## The Paris Climate Change Agreement and after

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In a turn towards pragmatism the Paris Climate Change Agreement, concluded in December 2015, adopted a markedly different architecture for global climate governance. It remains to be seen if pragmatism produces effectiveness. However, in lieu of the approach under the Kyoto Protocol, where binding emission reduction targets for Annex 1 Parties (broadly, the industrialized countries) to the Protocol were arrived at by a formula, the Paris Agreement records Intended Nationally Determined Contributions (INDCs) arrived at independently by the Parties and submitted to the United Nations. This turn towards an independent, non-binding and voluntary vocabulary for targets and efforts by countries to combat climate change is the result of strident resistance by some developed countries (most notably, the United States) to the arrangement arrived at in the Kyoto Protocol that placed the responsibility for greenhouse gas (GHG) mitigations during the first commitment period (2008-2012) entirely on the industrialized economies.

This differentiated approach for undertaking mitigation actions was derived from the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDRRC). position notes that industrialized countries account for bulk of the accumulated stock of anthropogenic GHGs in the atmosphere and hence should bear an immediate and proportionately greater responsibility for their mitigation. This differentiation, however, was the basis for the 95-0 vote of the US Senate on 6 December 1997 in favour of a resolution stating that '...the United States should not be a signatory to any protocol to, or other agreement regarding, the United Nations Framework Convention on Climate Change of 1992, at negotiations in Kyoto in December 1997 or thereafter which would: (1) mandate new commitments to limit or reduce greenhouse gas emissions for the Annex 1 Parties, 'unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties' within the same compliance period; or (2) result in serious harm to the U.S. economy' (emphasis added).

This pre-emptive strike, even as the Kyoto Conference of Parties deliberating the Protocol was underway (1-10 December 1997), by the country that has emitted the largest volume of anthropogenic GHGs, and which was at the time the largest annual emitter of these gases, significantly weakened the Protocol that emerged. The argument that developing countries have to share the burden of GHG mitigation and its implications for economic competitiveness has hobbled the effectiveness of the Kvoto Protocol. Notably, over the last two decades, large developing countries have emerged as significant GHG emitters. China - now the biggest emitter in the world – dwarfs the United States in annual emissions of GHGs, and India emits more than economies like Germany. Despite lower (or markedly lower, in the case of India) per capita GHG emissions compared to industrialized countries, large developing economies are now significant net emitters of GHG gasses. This fact, vastly different from the reality of 1997, gave further fillip to demands for universalizing the responsibility for responding to anthropogenic climate change.

The Paris Climate Change Agreement represents the culmination of this twodecade long, often fractious, negotiation. A testament to the pragmatism of this new architecture is the fact that in less than a year since the Agreement was concluded, it has been ratified by 115 of the 197 Parties (as of 5 December 2016) to the United Nations Framework Convention on Climate Change (UNFCCC). And further, in less than a year on 4 November 2016, the ratifications exceeded the threshold (defined as at least 55 Parties accounting for at least 55% of emissions) needed for the Agreement to come into force. This must count as success for a global community that 'only' two-anda-half decades ago resolved to address climate change. The complexity of collective decision-making presented by this challenge is unprecedented in human history, demanding new vocabularies for understanding the problem and responding to it. That said, this pragmatic political success is crucially a limited one. As of this writing, the voluntary, nonbinding contributions of Parties to mitigate GHG emissions submitted under the Paris Agreement, do not add up to reductions needed to keep average global temperature from rising above 2°C, let alone the 1.5°C identified in the Paris Agreement itself<sup>2</sup>. So in reality, we are significantly behind in the race and the urgency of moving faster cannot be emphasized enough. This reality reminds us that the pragmatism in politics and geopolitics, that has brought about this agreement, remains limited. We believe that this halfway-home character of these efforts makes scrutiny of the assumptions guiding our collective social and economic life – ultimately the insatiable demand for cheap and abundant fossil or other forms energy – in the context of climate governance, imperative.

In an effort to move the conversation in these ways, Azim Premji University, Bengaluru organized a Public Forum on the Paris Climate Change Agreement on 14 July 2016. Lead by an eminent panel of invited speakers, the forum successfully unpacked the nuances of the Paris Agreement and its policy implications for India. It also problematized open-ended economic growth and development from the vantage of climate governance.

Navroz K. Dubash (Centre for Policy Research, New Delhi) clarified the pragmatic turn represented in the Paris Agreement by observing that it 'reconceptualises the role of international law' by focusing on a process for engagement in climate governance, rather than persuading countries to follow a top-down allocation of carbon budgets. Despite the GHG 'emissions gap' of 12-17 Gt of CO<sub>2</sub> equivalent (depending on INDC conditionalities and whether 1.5°C or 2.0°C is targeted)<sup>3</sup>, the agreement, he submitted, creates the space for a 'global virtuous cycle' of taking stock and ratcheting up future efforts. This achievement of building a new architecture for collective decision-making and action by the global community to tackle a planetary phenomenon is significant.

At the same time, the Paris Agreement, although non-binding, is premised on universalizing mitigation actions and in doing so appears to have turned the page on historical responsibility for the existing atmospheric stock of GHGs. Tejal Kanitkar (Tata Institute of Social Sciences, Mumbai), shared estimates of historical emissions and atmospheric carbon budgets to show that industrialized countries have long surpassed their fair entitlements to atmospheric carbon absorption budgets. Effectively, they now over-occupy atmospheric space that in fairness belongs to developing economies, and they will continue to be a significant part of the global carbon emissions even until the 2030 target of the Paris Agreement. Kanitkar concluded that 'late developers will have no carbon space left!!' for their development. In effect, these countries are being crowded out of the possibility of using fossil fuels to industrialize, as their now industrialized predecessors did.

India's INDCs up to 2030 include reducing the emissions intensity per unit GDP of the economy by 33-35% below 2005 levels; achieving 40% share of fossil-free generation capacity and creating an additional carbon sink equivalent to 2.5-3 Gt of CO<sub>2</sub> (ref. 4). Given this set of intended contributions, Anshu Bharadwaj (Centre for the Study of Science, Technology and Policy, Bengaluru) brought attention to India's policy options. Bharadwaj noted that India's petroleum demand will continue to increase as millions will shift from biomass to fossil-based cooking fuels, and also the increasing transportation demand. Therefore, a significant portion of the burden will have to be borne by raising the energy efficiency of the economy by 45-48%. Bharadwaj also observed that the costs of renewable energy and its availability are not constrains to decarbonizing the economy. However, the task of managing the variability of renewable energy generation and integrating it with the electric grid needs significant attention.

As noted above, the GHG mitigation contributions under the Paris Agreement

remain inadequate. Even if we assume that all countries follow through on their independently determined and nonbinding mitigation contributions, there is likely to be a significant 'emissions gap' in 2030. This as a reminder of the disjuncture between what is needed and what appears possible within political pragmatism. We interpret this to mean that the response to climate change must move beyond the technical, and also make the normative aspect of development central a new politics of climate change. Gita Sen (Ramalingaswami Centre on Equity and Social Determinants of Health, Public Health Foundation of India, Bengaluru) asked if the time has come to move beyond a focus on 'consequences' of climate change to interrogating the political and economic 'principles' that drive it.

Industrialization fuelled by cheap and abundant fossil fuels ushered in an era of abundance<sup>5</sup> that engendered profound social changes like the advance of liberalism, capitalism and democracy. Despite these epochal transformations, poverty still exists and, together with extraordinary levels of inequality, has now precipitated into political populism that threatens a retreat into narrow identities. This, precisely at a time when the reach of the human endeavour (alternation of the climate) makes a global sense of community and collective action imperative. It must be asked: if so much wealth, scientific insight, technological prowess and political advancement, bought at significant costs to diverse socioecological systems, has not definitively altered the course of humanity, what will? Sen asked 'what kind of growth are we talking about?' and suggested that a more foundational assessment is needed via an inquiry into the 'imaginations' that guide development policy choices. If the dominant ideologies of free-market capitalism are discredited, then what are the alternatives? 'What is the kind of society we want to build?' she asked. What are the ideas and institutions that can facilitate such inquiry and delibera-

These questions are pertinent to the vocation of creating and disseminating knowledge that readers of this publication are invested in. In addition to conversing and collaborating as equals across disciplinary identities, be they in the humanities, social sciences or natural sciences, what is also called for is a decided turn towards critical scholarship. The latter is often misunderstood and mischaracterized as endless, unproductive criticism. This is far from the truth. Critical scholarship is instead one that seeks a deep awareness of the historical moment and alignments of power and privilege that need to be interrogated and even resisted, for the advancement of shared well-being. How we fashion ourselves through ideas, narratives, institutions and practices to reimagine development for the common good is an urgent question that merits the serious consideration of the readers of this publi-

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