

GROWTH VS ENVIRONMENT: DILEMMA FACED BY EMERGING MARKET ECONOMIES LIKE INDIA

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ABSTRACT

The paper is an attempt in researching the impact of growing industrialization on the environment. This is being studied in the light of the deteriorating environmental conditions which the world is experiencing in recent times. The trade-off between the two is a dilemma faced by most economies. There is an imperative need to understand the situation and make serious inroads in arresting the current environmental degradation.

Research question: the paper will attempt to analyze the dilemma between growth and the environment. Can the two move together or is there a trade-off? This will be attempted with respect to emerging market economies like India.

1. INTRODUCTION

Most of the economies of the world today whether developed or emerging are facing the wrath of environmental disturbances, which have manifested themselves in the form of climate change, environmental degradation, impact on animal and plant species, and soil to name a few. The effect at times and in recent years is so devastating that it has shaken up economists, conservationists, and environmentalists. The dilemma is to address the twin issues of growth and environment. Could they move together? Or is it that one has to be given up for the other? This is not such a major issue for developed countries, but it has become a pressing one for emerging marketing economies like India. The reason is that growth is important for India as it would adequately address poverty, unemployment, etc. On the other hand, if this is at the expense of environmental degradation then to what extent could the country push growth boundaries? How far could the country bear the burden of degradation?

Figure 1:Environment vs Growth



Source: Google images.

With increased liberalization and globalization and with the world economy being treated as one, there are various forms of trade occurring with countries. Developed nations through World Trade Organisation (WTO) and other such forums impose rules and regulations for developing countries with respect to environmental norms. For a developed economy to dictate norms and regulations to an emerging market economy is extremely simple, considering the fact that they have already achieved their targeted levels of development as well as all other macro indicators (reduction in poverty, reduction in unemployment, reduction in inequality and the required standard of living). But what about countries like India which are striving to reach a high sustainable inclusive growth rate?

2. DEFINITION

2.1 Growth: The growth of an economy is defined normally in terms of Gross domestic product (GDP). It is an increase in the final production of goods and services normally in an accounting year. It is also a measure of an increase in people's real income. The word real used here is adjusted for inflation this means that an inflation deflator has been adopted to the GDP measure. A nominal value is the measure of production at current prices. The real measure indicates the actual increase in the production of an economy. The impact of any change in the value on a change in price has been taken care of when an inflation deflator is adopted.

Development is a wider term than growth as it takes into account social indicators besides just GDP. It is the social development, well-being, and quality of life of a nation that are the goals

that have to be enhanced in an economy. Development economics focuses on improving fiscal economic and social conditions such as health, education, working conditions, and domestic and international policies.

2.2 Environment: The circumstances, objects, or conditions by which one is surrounded and this includes a complex system of physical, chemical, and biotic factors like climate, soil, and living things. These act upon the ecological community and impact form and survival. They consist of the atmosphere, the hydrosphere, and the lithosphere. It could also be divided into two types:

- Macro Environment: Macro refers to broader factors like demographic, ecological, political, economic, socio, cultural, and technological factors that impact a business.
- Micro Environment: This is specific to a business or the immediate location or sector in which it operates.

The macro-environment is a broader term that takes into account a large number of factors that impact the business environment of an economy.

A further differentiation could be with respect to :

- Aquatic environment (marine)
- Terrestrial environment (land)
- Atmospheric environment (air)

Figure 2: Pictorial depiction of the atmospheric, terrestrial, and aquatic environment.



Source: Google images

Pure Environment vs business environment. Both are correlated. The impact on air, land, and water has a direct bearing on the business environment of a country. At no point in time are the two divorced from each other. They both go hand in hand. The impact of one will affect the other and vice versa. It is difficult to state which of the two comes first as both are two sides of the same coin.

3. Issues/dilemmas faced by developed and developing economies with respect to the environment

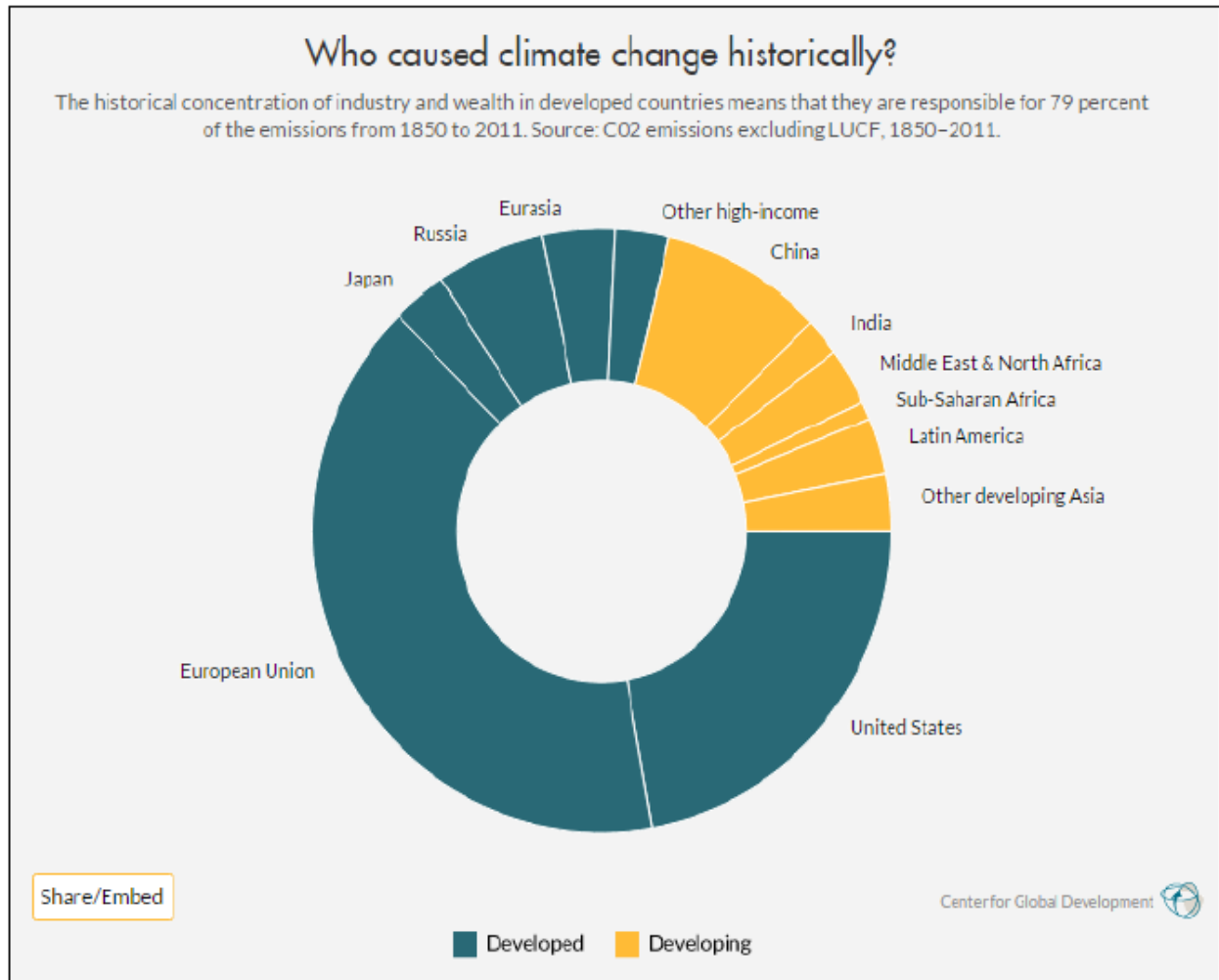
Protecting our habitat has become the most important need of the hour.

- This involves judicious use of water and power.
- Finding a solution for garbage disposal is becoming imperative.
- The realisation that an increasing number of vehicles is leading to enhanced and ever-increasing vehicular pollution.
- Efforts for afforestation should be undertaken on a war footing.

The above are some of the most pressing issues that all economies of the world have to battle with.

3.1 Developed economies: developed economies essentially mean those economies that have achieved sustainable gross domestic product (GDP) growth rate, and have managed to control a large number of macroeconomic indicators like unemployment and poverty levels effectively. As most of them have achieved this stage in the last century when the need to control and safeguard our surroundings were not paramount. They mostly achieved the high targeted GDP growth at the expense of the environment. They consumed a large amount of energy which resulted in huge levels of harmful carbon emissions. In fact, there are studies that have indicated that developed countries are responsible for close to 79% of the total carbon emissions.

Figure 3: pie chart indicating historical damage to the climate



Source: Center for the global development

The figure above clearly indicates the harm that these countries have inflicted on our surroundings. These countries consume more global energy and contribute more to global emissions leading in fact to inequity even in global emissions. Developed countries have already sufficient economic income and infrastructure facilities. In fact, it seems ironic that they have achieved their goals with respect to poverty and unemployment by using energy sources that have polluted our surroundings to a point where saving our habitat has become an all-important and pressing issue.

There have been various international forums that have discussed various issues of climate change and a large number of them have concluded in imposing greater sanctions on both developed and developing alike. This seems ironic that the same yardstick is used for all countries of the world considering the fact that the main damage has been caused by 4 developed countries. They still guzzle a lot of energy which increases the carbon content in the atmosphere vis a vis developing economies.

3.2 Developing Economies: The main environmental issue in economies like India relates to air and water pollution particularly so in metropolitan cities and industrial zones. In recent years soil has become an unimportant issue for environmentalists. Though the economy is facing a dilemma with respect to growth viz a viz degradation of air, water, and soil. The question that arises is whether it is this or that or this and that. Are they on the same side of the spectrum or on the opposite side of the spectrum? Would moving towards growth actually harm the environment? Will moving towards the environment, harm growth? Will the steps taken by developing economies have a major impact on the world's concern about climate degradation? Is it fair to curb the growth of developing economies by putting a plug with respect to concerns with the environment, when no such thing was in force for the developed countries currently?

4. The dangers and the costs involved with respect to environmental challenges in India.

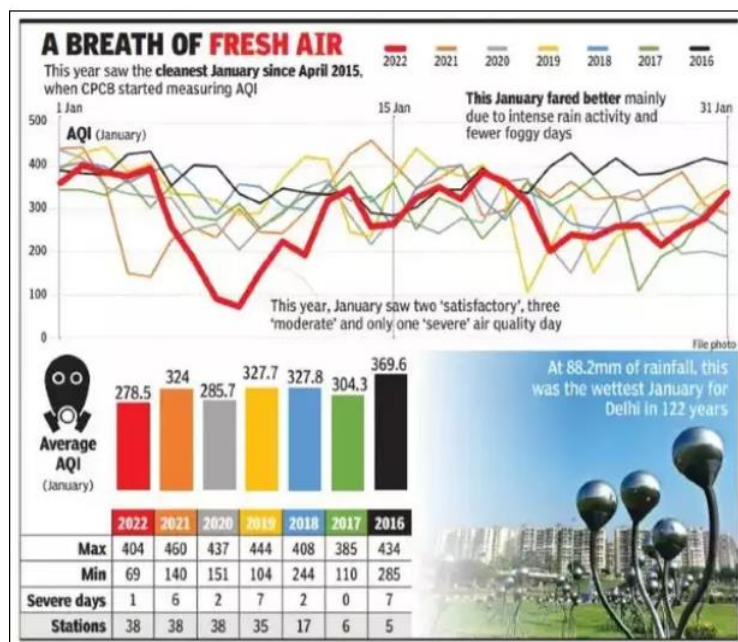
Pollution is one of the many several challenges, more so for developing economies, as degradation of the environment leads to ill health, death, and disabilities of millions of people annually. Developed economies have the sources and technology to combat pollution while developing economies have limited resources and thus cannot spare precious money on medically treating all their citizens who are bearing the brunt of adverse environmental conditions. Solving environmental issues usually imposes economic costs. Poor countries often lack the resources and technology to fight pollution. Environmental crises arise when economic growth overshoots the resource capacity. This results in ecological degradation.

The overpopulated poverty-stricken, biomass-based developing countries like India face immense environmental issues. one of the most pressing environmental issues is air pollution. New Delhi the capital of India has the worst air quality. Studies have indicated that PM 2.5 concentrations in 2021 are more than ten times higher than the 2021 WHO air quality guidelines level. Vehicular emissions, industrial waste, smoke from cooking, the construction sector, and crop burning are amongst the biggest sources of pollution. The main reason is India's dependence on coal, oil, and gas.

This dependence has added to immense carbon emissions. Scientists have indicated that

persistent exposure to PM 2.5 can lead to heart and lung diseases. In spite of measures that are taken with respect to banning cracker burning during festivals, or even regulation on cars, and banning thermal plants, the Air quality index (AQI) in India continues to be at a very high dangerous level.

Figure 4: AQI Index for Delhi



Source: Times Of India

Water Pollution is another area that has increased due to unprecedented urban expansion and economic growth. Just like Air, waterways have become extremely polluted with 70% of surface water being unfit for human consumption. This is due to the illegal dumping of raw sewage and garbage. The water management system in India is completely inadequate due to the absence of pipe planning and inadequate waste management. Water pollution leads to a decline in the GDP of an economy as it impacts agricultural yields. Besides the impact on agricultural production, it brings in its wake, waterborne diseases like typhoid, cholera, and hepatitis leading to fatalities as well as higher cost in treating the diseases. Most of the waterways have become open sewage.

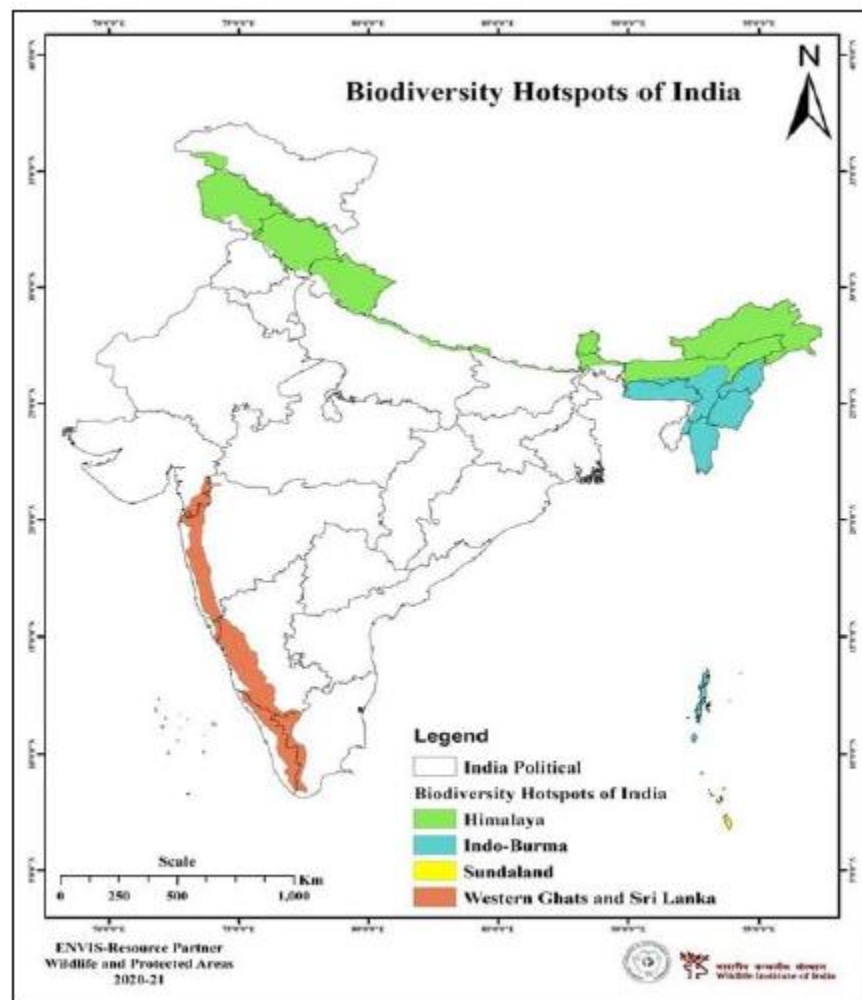
The third important impact is on varying temperatures flash floods, heat waves, droughts, and widespread wildfires, which have led to a loss of productivity and the GDP of the economy.

Solid waste management is becoming yet another important environmental issue.

With the population increasing and its urbanization, waste management is becoming a menace for the government.

The use of rampant plastic has added to the government's woes. These are extremely difficult to compost. They are stubborn and very often the Indus, Brahmaputra, and the Ganges are actually called "highways of plastic flows". Biodiversity, which caters to a large number of animal and plant species are threatened by increasing human habitation. A number of them including aquatic life are being threatened due to both pollution and deforestation.

Figure 5: biodiversity loss



Source: earth.org

5. Importance of saving our environment

The need of the hour is to control the adverse impact of climate change all over the world. Healthy ecosystems, purified air, and maintaining natural nutrients of the soil are some of the important areas that have to be addressed in an urgent manner as they are at the foundation of all civilization as well as for sustaining our economies. Biodiversity refers not only to species but also to the ecosystem. Every living thing including man is involved in the complex network of independent relationships.

Even if there is a decline in the number of some species, it is likely that the ecosystem might readjust itself to the new numbers, but the extinction of a specie creates havoc and can lead to widespread destruction. The loss of biodiversity in Europe has accelerated to unprecedented levels. European mammals, birds, reptiles, and butterflies have now entered the endangered zone. For example, the arctic fox, the Iberian lynx, and the red squirrel are under serious threat of extinction.

The unprecedented heat wave engulfing Europe presently (2022) has created havoc on the ecosystem as well as on all its inhabitants. This completely new aspect of climate change has disrupted life and has led to the realization that all countries working together is the only solution.

Saving the environment is not just an issue, it is a survival truth. Individuals, organizations, and the government have to come together to save the planet. The first step would be to preserve energy and reduce carbon sequestration. World wide an attempt should be made to reduce the use of coal and increasingly use hydro and solar energy. Our aim should be to reduce pollution of our environment and prevent global warming.

For this, attempts should be made to reduce the use of products that refuse to degenerate, eg plastic. Plastic items take about 1000 years to degenerate and the ones which we use in our daily lives take close to 10-20 years. Disposable diapers 500 years and aluminum cans 80-200 years. glass is made up of sand and broken glass can be made into a new one, but if broken glass is left in a landfill, it takes millions of years to decompose. Paper waste takes 6-8weeks to decompose.

Indicated below is the decomposition timeline of a number of daily used materials.

Figure 6: Time taken for garbage decomposition



Source: www.alamy.com

The above figure indicates the extent of time taken for the decomposition of everyday stuff that is taken for granted. A conscious decision has to be taken by the citizens of a country to change the material used in their everyday lives.

6. CONCLUSION AND THE WAY FORWARD FOR COUNTRIES LIKE INDIA

It is quite apparent that the impact of environmental degradation is real and is being felt all over the world. The unprecedented heat wave that Europe was subjected to in the summer of 2022 resulted from carbon emissions over the years. As time goes by, this is going to become a normal occurrence rather than one of occurrence. Care and corrective steps have to be taken by all economies of the world to prevent these unprecedented impacts of climate change .

For emerging countries like India, it becomes even more painful, difficult, and expensive to implement environment-saving technology and at the same time, trying to achieve high rates of growth, to solve its problem areas like reduction of poverty and unemployment. For India, both

are equally important, thus the country has to make a concerted effort to make the right choice between the two: adopting on the one hand the newer environment-friendly technology versus the present cheaper but environment damaging technology.

To save the planet and the future generation of Indians, it is essential to adopt environmentally friendly technology as a path to be followed for development.

BIBLIOGRAPHY

1. Blewitt, J. *Understanding Sustainable Development*, Earthscan, London, 2008.
2. Fernando, J *The Power of Unsustainable Development: What is to be Done?* Economics ANALLS. (2003).
3. Hove, H. *Critiquing Sustainable Development: A Meaningful Way of Mediating the Development Impasse?* Economics. (2004).
4. Iver, A. (2021). *its relationship between Sustainability determinants for India US and China during the sustainability awareness years from an energy usage perspective and its relation to Environmental auznets curve: analyses by linear regression*. utep.edu.
5. Katsoulakos, N., & Doulos, I. G. (2016). *environment and development*. Elsevier.
6. Marchi, V. D., Marchi, V. D., Krishnan, A., & Ponti, S. (2019). *handbook on globalvalue change*. Repec.org.
7. Pearce, D.W. Barbier, E. *Blueprint for a Sustainable Economy*, Earthscan, London, 2000.
8. Philippopoulos, A. Growth enhancing policy is the means to sustain the environment, *Rev. Econ. Dyn.* 11 (1) (2008).
9. Reynolds, M., Blackmore, C., & Smith, M. J. (2009). *the environmental responsibility reader*. Martin Reynolds.
10. Rokos, D. *From 'Sustainable' to Worthliving Integrated Development*, Livanis Publications, Athens, 2003 (in Greek).