anthropocentrism to ecocentrism and steps need to be taken to recognise the intrinsic value of nature instead of recognising only the instrumental value.

It also has been highlighted that there is ‘no sufficient practical experience with enhancing subjective well-being’ through alternative paradigms. To counter this situation, we need a policy-driven response, more adoption of such paradigms and thus more evidence, as we have no other way out. We have ample evidence that “never-ending pursuit of growth was incompatible with the planet's finite resources” (Latouche, 2009, p. 2).

The present environmental crisis is real, and no one can deny it. But there has been denial in terms of employing radical solutions to counter it. This chapter aims to highlight this fact. This chapter draws inspiration from this very fact, and it tries to build a case as to why it is necessary to put these solutions to practice. Sustainable development was offered as a solution in 1987 through the report of one of the UN conferences. As we have seen, the concept of sustainable development acknowledges the problems caused by limitless economic growth but does not question the necessity or validity of limitless economic growth.

Although sustainable development will help in ameliorating the present environmental crisis to an extent, it is highly unlikely that it will be able to stop and reverse the crisis for the simple reason that it does not provide an alternative to the prevalent development paradigm that continues equating growth with development. Therefore, we need alternative/s. The concept of Degrowth and a steady-state economy provide alternatives. It needs to be explored how these alternatives could be employed.

Another impediment that is discussed here is the dominance of anthropocentrism which stands for putting concern for human beings at the centre of all discourses and actions. Washington notes that “It has only been possible for our societies to maintain a belief in the desirability of pursuing endless growth because of the dominant anthropocentric worldview of modernism which sees the world as no more than a ‘resource’ for human use” (Washington, 2021, p. 8). Unless this dominant worldview is changed, stopping and reversing the environmental crisis is not possible, as humans would continue to use the natural resources continually for their comforts and needs.

To operationalise the change in the overview and shift from a growth paradigm to an alternative paradigm of degrowth or steady-state economy, these changes need to be incorporated into policy instruments and then into relevant programmes. This is to be acknowledged that at present all-powerful corporations advocating for growth would create hurdles for such an initiative. Therefore, the governments in the world and civil society organisations need to be proactive to take such steps in this direction.

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