

THE FATE OF KYOTO PROTOCOL AND CLEAN DEVELOPMENT MECHANISM

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Abstract

It has been 5 years since the second commitment period of the Kyoto Protocol commenced. Several have questioned its contribution to the main focus of the Protocol: Climate change. This essay highlights both the pros and cons of the Protocol as its fate will be determined by viewing its performance holistically. This essay also highlights the position of India under the Protocol and the impact of CDM on India. It concludes on the fact that the Protocol is a key-step toward climate change.

Keywords: *Kyoto Protocol, Clean Development Mechanism, Climate Change, Sustainable Development*

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INTRODUCTION

A mechanism for dialogue has always helped in improving ties and maintaining peaceful existence between the countries. Dialogues are generally preferred by the countries as it provides for a two-pronged solution: the country's stand is made clear to all the other countries and the countries are able to compare as well as compete (if necessary). A platform which provides exchange of information at the international forum builds a certain trust and confidence among the countries. *These platforms ultimately serve their purpose:* of building cooperation and paves the way for a concerted collective effort to achieve the desired goal. The Kyoto Protocol is one such forum. It was envisioned to promote coordination to collectively encourage sustainable development. A collective effort was expected by the parties to successfully reach the required limit of carbon emissions in the atmosphere. It was an ambitious project taken by the UNFCCC completely dependent upon the resolve of the parties which ratified it. But with time this resolve has been waning. Many countries have still not reached their desired limit. Certain developed nations which could have been the torch-bearers of sustainable development did not want to be a part of the Protocol at all. Also, a limited role was assigned to the developing nations like India and China. With all these problems, the fate of the Protocol has been questioned time and again by the Parties to the Protocol, Non-parties and even environmentalists. The dialogue process thus appears weak to the world currently which has bogged down the process for effective steps toward the problem of climate change.

THE INCEPTION- LATE REALIZATION IN ITS SOPHISTICATION

Kyoto Protocol was the result of subsequent acceptance of the fact that climate change was indeed caused by human induced activities mainly focusing on rapid industrialization and urbanization. Its inception was preceded by a long pause of questions and doubts. The world questioned this because defining climate change and its causes was a tougher task. Being an ambiguous term, climate change as an issue was officially highlighted in the Intergovernmental Panel on Climate Change (IPCC) in 1990. Subsequent assessment reports¹ by IPCC made it clear with evidence that '*Yes! Climate change is induced by human activities.*'

¹ These are published materials composed of the full scientific and technical assessment of climate change, generally in 3 volumes. Available at: <https://www.ipcc.ch> (Accessed on: 26-02-2017)

After this a major breakthrough was the Rio de Janeiro Conference (1992), the United Nations Framework Convention on Climate Change (UNFCCC) was established. It aimed at stabilizing of greenhouse gases² and also promoted international dialogue for framing policies on climate change. Hence, Conference of Parties came into conception. And with this the Kyoto Protocol also became a reality³. This reality was just on papers as it finally came into force in 2005. The inception process of the Protocol speaks to the complex problem that climate change presents economically, socially and politically. Due to its complexity the process for nurturing sustainable development was slower and tardier. Realization that the phenomenon was anthropogenic was unfortunately slow.

AN OVERVIEW OF THE PROTOCOL

The whole process was achieved in three phases. The Protocol was adopted in 1997⁴. It entered into force in 2005⁵. The detailed rules which were contained in the Protocol were adopted in Morocco⁶. The UNFCCC states the main aim of the Protocol as under:

‘...The stabilization of Greenhouse Gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.’⁷ It commits its Parties by setting internationally binding emission reduction targets.

For achievement of this aim, a set of rules have been provided which bind the parties and facilitate emission limitation. The important features of the Protocol are as follows:

- *The Commitment Period has been divided into two phases.* The first commitment period started from 2008 to 2012. The second commitment period began on 1 January 2013 and will continue till 2020. Climate change being a complex issue, the inclusion of commitment period into 2 phases is desirable. The Protocol has kept in mind that every party has to commit to its goal in its own pace.
- *Clearly provides the Greenhouse Gases which are needed to be curbed and reduced.* These have been grouped under *Hydrofluorocarbons and Perfluorocarbons*. The goal is

² Available at: <http://unfccc.int/2860.php> (Accessed on: 19-02-2017)

³ *Ibid*

⁴ Available at: https://unfccc.int/kyoto_protocol/items.php. (Accessed on: 10-02-2017)

⁵ *Ibid*

⁶ The Marrakech Accord- This accord was adopted in Morocco which stated that LULUCF activities should not undermine the environmental integrity of the Kyoto Protocol, Available at: https://unfccc.int/land_use_and_climate_change/lulucf/items/3063.php (Accessed on: 10-02-2017)

⁷ *Supra* note 2

to reduce the emissions of these gases by 5.2% compared to the 1990 levels. It also makes up for those gases which have not been covered under the Montreal Protocol⁸.

- *The obligations set vary according to the country's development and growth.* The limitations are set by the countries themselves according to their capacity and keeping in mind the economic standing and progress. In a way the Protocol facilitates achievement but not at the cost of a country's economy.
- *Acts as a bridge between the developed and developing country.* The Protocol provides for aid by the developed countries so that even the developing countries can benefit.⁹ The countries are expected to even share their information on the measures taken by them to restrict and curb Greenhouse Gases emission. A forum which promotes cooperation between the developed and developing country on a *common issue faced by the world is a distinct feature in a time where isolation is preferred over global interaction and cooperation.*
- *More emphasis on meetings where changes and modalities can be discussed. The Conference of Parties plays an important role under the Kyoto Protocol.*¹⁰ An expert review body has also been set up to check on the information submitted by the Parties to the Protocol pursuant to the decision of the Conference of Parties.¹¹
- *Flexible Mechanism:* Perhaps the most important feature of the Kyoto Protocol is the provision for flexible mechanism which the obligate Parties may adopt while obliging itself to curb and achieve a certain limit on Greenhouse Gases emissions (GHG's). These flexible mechanism all the more have made the Protocol distinct. Flexibility accentuates willingness of the Parties to oblige. These important mechanism includes: 1) *Clean Development Mechanism (CDM)*¹², 2) *Joint Implementation (JI)* and 3) *Emissions Trading (ET)*. According to UNFCCC,¹³ 'the Kyoto mechanisms:

1) *Stimulate sustainable development through technology transfer and investment*

⁸ The Montreal Protocol is an International Treaty designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion. Available at: <https://ozone.unep.org> (Accessed on: 10-02-2017)

⁹ Korhola, Elja-Riitta, The Rise and Fall of Kyoto Protocol: Climate Change as a Political Process, 15 November, 2014, Available at: <https://helda.helsinki.fi/bitstream/handle> (Accessed on: 19-02-2017)

¹⁰ *Ibid*

¹¹ Article 8, Kyoto Protocol

¹² Available at: <http://www.cdmrulebook.org/84.html> (Accessed on: 19-02-2017)

¹³ Available at: <https://cdm.unfccc.int> (Accessed on: 12-02-2017)

- 2) *Help countries with Kyoto commitments to meet their targets by reducing emissions or removing carbon from the atmosphere in other countries in a cost-effective way*
- 3) *Encourage the private sector and developing countries to contribute to emission reduction efforts*

CDM and JI are the two project-based mechanisms which feed the carbon market. The CDM involves investment in emission reduction or removal enhancement projects in developing countries. JI enables developed countries to carry out emission reduction or removal enhancement projects in other developed countries.'

The Kyoto Protocol was a pioneer step in dealing with the climate change phenomenon envisaging a concerted effort of its parties to contribute as well as benefit at the same time. Considering all of these benefits, the Protocol has time and again been questioned by the skeptics about its effectiveness. Hence, this makes it ever so important to read into its future!

FATE THROUGH THE EYES OF A CRITIC

Questions are important for sound understanding of an event, a happening or even a non-happening. It is an integral part to question the consequence of a decision. Pragmatism and skepticism are significant when pitching or adopting an idea. The idea of adopting a system where the emission of GHG's can be controlled by imposing a limit and a duty on the developed countries to help the developing countries in such projects has naturally been doubted by the skeptics. Their views have affected the manner in which the Protocol and International Organizations are viewed. Its criticism has gained popularity and hence through the eyes of a skeptic the Protocol is weak and ineffective. Certain important points which have been time and again raised by the critics of Protocol are stated as follows:

A complex challenge has been oversimplified: Many climate change experts believe that the phenomenon of rapid climate change has been viewed in an oversimplified manner. There is an uncertainty that shrouds its solution but, the Protocol ostensibly views the *emission limitation regime* as an answer. It is a cluster of other problems which transcend just physical aspects. In a way climate change affects the society as well as the economy. Making efforts to find a problem to the solution also speaks to a country's standing. An over-simplification is not the answer. Being a complex challenge, it has been viewed as a wicked problem rather

than a tame problem.¹⁴ The solution to a wicked problem can never be right or wrong as it is in a tangle itself.

The problem of 'Differentiated Responsibilities': A major equitable principle of the UNFCCC (United Nations Framework on Climate Change Convention) is the '*Common but Differentiated Responsibilities*' principle. This principle acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change. The principle of CBDR-RC is enshrined in the 1992 UNFCCC treaty, which was ratified by all participating countries. The text of the convention reads: "... *the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions.*"¹⁵

This principle has been criticized by the developed countries as having different interpretations of what is equitable and what is not for these two categories. The principle focuses on two points when imposing duties on the parties, i) historical contribution to the GHG emissions and ii) the economic and technological capacity of the country. They argue that emerging economies like China (one of the major emitter of GHG), India and Indonesia are still seeking an advantage under this principle and hence, remain non-obligated to the Protocol. The application of this principle hinders the efforts of the developed countries and the effectiveness of the Protocol. The flexibility mechanism has been criticized as a simple notification by the developing countries to the Secretary General stating that the country 'intends to be bound' by the emission limit. This flexibility principle has also caused stalling of important negotiations and affected decisions of major economies like the USA¹⁶.

No obligation for the developing countries- No obligation for the developing countries is an important feature of the Kyoto Protocol which is an extension of the 'CDR' principle of the UNFCCC. This has been criticized as currently the major emitters of GHG's belong to this category. This singling out process overburdens the developed countries and makes them less willing to oblige the Protocol at all. The EU and the US have pointed out the fact that

¹⁴ Available at: https://unfccc.int/files/pdf/03_unfccc.pdf (Accessed on: 12-02-2017)

¹⁵ *Ibid*

¹⁶ Korhola, Elja-Riitta, The Rise and Fall of Kyoto Protocol: Climate Change as a Political Process, 15 November, 2014, Available at: <https://helda.helsinki.fi/bitstream/handle> (Accessed on: 19-02-2017)

emerging economies should be treated differently from countries which are not fast developing countries.¹⁷

The problem with the Flexibility Mechanisms under the Protocol: The flexibility mechanism has also been put under a scanner by the critics. This majorly includes the Clean Development Mechanism¹⁸. It has been dubbed as the ‘first global, environmental investment and credit scheme of its kind, providing a standardized emissions offset instrument, CER’s (Certified Emission Reduction).¹⁹ This provides an opportunity to the developed countries to start a CDM project activity in a developing country. This earns the developed country saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO₂, which can be counted towards meeting Kyoto targets.²⁰ This mechanism is mainly criticized because of its rigidity. Under the ‘*Additionality principle*’²¹ the project developer has to show that the project could not be implemented without the support of the Clean Development Mechanism. The other point is the fact such projects are declining. A decrease has been seen in such projects. For instance, in 2014 an announcement was made by the National Clean Development Mechanism Authority to change the submission process for approval of projects, the decrease in number of project was highlighted as a fact. The contribution of CDM toward emission reduction is declining by the years. Its ineffectiveness²² has thus questioned the Protocol itself. Another point raised is the treatment of nature as a commodity. Setting up of a trade mechanism for encouragement to both the developed and developing countries/parties has been to tackle climate change has also not sat down well with environmentalists.

HOW EFFECTIVE HAS THE PROTOCOL REALLY BEEN- AN APPRECIATION

Despite all this criticism, it should be admitted that the Protocol has provided a platform which envisions a medium for dialogue. Negotiations and dialogues are helpful where the issue requires deeper understanding and better cooperation. Kyoto Protocol served this purpose at a time when the realization that anthropogenic factors contributed to climate change had materialized lackadaisically and non-uniformly. Countries were not too willing to

¹⁷ *Ibid*

¹⁸ Article 12, Kyoto Protocol

¹⁹ Available at: <http://unfccc.int/2860.php> (Accessed on: 19-02-2017)

²⁰ *Ibid*

²¹ Available at: <http://www.cdmrulebook.org/84.html> (Accessed on: 19-02-2017)

²² Available at: www.cdmindia.gov.in (Accessed on: 19-02-2017)

share the burden still the Protocol succeeded to continue till its first commitment period entering into the second commitment period. There must be certain advantages to this Protocol that new parties are joining the Protocol. In a way this can be deemed as success.

The Clean Development Mechanism under the Protocol has also been appreciated for its positive impacts. During the First Commitment Period, this mechanism's performance has been nothing short of innovative. It incentivized the development of investments in projects of renewable energy, reductions of methane emissions and for aiding improvement of energy efficiency.²³ It also pioneered the carbon market and helped in capacity building of developing countries. The other important issue that the mechanism covered was the creation of employment in developing countries.²⁴ This helps the developing country and promotes sustainable development in countries which have high unemployment rate and poverty. The mechanism has also been viewed as a *tool for gender equality*. The CDM majorly deals in agriculture and energy projects. Women in the rural areas of the developing countries who contribute to agro-forestry, agriculture etc. can benefit from these. This is because it offers access to a range of beneficial technologies and services which can lighten the burden off women's shoulders and also help them in finding financial security.²⁵

INDIA AND THE KYOTO PROTOCOL

Around 2,295 projects had been registered with India's Designated National Authority for the CDM [2009-2011]. This constituted for 1-4th of the global total of projects.²⁶ Till 2012, India also performed better when it came to issuance of actual CER's²⁷. There was a major collaboration in the field of solar energy, renewable energy and power sector. It has also successfully trained and inter-connected the local government with such projects.²⁸

²³ Ministry for Foreign Affairs of Finland, Gender and the Clean Development Mechanism, November 29, 2010, Available at: <https://unfccc.int/files/application/pdf> (Accessed on: 20-02-2017)

²⁴ Available at: http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2719.php (Accessed on: 19-02-2017)

²⁵ *Supra* note 24

²⁶ Urpelainen, Johannes, The Clean Development Mechanism in India- is it working?, October 01, 2012, Available at: http://www.ideasforindia.in/article.aspx?article_id=58 (Accessed on: 21-02-2017)

²⁷ Castro, Paula, Benecke, Gudrun, Empirical analysis of performance of CDM projects: case study India, 2008, Available at: <http://climatestrategies.org/uploads/2008/02.pdf> (Accessed on: 22-02-2017)

²⁸ Bhat, Pamposh, CDM in India- Challenges and Success, December 23, 2006, Available at: http://www.epco.in/pdf/CDM_India_Challenges.pdf (Accessed on: 22-02-2017)

Still there are certain short-comings which have slowly led to the decline of the impact of CDM in India. Certain important ones are as follows:

The Government participation in such projects is passive. It is the companies which are the front-runners in such investments. The problem with this is that the returns are projected more than what can be achieved in reality.²⁹ Such over-ambitious numbers hurt the main goal in the long run.

This approach also brings in the fact that India also does not have a separate national policy on such projects. Agreed that there is an authority setup which monitors the projects and is involved in its approval but, a clear road-map is required to make this mechanism more effective and less uncertain.

In a study there were certain barriers mentioned by the investors of such projects. These ranged from technological problems, lack of skilled personnel and uncertain support for the project. Further this study provided that the promise of benefits was not evident from the responses of the village holders.

There is lack of measuring guidelines for assessing the contribution of CDM to sustainability benefits which focus on social, economic, environmental and technological well-being.³⁰ The other problem is India's optimism about the Protocol itself. With its focus on the Paris Agreement, the Kyoto Protocol is slowly losing its worth in the eyes of major climate change experts and environmentalists in India. India also demanded for clarity when it came to funding from the developed countries. There is a changing attitude towards the Protocol which is a result of changing politics and stature of India as the fastest growing economy of the World. Its priorities are changing.³¹

SO WHAT IS ITS FATE? - CONCLUSION

'A journey of a thousand miles begins with a single step' - Lao Tzu

²⁹ Urpelainen, Johannes, The Clean Development Mechanism in India- is it working?, October 01, 2012, Available at: http://www.ideasforindia.in/article.aspx?article_id=58 (Accessed on: 21-02-2017)

³⁰ Castro, Paula, Benecke, Gudrun, Empirical analysis of performance of CDM projects: case study India, 2008, Available at: <http://climatestrategies.org/uploads/2008/02.pdf> (Accessed on: 22-02-2017)

³¹ Chatterjee, Bappaditya, Kyoto is dead, long live Kyoto! , December 01-15, 2012, Available at: www.cseindia.org/BE_December_01 (Accessed on: 22-02-2017)

Climate change is no simple issue. A lot needs to be covered and a lot more understanding of this complexity is required. It seems as a long and arduous journey and the first step began with the Kyoto Protocol. It should be appreciated for the fact that at least it provides a road-map to reduce and control anthropogenic activities which contribute to the depletion and deterioration of Mother Nature. Countries are still looking forward to be a part of the second commitment period of the Protocol and even the advanced nations are looking forward to chip in. In his final Presidential address, Barack Obama called for better action on climate change and global warming. *'...Without bolder action, our children won't have time to debate the existence of climate change. They'll be busy dealing with its effects. More environmental disasters, more economic disruptions...Waves of climate refugees seeking sanctuary. We can and should argue about the best approach to solve the problem.'*³²

Prime Minister Narendra Modi also termed the phenomenon of climate change as a global challenge at the Paris Summit³³. His speech reflected the voice of developing nations as he called on for bolder action by the advanced countries. He even touted for better leadership by India so it emerges as a leader in climate change and sustainable development.

It can be said that the bigger picture has come to the attention of all the emerging and advanced economies. This is a step in the right direction. Considering this a fact, the Kyoto Protocol should be viewed as an enabler rather than a regressive step by both the developed and developing nations. For making it more effective, dialogues and exchange of information should be done openly and without any hidden political agenda in mind. As for the Clean Development Mechanism to be more effective in the developing countries, these nations can come together and hold dialogues for better implementation of this mechanism. CDM should be viewed as an opportunity. A better national and international policy, exchange of information which looks at the success stories and causes for failure impartially should be encouraged.

A complex problem has been recognized. What is required is action and this can only be through dialogue and better communication.

³² Emily Holden, In final address, Obama urges U.S. To deal with climate change, E&E News, January 11, 2017, Available at: <https://scientificamerican.com/article/in-final-address-obama-urges-u-s-to-deal-with-climate-change/> (Accessed on: 21-02-2017)

³³ Chetan Chauhan, Climate change is not of our making: Modi at Paris summit, Hindustan times, December 01, 2015, Available at: <http://m.hindustantimes.com/india/climate-change-is-not-of-our-making-modi-at-paris-summit/story-AYCPgLGsqWD2kS2o4cZORO.html> (Accessed on: 21-02-2017)

As for India, Prime Minister Narendra Modi rightly put in words at the Paris Summit, ‘India’s progress is our destiny and right of our people...We need a genuine global partnership.’ This is the need of the hour for all developing countries to contribute toward sustainable development. A helping hand by the advanced countries!

Sharing of knowledge and what a person possesses benefits both the receiver and the one who imparts. This is the bigger picture and it should aid the smaller but significant part which is the Kyoto Protocol.