

## Annals of Climate Change Finance: Retrospection

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**Abstract:** The paper entitled, “Annals of Climate Change Finance: Retrospection”, discusses the theoretical setting behind the evolution of climate change finance along with the various tool which comes under it with a view to make a brief review of its evolution over the period of time and how it is labeled as climate change finance while tracing its root from the collective effort commenced at global level in 1948. The paper also seeks to answer whether the fund under this climate change finance is sufficient or not. If not, what should be done in the form of possible ways is also being extended under this paper. The paper suggests what should be done in the form of possible ways in the climate change policy with special reference to global economies.

**Keywords:** Climate Change Finance, Global Economies, Climate Change Policy, G20

## INTRODUCTION

Aftermath of the Second World War, there was following themes towards which the world turned their attention and required the collective effort to achieve–

1. Peace
2. Freedom
3. Development
4. Environment

Whatever surrounds us is called Environment and what we do to improve our human environment is called development. These two are inseparable. In order to improve our human environment, the more and more economic activities are carried out while exploiting the natural and physical resources. In the process of carrying out economic activities while exploiting the natural resources, there are some byproducts as a result of these economic activities in the form of waste. It is not only anthropogenic activities but also non-anthropogenic activities responsible for waste generations. However, these

wastes are given back to the Nature. Nature has the assimilative capacity of waste. It is easy for the Nature to assimilate the biodegradable wastes and tough for the Nature to assimilate the non-biodegradable waste. While giving wastes back to the Nature, we forget that the Nature also has a limit in assimilating capacity of waste. Yes, there is cap on the assimilative capacity of waste of the Nature. It is in respect of both time taken to assimilate the waste as well as quality and quantum of wastes. Not only this, but also this assimilative capacity of waste degrades with the passage of time. But why? Actually, in the race of becoming the developed economies, the rate of exploitation of natural resources exceeded the rate of replenishment capacity of the Nature and the rate of giving wastes back to the Nature exceeded the rate of assimilative capacity of wastes of the Nature. This overheats the environment. When the environment overheats, several issues come out at local, national and global level. These problems are transboundaries in nature, which does not confine to the particular boundaries of the nations. Few issues are listed below:

1. Local environment issues: Air pollution, Depletion and pollution of water resources, Water Footprints, Solid waste problem, Land degradation, Degradation Ecosystem (forest, fresh water, marine etc.) Pesticide, heavy metal & other toxic chemical like DDT poisoning the web of life Carbon Footprints.
2. Global environment issues: Climate Change, Ozone depletion, Global Warming, Trade and environment.

These issues are of such in nature that if we did not make effort then it is to remember that Nature always has also the limit to bear the brunt of extreme circumstances thereafter it tries to regain its status quo. In our economics terminology, the Nature balances itself. In this regard, the Malthusian population theory is worth mentioning here. Thomas Robert Malthus in his book, “An Essay on the Principles of Population (1803)” wrote how the Nature balanced the population when it exceeded the Nature productive capacity to feed, that is, imbalances between food and population chain. Alternatively, he suggested adopting positive checks in order to avoid natural checks which are pathetic, i.e. natural calamities. From his theory, it concludes that we have only two choices.

1. Let the Nature itself balances the imbalances between human environment and natural environment.
2. Let us make the collective effort to balance the imbalances between human environment and natural environment.

To my mind, the third choice is the mixture of these two choices. In present, it is easily observed that despite our collective efforts to maintain the sanctity of Nature, we

are not in a position to mitigate the effects on the environment. This raises question on the collective efforts which are being put at local, national and international level. There is a need to retrospect the problem afresh and investigate the degree of effective collective efforts to maintain the sanctity of Nature. This means that if the collective efforts to maintain the sanctity of Nature are not much sufficient or not so effective that Nature could regain itself upto sufficient level while keeping its replenishment capacity and assimilative capacity intact with the pace of rate of exploitation of the Nature then the Nature will balance itself despite the collective efforts put by the human. Now the choice is our's "*What the Future We Want.*" This is the question of 21st century.

Before answer to this question, "*What the Future We Want*", the present generation seeks to answer of its own question put before the previous generations: when the Malthus had made us aware of problem then why it was not taken up seriously from that time, whether it was not considered a problem and when you have benefitted the beneficial opportunities of the environment then why you are posing restriction on us and why we should care of the problems and so on. These are nothing else but the apprehensions of the developing economies before the developed economies. They need answers of such apprehensions but also compel to think.

***"If not now, then when?; If not we, then who? ; If not here, then where?"***

Now the Problems are low level of awareness, lack of civic sense, lack of coordination among various government departments, reluctances in submitting environmental audit report by industry, lack of focus on preventive measures, illegal mining & deforestation and no central authority at World level.

### **RETROSPECTION: WHAT HAS BEEN IN THE PAST!**

It was the time when most of the economies were freed from the colonial rule and the world had faced the Second World War which caused heavy destruction in the developed economies. Now these two economies had their own economic interest lies the development goals. Developed economies, which borne the brunt of the Second World War, wanted to regain their development path while the developing economies wanted to follow the development path of the developed economies. In the 18<sup>th</sup> and 19<sup>th</sup> centuries along with the half of 20<sup>th</sup> century, there were less number of countries who gained freedom and most of the colonial economies. So there was less awareness regarding the development and environment trade off. However, some efforts were put in this direction from the foundation of International Union for Protection of Nature, Fontainebleau, near Paris in 5 October 1948 and later on it was renamed as International Union for Conservation of Nature and Natural Resources (IUCN) in 1956. Presently, it is known as International Union of Conservation of Nature. It is a unique partnership of governments & NGOs. A book written by Rachel Carson "*Silent Spring*" published in 1962

drew the attention towards the relationship between development and environmental degradation. In this book, Carson, R. (1962) glimpsed of Nature compromised by the use of synthetic pesticides, especially DDT (Dichlorodiphenyltrichloroethane) in Agriculture and argued “once these pesticides entered the biosphere; not only killed bugs but also made their way up the food chain to threaten birds and fish populations and eventually sicken human beings.” This raises the concern towards the existence and survival of human beings on the earth. Another eminent work was published by Club of Rome founded in 1968 entitled “Limits to Growth: a study about the future of planet” prepared by D. H. Meadows, D. L. Meadows, J. Randers and W. W. Behrens. In this report, it was argued “if present population, food, pollution and resource trends continue the limits to growth on the planet will be reached within the next 100 years.” It added on concern towards future of planet besides the existence and survival of human beings. Now exploring the development and environment relationship became imperative and global cause of concern. An International Seminar was held in Founex, Switzerland in 1972 and the Founex Report prepared by a panel of experts led by Maurice strong and three consultants – Mahbub-ul-Haq, Gamani Corea and Barbara Ward- was published. The report was first in its nature to identify key objectives and relationships between environment and development, and helped to locate and bridge the policy gap and also cleared conceptual differences separating developing and developed economies. The Report pointed out that environmental problems are trans-boundaries in nature and all countries are affected by it while presenting a list of issues and goals that developing countries had and should not avoid environmental problems because it is eventually different because there is poverty trap and lack of development. The problems of developing economies can be resolved through development process by widening of development concept while incorporating urgent social and human problems besides the concern for environment problem. But the problem is that limited resources in developing countries are constraint to achieving this integration. Another UN Conference on the Human Environment was held in Stockholm, Sweden in 1972. The conference called upon Governments and peoples “to exert common efforts for the preservation and improvement of the human environment, for the benefit of all the people and for their prosperity.” In 1972, “Only One Earth: the Care and Maintenance of a Small Planet” written by Barbara Ward & Rene Dubos was published. The book highlighted world’s biggest problems – poverty, hunger and the destruction of natural resources. United Nations Environment Programme (UNEP) was founded at Nairobi, Kenya on June 05, 1972. “UNEP is an agency of the UN that coordinates its environmental activities, assisting developing countries in implementing environmentally sound policies and practices.” UN’s World Commission on Environment and Development (WCED) began its work in 1983. “A Global Agenda for Change” was what the WCED

was asked to formulate “to propose a long-term environmental strategy for achieving sustainable development by the year 2000 and beyond.” WCED’s Report “Our Common Future” was published in 1987. It defined, “sustainable development as the ability to make development sustainable – to ensure meeting the needs of present generation without compromising the ability of future generations to meet their own needs.”

The World Meteorological Organization (WMO) and UNEP established the Intergovernmental Panel on Climate Change (IPCC) in 1988. UN Conference on Environment and Development (Earth Summit) was held in Rio de Janeiro (Brazil) in 1992. The outcome of Earth summit was Agenda 21 addressing the burning problems of that time & also aimed at preparing the world for challenges of the forthcoming century. United Nations Framework Convention on Climate Change (UNFCCC) is an International environmental treaty produced at the Earth Summit 1992 with the objective “to stabilize greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.” In 1997, the Kyoto Protocol concluded and established legally binding obligation for developed economies to reduce their greenhouse gas emissions. Kyoto Protocol Framework Convention on Climate Change was adopted in 1997. UN Millennium Summit (2000) declared 8 Millennium Development Goals and 18 Targets to be achieved by 2015. (Rio+20) UN Conference on Sustainable Development (2012) held in Rio de Janeiro (Brazil). The document “The Future We Want” released putting sustainable development as a top priority in the agenda of UN and the global community. Appreciable outcomes of Rio Summit were the restoral of “Principle of equity & of Common but Differential Responsibilities (CBDR)” in the tackling of environmental issue at global level and plating poverty alleviation at the top of agenda. The conference decided to launch 4 mechanisms: “1- Developing Sustainable Development Goals 2- Technology Transfer 3- Financing Strategy 4- Defining the Format and Organizational aspects of the high level political forum to follow up on the implementation of Sustainable Development.” Sustainable Development Goals have “17 Goals and 169 Targets to be achieved by 2030.” Among 17 goals, the goal number 13 is “to take urgent action to combat climate change and its impacts.”

Climate change caused by anthropogenic as well as non-anthropogenic factors which alters climate measures such as temperatures, wind and precipitation that is prolonged. In the discourse of climate change, the global economies routed the response mechanisms along two prime tracks – Adaptation and Mitigation. “Adaptation is the process of making an adjustment in natural or human systems in response to actual or expected climate stimuli or their effects, which moderate harm or exploit beneficial opportunities while Mitigation is an anthropogenic intervention to reduce the source or enhance the sinks of GHGs. Mitigation’ strategies are important, ‘adaptation’ strategies

are indispensable, because even a drastic & immediate cut in global GHG emissions would not fully prevent climate change impacts. (Murlidharan, K. 2021 Chapter 5 Pg. 165).” These two mechanisms require funding at large scale in order to be operative. Thus, climate change finance refers to “local, national transnational financing- drawn from public, private and alternative sources of financing to support the mitigation and adaptation in order to combat the climate change and its impact.”

Now again, it raises the apprehensions in the mind of developing economies before the developed economies regarding financing the mechanisms (adaptation and mitigation) to combat the climate change and its impact. UNFCCC, Kyoto Protocol and Paris Agreement had already made a call for financial support from the more endowed countries to the less endowed and vulnerable to climate risks. In Cancun Agreements (2010), developed economies made a commitment to “a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries in respect of adaptation and mitigation activities to combat climate change and its impacts.” In Paris Agreement (2015), developed economies re-confirmed the \$ 100 billion goals and agreed to set a new collective quantified goal not less than of USD 100 billion per year prior to 2025. Before United Nations Conference of Parties (COP24) in 2018, the BASIC (Brazil, South Africa, China and India) countries said “they would push developed countries on their commitment to providing \$100 billion annually from 2020.” Alok Sharma, president of COP 26, reiterated “a mechanism was being put in place to achieve the **target of climate financing USD 100 billion by 2023.**” At COP21 in Paris, Parties extended the \$100 billion goals through 2025. After COP26, there was a consensus “developed nations will double their collective provision of adaptation finance from 2019 levels by 2025, in order to achieve this balance between adaptation and mitigation.”

## NEED FOR CLIMATE CHANGE FINANCE AT GLOBAL LEVEL AND TOOLS

The report by World Economic Forum (WEF) projected that about \$5.7 trillion would require investing annually in green infrastructure by 2020. The annual commitment of \$100 billion appears to be a drop in the ocean before the \$5.7 Trillion puzzle. This is why there is a need for large scale investment in 2020 and beyond for the effective implementation of Mitigation and Adaptation Mechanisms to tackle climate change and its impact. The fact behind is this that both mechanisms require a large scale investments so a significant level of financial resources are needed. In order to tackle the problem of fund deficiency at global level, few initiatives have been taken in the form of Global Climate Financing Tools.

Green Climate Fund (GCF) was established after Cancun Agreement to reduce greenhouse gas emissions in developing countries. It is designated as an operating entity of the financial mechanism. Adaptation Fund (AF) was result of Kyoto Protocol

and established in 2001. Under this fund, approximately US\$ 532 million committed to adaptation and resilience activities. Global Environment Fund (GEF) served as a private equity fund focusing on seeking long term financial returns by investing in clean energy. Besides, GEF and GCF, parties also established two special funds managed by the GEF, “The Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF).”

## CHALLENGES TO CLIMATE CHANGE FINANCE AT GLOBAL LEVEL

Combating climate change and its impact does not only depend upon the adaptation and mitigation mechanisms but also financing the mechanisms in order to make them operative. Under the CBDR principle, each nation requires to contribute keeping in mind the need of mechanisms in order to make them operative. This requires that national needs and climate change finance must go in tandem with each other. However, it was observed that there is a huge gap between the two under Nationally Determined Contribution. To fill the void, the additional international financial support is needed. Making arrangement for additional financial support at global level is a major challenge of the present time. This will create additional issues in the form of approving fund for developing countries and Least Developed Countries from the multilateral climate funds. “The uncertainties such as, the recent refusal of US to pay \$2 billion of its pledge this has created shortage of funds at available GCF.”

## CONCLUSIONS & SUGGESTIONS

Climate Change Policy is not a choice between a “High-growth, High-carbon world” and a “Low-growth, Low-carbon world.” This poses a question of “whether to grow or to preserve the planet.” To response such question, an economic analysis of climate change policy is need of the hour at theoretical level. While at practical level, there must be an attempt to limit human activities to level that is within the carrying capacity of the environment like a “Plimsoll line” of the ship. Fundamental Change in Attitude of stakeholders to use Natural recourses wisely is also needed. Redefining Growth in terms of “Quality of life” and increase in national output in conformity with sustainability is needed. Redefining costs and benefits to reflect externalities and to promote investment decisions compatible with sustainability criteria is also needed. Diversionary principles to be followed – money should be diverted from activities that are environmentally damaging to those which are environmentally friendly (e.g. diversion of money from waste disposal to waste reduction). Thus three main building blocks of climate smart policies are:

1. Acting now: time is most scarce element.
2. Acting together: global partnership from technology transfer and funding mechanism.

### 3. Acting differently: resource use efficiency

#### *References*

- Callan, S.J. & Thomas, J.M. ed. 6 (2015). Environmental Economics and Management: Theory, Policy and Applications. South-Western College Publishing ISBN: 978-8131527641
- OECD Report (September, 2022). Climate Finance and the USD100 Billion Goal. Available at <https://www.oecd.org/climate-change/finance-usd-100-billion-goal/>
- Shirai, S. 2022. An Overview on Climate Change, Environment, and Innovative Finance in Emerging and Developing Economies. ADBI Working Paper 1347. Tokyo: Asian Development Bank Institute. Available: <https://doi.org/10.56506/DRTF8552>
- WEF Report (2021). This is How Climate Change Could Impact the Global Economy. Available at <https://www.weforum.org/agenda/2021/06/impact-climate-change-global-gdp/>
- Muralidharan, K. (2021). “Chapter 5 Lean, Green, and Clean Quality Assessment Models”, Springer Science and Business Media LLC, 2021 Publication