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PARIS AGREEMENT ON CLIMATE CHANGE: OWNING RESPONSIBILITIES

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Introduction

Climate change refers to a change in distribution of weather patterns which lasts for an extended period of time. Numerous natural as well as man made factors result in such a change in climate. But scientific consensus suggests that certain man made factors result in drastic and unnatural change in weather patterns, often referred to as 'global warming'. Human activities increase the concentration of greenhouse gases such as Carbon Dioxide (CO₂) due to deforestation, excessive combustion of fossil fuels, aerosols, animal agriculture, etc., which directly or indirectly affect the climate, microclimate, and measures of climate variables. As a result, the United Nations Framework Convention on Climate Change (UNFCCC), an international environmental treaty, was negotiated at Earth Summit in Rio de Janeiro in 1992 with the objective of "stabilizing greenhouse gas concentrations in the atmosphere at levels that prevent dangerous anthropogenic interference with the climate system". The framework does not set any binding limits on greenhouse gas emissions of countries, nor does it have any enforcement mechanisms. Rather, it lays down the outlines of how international treaties (called 'protocols' or 'agreements') may be negotiated.

Kyoto Protocol was one such framework which emerged from UNFCCC in Japan in 1997 (Associated Press 2016). The framework sought to stabilise greenhouse gas concentrations. It came into force in the year 2005 for a period of 15 years and was signed by almost all the countries with the notable exception of United States (Associated Press 2016). Certain developing countries such as China and India were not mandated to reduce their emissions as their contribution to the world carbon budget was relatively small. Even after a decade of negotiations Kyoto was not a complete success. Countries were more concerned about the manner in which their economy would be

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affected by the restrictions placed by the protocol. These concerns ultimately hamstrung the protocol. Even though it set comprehensive goals and binding targets to reduce emissions, it fell short of signatories. One of the superpowers, the United States of America, refused to sign it, and only 37 industrial nations signed the Protocol. In Durban, the European Union pledged to support the Protocol till 2017 (even though it will operate till 2020), but many countries will ‘let’ their targets expire before 2020 (Marcacci 2011). This recantation threatens to limit reductions even further.

The UNFCCC in 2009 (also known as Copenhagen Summit) stressed that climate change is one of the biggest challenges of the century and actions need to be taken for keeping global temperatures from rising above 2 degrees Celsius. This document was not binding and major recommendations were not accepted by some countries which resulted into yet another failure. In 2015, the Paris Agreement was adopted with emphasis upon commitments of countries through ambitious Nationally Determined Contributions.

The mood was so pessimistic after the failure of Copenhagen Summit that UN Climate Chief said she thought a global consensus was not possible in her lifetime (Ritter 2016). But now, an infallible agreement is expected to take effect by 2018. It is after twenty-one years of coming into effect of UNFCCC that we finally have a reliable and working international treaty – a step that is twenty years overdue, but is still welcome.

The Paris Agreement

The Paris Agreement is meant to be a signal to reduce the usage of fossil fuels as primary energy source and for the countries to take part in climate change more seriously (Worland 2015). Many countries were part of the Paris deliberation, both developed and developing countries, including the oil and gas producing countries. This displays a unity seen never before as it also includes the countries whose economy will be affected the most by the Agreement. The deal requires countries, which ratify it, to peak their emissions ‘as soon as possible’, and then reduce them in the coming century. “A facilitative dialogue among Parties in 2018 will be convened to take stock of the collective efforts of Parties in relation to progress towards the long-term goal for peaking of Green House Gases,” says paragraph 20 of the Paris text (UNFCCC 2015). Reduction in emission of greenhouse gases needs to be continued as the century progresses. Countries will aim towards keeping global temperatures from rising beyond 2 degrees Celsius by the year 2100, while thriving for an ideal 1.5 degrees Celsius (Worland 2015). The deal encourages spending billions on achieving more efficient

combustion technology, procuring and developing renewable sources of energy like solar and wind power, constructing sea walls for low lying countries, etc. The text of the Agreement also includes a provision which requires the developed countries to spend \$100 billion on developing countries for helping them during natural disasters. This figure is believed to be a 'floor' which might increase with time (Worland 2015).

At the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris, India's argument rested primarily on the principles of 'equity' and 'common but differentiated responsibilities' which states that the developed countries, through industrialisation, have already used up two thirds of the carbon space in the atmosphere leaving little space for developing countries like India to grow with some level of unavoidable emissions, especially from coal fired plants (Ananthakrishnan 2015a). This leaves 1000 billion tonnes of carbon dioxide for use by remaining countries till the end of the century. It is required by the Agreement that the developed countries should simultaneously help the developing countries in their transition to a green economy, providing funds when needed (for natural disasters), encouraging innovation and transferring technology. The Agreement provides a regime for voluntary disclosure by countries of their plans to reduce reliance on fossil fuels. This would be done through quantified and measurable actions forming 'Intended Nationally Determined Contributions' (INDC or NDC). This means the countries would themselves declare the steps they would take to reduce emissions without pressure from any external authority. India found itself in difficult position in Paris negotiations - its demand for decadal review of INDCs was not accepted (UNFCCC will review INDCs of countries every five years). Article 13 of the Paris Pact requires transparent functioning, which is not a strong virtue in India's governance. Countries are required to ensure that transparency forms a part of their INDCs which is communicated to the UNFCCC (Ananthakrishnan 2015a). Same applies to the developed countries who have been dragging their feet to provide developing countries with \$100 billion a year, mainly towards adaptation needs. Within the next few years, India will need to flesh out the promises made in its INDC to be submitted to the UNFCCC, along with the steps to be taken for helping vulnerable communities. The Intergovernmental Panel on Climate Change (IPCC) will release a special report in 2018 highlighting the impacts of global warming of 1.5 degrees Celsius above pre-industrial levels and related environmental consequences. This report of IPCC, sought by many vulnerable nations, particularly island countries, will certainly lead to a new wave of protests against oil companies, with implications on India (Ananthakrishnan 2015a). The government therefore needs to prepare for a spike in public pressure, and work overtime to meet the demands that it has signed on to.

Intricacies of Provisions under the Agreement

During the Copenhagen Summit in 2009 it was agreed that global temperature should not be allowed to rise more than 2 degrees over pre-industrial levels. When Paris began, some observers thought that UN would abandon the 2 °C target for something more realistic. This is because no concrete steps were taken to limit greenhouse emissions with the same target earlier. Instead, nations began supporting a more ambitious path. More than 100 countries supported target of 1.5 degrees instead of 2 degrees, including the United States. Still, Article 2, Section 1 of the final document retains the 2°C target while recognising the importance of 1.5 degrees (Ananthakrishnan 2015a). Therefore, it will be better for nations to strive for an ideal 1.5°C target, but they are not mandated to push hard for anything beyond 2 degrees.

If humanity wants to survive with global temperatures below 1.5°C by 2100, it will need to stop carbon emission to zero by 2060. Small island countries wanted forceful sanction against high emission levels, calling for ‘zero global emission by 2060’ or ‘decarbonisation as soon as possible after 2050’. But countries like Saudi Arabia argued that it would be harmful for countries’ sustained economic development, which may be interpreted as a threat to their revenues from oil production. Most developing countries support the same argument. They are willing to reduce emission levels, but not bring them to a complete halt. Article 4, Section 1 of the final Paris Agreement resolves to peak global emissions as soon as possible².

Change in climate patterns will affect not only coastal cities and settlements, but also farmers and fishers who depend on annual predictability of rain and ocean currents. A single section of the Paris agreement, Article 8, addresses the issue by listing ways in which developed countries could assist such climate threatened countries by providing them with emergency preparedness, early warning system, livelihood, etc. In order to salvage Copenhagen climate talks in 2009, Hillary Clinton, the then US Secretary of State, announced \$100 billion to be mobilised by rich countries for the developing countries to help them make their economies more sustainable and prepare them for the storms to come (literally) (Associated Press 2016). The United States preferred two countries – China and India – to contribute to \$100 billion as, according to the United States, they are rich and powerful. But India and China argued that being powerful and rich is a relative term. They may be rich and more influential in their region, but not

² No fixed date has been assigned for developed or developing countries for peaking emission levels.

globally. Millions of people in these countries still live in poverty and catering to their needs is their priority. Item 115 of the Paris pact says that significantly more than \$100 billion will be needed for any visible changes to take place.

The Agreement mentions two ways in which global emissions by nations can be checked. The first is stock-taking, when countries will announce the steps they took (in the past five years) for reducing carbon emissions. The Agreement says that stock-takes shall take place every five years. The second is ratcheting, in which countries will announce more ambitious plans for future along with stock-taking. India wanted ratcheting sessions to take place every ten years, citing its short term goal was to lift its nation out of poverty, but the Pacific Island nations and the US wanted it to take place every five years, so as to keep a better track of steps taken by countries. Article 14 of the Paris Agreement deals with the mechanisms of stock-taking and ratcheting. It announces that stock-taking will begin from the year 2023, then every five years, and that countries will simultaneously announce enhanced plans for future ratcheting. According to Item 20 of the Agreement, nations will meet in 2018 for a facilitative dialogue where they are expected to improve their plans.

The United States wanted a third party oversight, similar to the International Atomic Energy Agency, which would make sure that countries adhered to the promises made during ratcheting. But China, India, and other developing countries were sceptical of third party oversight. Under Article 13, though there will be no outside agency, nations will be subject to a common framework of transparency (UNFCCC 2015d).

Developed countries have been urged to scale up their financial support by 2020 and before 2025. Although the terms of providing financial support are voluntary, the mechanism could offer much needed compliance and direction. Developed countries have to provide biennial reports on their support to developing countries, whereas developing countries may do so voluntarily. Even though there are no sanctions in the Agreement for non-compliance, the biennial reports (under transparency framework of Article 13) will provide a clear picture of adherence to the pledges made and also the progress on INDCs. Moreover, all submissions are subject to scrutiny of Technical Expert Review, which will analyse their authenticity and areas for improvement (Shinde 2015).

Under the Kyoto protocol, no greenhouse gas targets were set by developing countries like India and China; it extended only to soft commitments like promoting sustainable

development, information sharing, enhancing carbon absorbing resources like forests, etc. But, in Paris, countries are expected to follow their respective INDCs. Also, the current agreement focuses more on the Green Climate Fund which has been promised by the developed countries for a long time. Unlike Kyoto Protocol, the pledges made by developed countries for reducing emissions are not legally binding. They are voluntary submissions by countries based on their self-determined capabilities. This approach might seem odd as questions can be raised on the real cooperativeness of countries when they choose their own targets. For critics, Paris is worse than Kyoto, considering the mutual cooperation which could have been expected from countries in today's relatively stable international environment. But for others, this is a pragmatic approach. From the twenty-five years of experience of negotiating climate talks, organisers suggest that imposing binding obligations and targets on countries simply do not work (Urpelainen 2015). Commitments must be based on what countries are willing to do.

The Paris Agreement is not legally binding and hence cannot trigger enforcement through International Court of Justice (ICJ), nor can any penalty be imposed for non-compliance. However, it has been structured in such a manner that it allows countries to freely decide their future goals, with a strong review mechanism to track progress in an accountable manner (Shinde 2015). Countries are not punished for under-performance of their desired goals, but regularly reviewed and transparent submissions by countries put their reputation at stake in front of the world (Urpelainen 2015). In this competitive world, where one country wants to outperform others, one would not desire any form of implementation failure or lack in ambition. Once parties ratify the Agreement, it is believed that the reviewing and reporting mechanisms are so detailed and transparent in nature that the peer pressure of adhering to its terms would be enough. This pressure also led to submission of their INDCs before the summit by 189 out of 196 countries (Shinde 2015).

According to Section 21 of the Paris Agreement, it will enter into force only when 55 countries ratify it to the UNFCCC which should amount to a total of 55% of world's greenhouse gas emissions. Article 20 says that the ratification process will take place from 22nd April, 2016 to 21st April, 2017 at UN headquarters (Shinde 2015). This is the place where countries will formally express their willingness to be bound by the international agreement.

Operationalisation of the Paris Agreement is a two-step process. Signing is the first step and ratification is the second. Ratification is a more time consuming and intricate process. As of 25th April, 2016, 175 countries, out of 190 who were present in Paris last

year, signed the Agreement (Sinha 2016). The ones who haven't signed yet include major oil producing states like Nigeria, Saudi Arabia, Iraq, whose economies will be affected substantially because of a faster shift towards cleaner technology. It is not mandatory for all countries to sign the document, as long as, the criteria of '55 countries accounting for 55% of global greenhouse emissions' is adhered to. Only those countries which ratify it will be bound by its provisions. The ones only 'signing' the Agreement and not 'ratifying' it will not be a part of the system. The United States had signed the Kyoto Protocol but had not ratified it, and hence, remained out of its ambit (Sinha 2016). Though there is a deadline for 'signing' the Agreement i.e. by 21st April, 2017, there is no deadline for ratifying it. In fact, 15 countries came to New York (for signing the Agreement) with their instruments of ratification (Sinha 2016). These countries mainly included the island nations which are most threatened by climate change.

Differentiated Responsibilities: Which Countries Should Exert More?

The pledges made by India have been labelled as weak, lacking long term positive effects by many global observers. They talk of India as a 'stumbling block' (Tongia 2015). In contrast to India's situation, China has already declared 2030 to be the year in which their carbon emissions will peak³. Rumours say that it might peak even sooner, which is possible because of its stringent policies. The reality is that India is doing its fair share, but even that will not suffice. Considering the current level of commitments, increasing concentration of carbon will still result in a rise in global temperature. It is no longer a question of 'will it rise' but 'how fast' and 'by what degree'. The problem is that three fourths of the global carbon budget has already been used by countries other than India, which hasn't utilised most of its resources yet (Tongia 2015). It is, therefore, natural for India to believe that its emissions will be on rise.

The UN Framework Convention on Climate Change and Kyoto Protocol were accepted at a time when developed countries held unquestioned supremacy in world economic order. The dominant position of the West was further buttressed by the collapse of Soviet Union. India, China, and other developing countries were not considered serious

³ Differentiation has been made between developed and developing countries. Developed countries need to reduce emission levels soon, whereas developing countries have been given some time to develop their economies further. Since most of the economic activities require industries, and hence emissions, the developing countries have been given some time to continue with this industrialisation. But, according to the Paris Agreement these countries need to give a time (year) till which they will continue emitting at relatively high rates. This limit, which the countries voluntarily decide, is the peaking limit after which they start reducing emissions.

threats to their supremacy till the 1990s (Dasgupta 2015). The situation changed dramatically when China overtook Germany and Japan to emerge as the world's second largest economy and exporter, only next to the United States. This period also saw rapid rise of developing countries, including India, and their emergence as major economic powers due to liberalisation of economy. The current trend is of a wider diffusion of power among countries, decline in the influential position of developed countries, and consequent rise in the importance of developing countries.

The premise on which the Paris Agreement is based is that each country will be benefitted by agreeing to checks on national greenhouse emissions. A country like India lies in the middle of the dilemma- to reduce carbon emissions by compromising on growth and development, or to sustain economy's growth without placing much consideration on global climate change (Dubash 2015). India's approach during the deliberations has been to avoid any unnecessary limits on energy options. This is imperative as India will require a great deal of energy for its ever-increasing population in the coming decades- access to electricity, fuels for cooking, power to industries for providing people with livelihood, etc. These needs may be huge, but they are also uncertain as much depends on how technology changes and how India grows. It is this uncertainty which makes negotiations difficult as it becomes hard to know how much to sacrifice without causing much harm. The basis of India's approach to ensuring it doesn't bargain away without causing harm depends on the principle of 'common but differentiated responsibilities'. Without this safety measure, all countries would've been placed on the same pedestal. Developed countries have continuously asked for dilution of this principle, saying the world has changed a lot in twenty years (Dubash 2015). Powerful (developed) countries launched an aggressive attack against the foundational principles of 'common but differentiated responsibilities' (Dasgupta 2015). They wanted a new agreement that would undermine this principle which was first used in Kyoto Protocol. In short, their aim was to shift the burden for mitigating emissions from their shoulders to the developing countries.

This deadlock was broken at the Paris Conference by asserting that the world has unquestionably changed, but not so much that these categories are no longer relevant. The difference of burden between developed and developing countries has been made more fluid. For example, the developed countries need to take lead in core mitigation areas, while developing countries can do so overtime. This allows developing countries to improve their situation in the global economy by keeping emission levels high (as per requirement) by pledging to fix a 'peaking year' in future (Dubash 2015). Keeping such principles intact has ensured that India's losses during the deliberations were kept at a

minimum. It is believed that India and China may be forced to 'voluntarily' cross the line between developed and developing countries owing to their dominant position in Asia.

There is another logic that is inherent in the Paris Agreement. The motive for change will come from domestic countries, and leverage/boost will be provided by international processes. Therefore, the key components of the Paris Agreement include Nationally Determined Contributions, which are voluntarily set, and a way of encouraging those goals overtime (ratcheting). This mechanism includes a mandatory five-year review of pledges made, a technical review process for checking the actions taken up, and financial support provided to developing countries. Through these transparent mechanisms it is ensured that countries take their updates seriously (Dubash 2015). The idea is that the Agreement will initially coerce countries into making pledges, with procedures for enhancing them overtime. This will set in place an iterative process in country after country for achieving better targets, leading to greater shifts to low carbon trajectories.

The initial targets submitted before UNFCCC fell short of what is required by science, and could reduce only one third of the required emissions. The update and ratchet mechanism is useful in such a scenario where pledges have fallen short of what is required. It will lead to a cycle of more ambitious targets coupled with greater investment in low emission technology, low barriers and restrictions to the implementation of those options, leading to an ever-improving cycle of ambitious pledges. If this mechanism works as required, India will be a substantial gainer.

The principle of differentiated responsibilities has been criticised on many grounds. It is believed to be problematic because it has created a paradigm that 'if it continues, measures taken against global warming will not be of much use.' The current interpretation is ineffective because of its arbitrary creation of exception of emerging economies. For example, major emitters like India and China are having, and will have, chilling effect on global climate. Because of their increasing importance in world economy and international community, their participation in this agreement as relatively developed nations is important. The agreement, or its proponents, does not sufficiently distinguish between developed and developing countries. The closest they have come to differentiate between different countries is that certain countries are 'particularly vulnerable' to climate change. It is said that by framing their policies to fit this framework of being 'particularly vulnerable', countries like India and China have wrongfully benefited from it. The language of the Agreement is not specific enough to

make explicit this characterisation, rather, it re-emphasises the distinction. Even though countries are presenting themselves as developing nations, current data does not support this assertion. Both India and China have organised Olympics and Commonwealth games; it need not be mentioned that the amount of money spent in such events could serve ‘various’ other purposes. Such a principle of differentiated responsibilities, which allows such countries to act unregulated, is flawed. There are still some countries which have been categorised as ‘developed’ when their economy is not enjoying a similar boom as China and India. Since these problems are inevitable without legally binding obligations, certain countries should be pressurised more to participate in the Agreement. Another option is to create a third category for countries like India, China, Indonesia, and other similarly placed countries.

Yet, all these problems have, presumably, been taken care of by the concept of ‘peaking emissions’ according to which only certain years have been given to such countries to emit greenhouse gases.

Changes after The Agreement: Some Immediate Consequences

Retributive Climate change challenge cannot be addressed without the participation of civil society. Both the negotiators, who were drafting the Agreement, and the civil society are equally important for addressing the issue and they cannot exist without each other (Venkat 2015). Electricity generation by a bicycle to power a mixer grinder, a solar system using which jockey plays music, a tree with special leaves for harnessing wind power, cars running on electricity- these and many more ideas were on display at the COP 21 venue where negotiations took place (Venkat 2015). The spaces around the venue served as open space for people and companies to showcase their ideas of new and efficient sources of energy. Informative stalls were setup where experiences of communities worldwide coping with change in climate was being shared.

France released a global tender for electric cars which would cost less than 5 lakh rupees, charge faster, and would be made of light materials for improved efficiency. Such a competitive approach towards electric cars would indirectly help in innovation in new materials and batteries. Owning a car is considered a status symbol in most countries, hence, production of cars cannot be stopped, but it can be made more efficient (Ananthakrishnan 2015b). Seven corporate magnates (Google, Microsoft, General Electric, etc.) collaborated to form a group ‘We Mean Business (WMB)’ which will work to promote business action on climate for enabling an environment of clean economy.

The World Bank has come up with a climate plan that will help developing countries add 30 gigawatts of renewable energy, develop new agriculture plans for changing climate, and deliver early warning system to disaster prone areas. This target is sought to be achieved by the year 2020. The Bank will also help countries put a price on carbon pollution in order to create incentives for public, as well as corporations, to make environment friendly choices (Jha 2016).

The untapped hydroelectric power in India is around 73 gigawatts, but we don't have enough resources to exploit all of it (Mahalingam 2016). Besides, the current power generation through dams is very inefficient and it depends mostly on monsoon. It is also not very economical to setup nuclear power plants due to huge costs involved and fuel issues. Therefore, the task should be to review our existing basket of options. Electricity is the cleanest form of energy, but the way it is generated is often unclean. Electricity generated from coal is the dirtiest of them all. About 60% of India's electricity generation is from coal based power plants, therefore, reducing the consumption of coal and using it in a responsible manner should be our top priority, no matter what public sentiments dictate (Mahalingam 2016). About 144 old thermal power plants have been targeted for improvement in their efficiency. Global businesses have welcomed Prime Minister Narendra Modi's plans for boosting growth of solar and other related technologies by 2022. Other steps taken for tackling the issue include closing down of old thermal plants, advancing the cut-off date for implementing Euro-IV emission norms, pushing the entry time of trucks in cities late into the night, etc. Regulating the use of private vehicles by means of licence plate restrictions is a proposal which has received the most attention. The Aam Aadmi Party in Delhi has followed examples of countries like China for implementing odd-even scheme for controlling the level of pollution. It is a largely welcome scheme and it is desirable for other governments to implement it as well. India will amend the Energy Conservation Act and the Electricity Act in order to achieve the targets it has pledged to UNFCCC. For easier import of new and efficient technology into India, the IPR import bill will also be amended for reducing restrictions on companies on various grounds (Ananthkrishnan 2015c). For stricter implementation of limited usage of certain sources of energy, new legislations need to be formulated (Ananthkrishnan 2015c). India took a similar measure for the Montreal Protocol when it issued the Ozone Rules to reduce the emission of chlorofluorocarbons into the atmosphere, thereby reducing the harm caused to ozone layer. Recently, India announced the construction of eight long term ecological observatories to study long term change in climate. These new facilities called Indian Long Term Ecological Observatories (ILTEO) would study eight different types of

habitats and come up with reports on the changes caused due to climate change (Ananthakrishnan 2015c).

Suggestions and Conclusion

The Agreement came into force on November 4, 2016 when, in early October, 55 countries with 55% of the world's greenhouse gas emissions ratified the agreement. India emerged as a progressive and proactive player in the Paris talks. It has demonstrated its willingness to move away from fossil fuel based path and its ability to think uniquely. It has been made clear to other countries that India is willing to collaborate with other countries in a manner which does not jeopardise its development push. The hope is that the Agreement will spur the civil society into pressurising the world leaders to improve upon their covenants every year, adding clear commitments by rich/developed countries for helping poor/developing countries. Though the long-term goal is to check the increase of global average temperature to well below 2 degrees C above pre-industrial levels, there are various short term goals to achieve this. Effort needs to come from the central government in the form of lots of centralised regulations and introduction of subsidies for low carbon energy resources. Given the scale of changes required in a populous country such as India, changes need to be incorporated as cheaply as possible. Some experts also believe that stringent and comprehensive prices on carbon emission will be considerably cheaper than providing for subsidies (Hope 2016). The basic tenet of environmental policy is the 'polluter pays principle'. It simply means that anyone who causes harm must compensate/ pay for it. Some economic models have been proposed by experts, calling for varied prices on carbon dioxide emissions (Hope 2016). Prices should be higher for more potent greenhouse gases like methane which is released into the atmosphere by agriculture and fracking. The current situation calls for imposing such prices indirectly, in the form of taxes. Strong and comprehensive taxes are needed on greenhouse gases to be paid by firms, farms, and final consumers. It is true that such taxes would add to the already high petrol prices, gas prices, coal fired electricity, etc., but, it is also to be remembered that these are the cheapest ways to meet Paris target in the near future. These taxes also have certain advantages which includes increased tax revenue over a financial year. Relief can be provided to farmers, firms, and final consumers by using this extra tax to reduce taxes in other areas like VAT, basic income tax, etc.

It has never been the case that complete consensus has been reached in a climate conference, and same has been the situation of the Paris Agreement. The proverb 'Tragedy of Commons' highlights one of the issues wherein nations acting responsibly, rationally and in good faith, end up severely undermining the best interest of entire

planet by excessive usage a common resource (Sethi 2015). This leads to complications as no country can be sure of whether the pledges made by other countries are being adhered to. Such countries do not stop carbon emissions for the fear of being left behind in global economic competition with respect to others due to the prevailing uncertainty. Tragedy of commons leads to loss of everyone (Druzin 2016).

Nevertheless, the Paris Agreement marks a milestone in preserving the Earth's environment and provides a base for ambitious actions. It is the outcome of years of research by scientific societies, aided by millions of people around the world, pointing towards man-made greenhouse gas emissions leading to events such as cyclones and droughts. The 196 members of United Nations Framework on Climate Change acknowledged that postponement of action on climate change is no longer viable. Negotiators at Paris conference adopted a more sophisticated and strategic approach to tackle global warming than any other Conference of Parties (COP) so far, for which they deserve to be congratulated. Though history has been created by adoption of the Agreement, the pledges given by member countries will not be enough to mitigate the effects of global warming.

The Paris Agreement ensures both efficiency and fairness. Attaining it was an unnerving task, and more challenges lie ahead. The outcome of Paris Agreement brings a sense of relief, if not elation. Whether the Agreement represents real progress is debatable, but, unlike previous treaties, it is not a giant step backwards.

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