

Saga of Indo- US Climate Contestation and Cooperation: A Legal Analysis

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Abstract

Climate Change has been characterized as a monumental human development and existential challenge for the 21st century. The international community has responded to the grave and complex economic, social, and environmental challenges posed by climate change and have constructed an edifice of a robust legal framework in the form of United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol, and the Paris Agreement. The climate negotiations have been characterized by fierce and conflicting positions between developed and developing countries. In this discourse, India and the United States is positioned contrastingly regarding its developmental and economic concerns, historical and current contribution to global GHG emissions and vulnerability to climate change impacts. The engagement of both countries with the global climate negotiation has been substantially fashioned by their domestic imperatives which often resulted in contestation between both the countries. The chapter analyses the evolution and crystallization of climate contestation and cooperation between India and the United States.

Introduction

The Global Climate Risk Index 2018, released at COP 23 has placed India as the 6th most vulnerable nation to climate change impacts (David Eckstein 2018, 5). The reports and statistics uncover that the country is already confronting the effects of climate change including changing rainfall patterns, increased droughts, and floods, the threat to agriculture and food security, groundwater crisis, etc. However, in terms of its contribution to climate change, India has among the world's lowest per capita greenhouse gas (GHG) emissions, yet is the third largest emitter of GHG (Jan Burck 2018, 5). This different scenario presents a challenge in conceiving appropriate climate policies while harmonizing developmental concerns and is a prerequisite to address the threats posed by climate change.

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In contrast to India, the United States stands as the world's second largest GHG emitter and has a high per-capita emission rate (Ramseur 2017, 1). Despite these contradictions, the position of the world's two leading democracies which accounted for the significant percentage of greenhouse emission was considerable in navigating the course of climate change legal framework. India positioned as the defender of the global south, vehemently arguing for its developmental space, insisted on historical responsibility and resisted any binding obligations (Sengupta 2012, 105). The United States supported by its structural power and the distinction of being the principal actor in the international climate change regime, postulated critical leadership to the negotiation strategies and discourse (Shardul Agarwala 2001, 118). However, as opposed to the early domestic climate responses, the policy response of the United States at the international level vacillated between engagement and disengagement. For the United States, the debate over comprehensive climate policy focused on the costs of climate action and competitive disadvantage, rather than on the grave economic and environmental consequences resulting from climate change. Negating the historical responsibility approach, the United States insisted on focusing on the current emission rates. The conflicting position projected by both the nations seriously undermined the environmental and political impact of climate negotiation. However, gradually, the geopolitical imperatives paved the way for accommodation of each other's interests while evolving a cooperative global order. The sustained political and diplomatic mobilization and emphasis on cooperation was also matched by the realization of strategic possibilities of bilateral cooperation.

The chapter will begin with an overview of the international climate treaties and agreements and the position of the USA and India over time, vis-a-vis these treaties and agreements. The chapter will chronicle the position of India and the United States in the climate negotiations. It will then focus on the domestic legal measures enacted by both nations to tackle the problem. It will also explore the evolution of the position of India and the United States, from confronting and contesting parties at international climate negotiations to envisaging bilateral cooperative mechanisms on climate change. The cooperative and joint mechanism envisaged and initiated by both the nations in the field of climate change will also be a part of the discussion. Lastly, the chapter will present an analysis of how far the decision of USA to withdraw from the Paris Agreement will affect the foundation India and USA climate cooperation strategies and its impact on Indo-US relations and achievement of sustainable development.

Climate Change Legal Framework: Evolving Position of India and the United States

The policy and legal response to climate change emerged in the international arena as a response to the increasing scientific consensus on climate change, and the field of international climate change law has evolved rapidly (Cinnamon P. Carlarne 2016, 5). The establishment of the Intergovernmental Panel on Climate Change (IPCC) to provide policy makers with authoritative scientific information provided a boost for a political response (Eleftheria Vasileiadou Gaston Heimeriks 2011, 1053). The UN General Assembly responded by launching negotiations culminating in the adoption of United Nations Framework Convention on Climate Change (UNFCCC) signed at the UN Conference for Environment and Development in Rio de Janeiro 1992 (UNFCCC 1992). The Convention, being a framework mechanism did not provide for any binding targets but set an overall framework for nations to cooperate to address climate change. The negotiation witnessed contesting position between states in questions relating to core obligation, implementation, and financial assistance (Rajamani 2013, 154).

Though the UN grouped states based on regions for administrative reasons, in the climate negotiations various groups were formed and countries got aligned in multiple groups for protecting their interests (Gaast 2016, 46). Traditionally, India was associated with G-77, the negotiating collective of the developing nations (Najam 2005, 305) and provided much-needed leadership for articulating the strategy of the group (Gupta 2012, 90). At the negotiation lead up to UNFCCC, India continued its classical emphasis on development paradigm initiated at the Stockholm Conference (Stellina Jolly 2019, 143) and termed climate change as the creation of developed North (Vihma 2011, 70). Powerful civil societies and think tanks categorized climate change politics and the effort of developed nations to impose mitigations targets on developing nations as unfair and unequal (Anil Agarwal 1991, 8). India adopted the position that any meaningful solution to climate change is based on fairness and equity guided by its developmental concerns (Paramjit S Jaswal 2010, 375). From the Indian perspective, fairness demanded that determination of responsibility be based on the extent of historical GHG contribution (Pieter Pauw 2014, 24) and rejected any kind of reduction obligation on the part of developing nations, even if voluntary (Gupta 2012, 90). The equitable arguments were connected with equal per capita access to the atmosphere (Metz 2000, 120). India also drafted a proposal insisting on per capita emission rates and highlighted that India's per capita based emission rates are only tenth compared to the major industrialized countries (Dubash 2013, 193) (Powell 2015, 10). The United States argued for binding

responsibilities on the part of developing nations considering the future emission rates and accounting for the gross emission rates of countries like China and India (Rajamani 2013, 157).

The negotiations at UNFCCC tried to bring a political consensus between the differing positions and effectuated the cardinal principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDRC) which acknowledges the differing capabilities and responsibilities of individual nations in addressing climate change into the climate regime (Douglas Bushey 2010, 1). The incorporation of CBDRC was a victory for the decades of the fierce position held by developing nations and the leadership provided by countries like India and China (Stalley 2013, 3). The Convention has been followed by the Kyoto Protocol which established a strict quantitative greenhouse gas emission limits based on a binary mechanism for emission reduction in the light of the CBDRC principle (Kyoto Protocol 1997). It is believed that it was India's proposal of 20% emission reduction by industrialized countries in the year 2000 was modified to become the basis of the Kyoto Protocol (Jagadish Thaker 2014, 109). The principle of CBDRC became the cardinal principle of India's climate negotiations position and was majorly supported by Indian experts who considered climate change merely as an additional problem to be solved in comparison to the multitude of socio-economic challenges (Ambuj Sagar 1997, 3141). The United States emerged as a steadfast critic of the principle engrained in the Kyoto Protocol (Bortscheller 2010, 51) and this culminated in the country's decision not to ratify the Kyoto Protocol citing economic disadvantage and terming the protocol as fatally flawed thus seriously impeding the environmental effects of climate regime (Honkonen 2009, 258) Despite this, India has frequently emphasized that equity is the way forward in the climate negotiations and has advocated rather unsuccessfully, a per capita rights to global environmental resources (Anna Korppoo 2009, 49) .

Further, the Indian position has emphasized on adaptation, given India's high vulnerability to climate change. It has continuously insisted on the fulfilment of the international community's commitment regarding additional, adequate, and predictable funding and technology transfer to developing nations since climate change poses a sizeable additional burden and an economic and social imperative (Himangana Gupta 2015). The Indian position was sagacious, and it cemented India's status as a leader among the developing countries. The United States remained steadfast on its stand. Neither did it treat climate change as a substantial problem nor

did it engage with international negotiations. During the Bush administration, the US did not initiate many national measures (Harrison 2007, 94).

The first commitment period of the Kyoto Protocol was fixed from 2008-2012 and negotiations concentrated on finding an effective post-2012 legal regime. The period also saw the gradual acknowledgment of the enormous economic gains achieved by countries like India China and Brazil and substantial changes in the geo-political realm. The scenario witnessed pressure being exerted on these countries by both developed and developing nations, to be in the legal orbit for initiating mitigation commitments (Mohan 2017, 7). The situation highlighted the converging, diverging and conflicting interest of developing nations, slowly eroding the common position of G-77, resulting in the formation of many groups (Antto Vihma 2011, 315). This also led to the distinct negotiating positions taken by the newly formed BASIC countries to cement their common interests independent of G-77 (Mohan 2017, 8).

A shift in India's positions to flexibility and adaptability became discernible when India while rejecting the demand for binding mitigation obligations endorsed the 2°C target of greenhouse emissions (Powell 2015, 12). The COP 13 meeting in Bali showed a definite shift in India's stand when it acknowledged the need for all countries to take voluntary measures. At the COP summit in Copenhagen, BASIC countries announced voluntary mitigation measures. The move may have been prompted by the unilateral commitment of emission reduction commitments made by the United States under the Obama administration (Pieter Pauw 2014, 29) and signs of fragmentation inside the G77 (Karl Hallding 2011, 81). For the first time, India along with BASIC countries was able to forge a unified position with the United States to accept binding emission cuts through a pledge and review system (Raghunandan 2013, 14).

The change of guard at the helm of affairs in the United States resulted in the renewal of United States' engagement with climate negotiation and the concrete vision and ideas it had for the formulation of the future agreement. US submission emphasized on the action from all the major emitters without distinction between the annex and non -annex countries, symmetrical legal obligations for parties, deviation from the top down model formulated at Kyoto to emphasis on national commitments (Christoff 2010, 639). The successive COP negotiations further strengthened and refined the United States' position, culminating in the final adoption of the Paris Agreement.

At the Cancun COP, the then environmental Minister of India, Mr. Jayaram Ramesh explicitly stated the need for all the countries to take appropriate legal action, thus marking a shift to the

reframing of equity as 'equitable access to sustainable development (Atteridge 2012, 71). The stand, however, was heavily criticized as breaking away from India's decade-old reliance on equity and developmental priorities (Mohan 2017, 8). The Durban COP saw the establishment of the Durban Platform for Enhanced Action which did not emphasize the firewall distinction between developed and developing nations. Further Durban COP side-tracked the commitment to CBDR principle and reiterated its commitment to have a legal outcome applicable to all nations (Deleuil 2012, 272). However, India still attempted to bring back CBDR by insisting that negotiations would also proceed 'under the convention,' implying the inclusion of all its principles (Dubash, Navroz K. 2017, 7). This position was amply reflected in the INDCs submitted by India which stated that 'Our objective is to establish an effective, cooperative and equitable global architecture based on climate justice and the principles of Equity and Common But Differentiated Responsibilities and Respective Capabilities, under the UNFCCC' (INDC 2015). The United States was an indispensable player in fashioning the Paris Agreement, often encouraging, pushing, and bilaterally bringing other core powers to accept the flexible bottom-up paradigm.

The Paris agreement has been negotiated with the wider participation of countries and has been hailed as historic. However, the agreement is only a beginning, the real challenge is to implement principles underscoring the agreement through national agreements and international cooperation so that it contributes meaningfully to the decarbonization needed to contain climate change. However, the hopes have now been dashed when the United States, which has been instrumental in shaping the current structure of Paris Agreement has decided to withdraw, from the Agreement, undercutting the foundation of global climate governance and cooperation (Hai-BinZhan 2017, 220).

In this scenario, it is imperative to understand the implications of the United States' withdrawal for climate negotiations, on India and India's bilateral relations with the United States. This is important because the last three decades of climate negotiations suggest that engagement between India and the United States have often been that of contestation and confrontation. However, the geo-political imperatives brought both the nations to re-engage, gradually softening the rigid conflicting stand exhibited by them earlier. The change in strategies and the gradual shift from a confrontation between both the nations were marked by two distinct developments. Firstly, irrespective of the international consensus and positions, domestic measures were initiated. Secondly, some common ground of cooperation has started to reflect in the bilateral cooperation between both the countries on climate change. The following

sections will evaluate the existing domestic legal framework and the bilateral cooperative mechanisms initiated between both the countries and the potential impact of US withdrawal on these.

Domestic Legal Framework in Climate Change: Comparing India and United States

Climate Change Legal Regime India

‘The Government of India declares its understanding that, as per its national laws; keeping in view its development agenda, particularly the eradication of poverty and provision of basic needs for all its citizens, coupled with its commitment to following the low carbon path to progress, and on the assumption of unencumbered availability of cleaner sources of energy and technologies and financial resources from around the world; and based on a fair and ambitious assessment of global commitment to combating climate change, it is ratifying the Paris Agreement.’ (INDC 2015, 1).

The above statement given by India while ratifying the Paris Agreement captures the position of the country on the problem of climate change. The development of India’s environmental law in India and climate change policy and laws has been a continuum of legislative and judicial action, drawing on various provisions of the Indian Constitution and in consonance with various international environmental instruments that India is a signatory. Even though India is a signatory to the United Nations Framework on Climate Change (India and UNFCCC 2012) and the Kyoto Protocol of 1997, it did not have any obligations under it since both these conventions operate on the principle of Common but Differentiated Responsibilities (CBDR). Despite the absence of binding obligations, India has been taking initiatives targeted not only against curbing climate change (India and UNFCCC 2012) but also in furtherance of its general obligations of protecting the environment.

Several constitutional provisions have acted as a catalyst to proactive environmental action in the country. Article 21 of the Indian Constitution which guarantees the right to life, states that no person shall be denied of his life and liberty except by the according to the procedure established by law. The right has been widely interpreted, to bring into its ambit several positive rights in the form of enforceable obligations on the State. The 42nd amendment to the Constitution inserted fundamental duty under Article 51A(g), which states that every citizen is duty bound to protect and improve the ‘natural environment’ and Article. 48A, which imposes a duty on the State to protect and improve the environment.

Most of the Indian environmental jurisprudence has developed through judicial activism. Although, there has been no direct litigation on preventing climate change, several principles that form an integral part of the UNFCCC and other international instruments, like the precautionary principle, sustainable development, intergenerational equity, etc., have been recognized in various judicial decisions in India. Currently, a petition is pending before the Hon'ble National Green Tribunal, wherein, climate change is the central issue in question. In this petition of *Ridhima Pandey v. Union of India*, a nine-year-old applicant, has requested the Tribunal to order the national government to undertake mitigation strategies in dealing with climate change, including, preparing national carbon budget, national greenhouse gas emissions inventory, etc (Ridhima Pandey v Union of India 2017, 2-4).

Although there have been multiple legislations by the Indian legislative vis., Water Act 1974 (The Water (Prevention and Control of Pollution) Act, India 1974), *Air (Prevention and Control of Pollution) Act 1981* (Air (Prevention and Control of Pollution) Act, India 1981), Environment Protection Act 1986 (The Environment Protection Act, India 1986) etc., These acts explicitly refer to India's commitment and participation at International environmental conferences. However, none of these Acts addresses the problem of climate change directly because when these were legislated GHG emissions were not a major concern- neither domestically, nor internationally. However, the Indian government has taken some very immediate measures to manage carbon emissions, these measures include the promotion of renewable energy. India's attempt to fulfil its obligation of minimize energy consumption and maximizing conservation, is majorly reflected through the provisions of the Energy Conservation Act 2001 (The Energy Conservation Act, India 2001) and Electricity Act 2003 (The Electricity Act, India 2003).

The Indian National Environmental Policy lists the key elements of India's response to climate change as

- a) The principle of common but differentiated responsibilities (CBDR);
- b) Reliance on multilateral approaches;
- c) Equal per capita entitlements to global natural resources;
- d) Overriding priority of the right to development; and
- e) Identifying key vulnerabilities of India to climate change (India's National Environmental Policy 2010, 43).

These stands were almost reiterated in the National Action Plan on Climate Change (National Action Plan on Climate Change, India 2008, 1-2). It is pertinent to note that though NAPCC has been developed primarily in response to international commitments, NAPCC refers to country's domestic imperatives and states that India's policy response to climate change will mainly address 'the urgent and critical concerns of the country' (India's National Plan on Climate Action, 2008) (National Action Plan on Climate Change, India 2008, 1). In its introductory statement, the plan sets out that India will undertake efforts to implement effective and cooperative measures to deal with climate change, based on common but differentiated responsibilities. However, at the same time, it also states that the success of these measures is dependent on the commitment of the developed countries to CBDR. Taking the principle of equity as a reference point, the policy states that India's per capita GHG emissions will at no point exceed that of developed countries (National Action Plan on Climate Change, India 2008, 2). The operational thrust of NAPCC is in the shape of eight Missions.

Climate Change Legal Regime United States

The United States is a federal nation with constitutional division of powers between the executive, legislature, and judiciary. In United States environmental regulations, administrative law and administrative agencies exercise major influence in decision making. Federal laws are supplemented by regulations or rules made by federal agencies such as Environmental Protection Agency (EPA), the Department of the Interior (DOI), and the Fish and Wildlife Service (Carlarne 2010, 22). Since 1970's federal pre-emption has influenced the United States environmental law and policy (Sarnoff 1997, 227) (Gilbreath 2000, 227), which is based on the presumption that federal policies are (1) more efficient than state regulation to achieve specific goals, (2) capable of addressing transboundary pollution, (3) prevents 'race to the bottom' in environmental standards, (4) serious attention to environmental issues beyond politics, and (5) codifies moral rights. (Sarnoff 1997, 227). Federal intervention in environmental legislation is manifestly reflected in environmental statutes such as the National Environmental Policy Act of 1969 (United States EPA 2017), Clean Air Act 1970 (US EPA 2017) and Clean Water Act 1972 (United States EPA 2018).

The United States is a party to UNFCCC but not to the Kyoto Protocol. UN Framework Convention, although doesn't bind the State parties to achieve specific target on greenhouse emissions, yet it requires them to adopt measures to control GHG emissions (Carlarne 2010, 35). The National Climate Program Act of 1978, enacted by President Jimmy Carter was the

first statute to address issues of climate change, which authorised and directed department of commerce ‘to coordinate the establishment and operation of a comprehensive national climate program to develop prediction systems, and analyse the effects of climate change on human activities’ (The Congress 1978). Major provisions of the Act included the establishment of a National Climate Program to enable the United States and other nations to understand and respond to natural and human-induced climate change and its implications on agriculture, energy, land and water, transportation, public health, and national security.

During the 1990s, the United States participated vibrantly in the international climate change negotiations and ensured that UNFCCC remains only a non-binding framework convention. The United States signed UNFCCC on June 12, 1992, and ratified on October 7, 1992 (UNFCCC 1992). However, domestically, environmental regulations witnessed severe approach-shift in the 1990s when the existing command and control approach gave way to market-based policies and tools and cost-benefit analyses, which still dominates environmental regulations and consequent budgetary cut for environmental agencies (Carlarne 2010, 31). Unlike UNFCCC, the legally binding Kyoto Protocol suffered a severe setback in the US Congress. The Kyoto Protocol signed by Bill Clinton in 1998 failed to receive ratification from the then-Republican-dominated Senate (B.Gerrard 2016). The Senate was then influenced by Byrd-Hagel Resolution, which it passed few months prior to Kyoto Protocol.

Though this resolution was non-binding, Clinton administration found it difficult to collect majority votes for Kyoto ratification (Jon Hovi 2010). George Bush, his Republican successor in the Oval Office, armed with the Republican majority, targeted to roll back all environmental protection measures of Clinton. According to Patrick Parenteau (Parenteau 2004, 364):

“From day one, the Bush Administration has set about the task of systematically and unilaterally dismantling over thirty years of environmental and natural resources law.”

Kyoto Protocol, with provisions favouring the US, like ‘cap and trade program’ to reduce GHGs and use of ‘carbon sinks’ to generate credits for emission offsets, was nonetheless repudiated by US (Gillespie 2003, 285) (Parenteau 2004, 365). The president attacked the Protocol for being unrealistic and the targets being arbitrary and unscientific (The White House 2001). Nevertheless, he attempted to develop several bilateral and regional cooperations to address issues and impacts of climate change and to promote clean energy technology to combat issues of GHG emissions. Climate Change strategy under George W Bush based on

voluntary obligations, carbon sequestration technology, business challenges, and nonbinding international partnerships contained elements of research and development and capacity building without any legally binding commitments and regulatory mechanisms to reduce greenhouse gas emissions (The White House 2002). Despite his international engagements with several developing countries to address climate change and energy security through clean energy technology including measures like Asia-Pacific Partnership on Clean Development and Climate to engage with China and India, domestically, his climate plan lacked legally binding emission regulations even at the end of his presidential tenure (The White House 2007).

The climate change policy of George Bush could be found in The Global Climate Change Policy Book (The White House 2002). It included his approach to harness the power of markets and technology and to develop a global partnership with developing countries to combat global climate change. Key elements of the policy focused on:

- Reduction of greenhouse intensity of US Economy by balancing economic growth and emission through clean energy technology.
- Improving emission reduction registry registered under the 1992 Energy Policy Act.
- Transferable Credits for emission reduction.
- Review of the progress towards the goal and additional measures, if required.
- Increased funds for America's climate Change commitments.
- Act on the science and technology review.
- Implement a comprehensive range of new and expanded domestic policies like tax incentives for renewable energy, cogeneration and modern technology, carbon sequestration and transportation programs.
- Expansion of international policies to complement domestic program like investment in climate observation systems in developing countries, tripling funds for 'debt for nature' forest conservation programs, fully funding the global environmental facility.

President Bush's decision of excluding carbon dioxide gas emission from power plants under GHG regulations attracted judicial attention in *Massachusetts v. EPA* (Massachusetts v. EPA (2007)). This case started with the EPA's denial of the petition to regulate GHGs, mainly carbon dioxide from vehicles and power plants under the Clean Air Act on the grounds of:

- (1) the Act does not authorize it to issue mandatory regulations to address global climate change, and
- (2) even if it had the authority to set greenhouse gas emission standards, it would have been unwise to do so at that time because a causal link between greenhouse gases and the increase in global surface air temperatures was not unequivocally established.

EPA also contested that any regulation of vehicle emission as a piecemeal approach to climate change would conflict with the president's comprehensive approach to climate change involving technical innovation, voluntary emission programs, research and development, and persuading developing countries emissions (Massachusetts v. EPA (2007)). On the subsequent petition in the Supreme Court filed by twelve states and certain environmental groups, the Supreme Court held that not only EPA has authority to regulate GHGs but also a nondiscretionary duty to consider whether GHGs 'cause, or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare' (Massachusetts v. EPA (2007), 533-555) (Wirth 2015, 535).

With Barack Obama assuming power as the president, issues of climate change were addressed as issues of energy and national security (Carlarne 2010, 52). While he emphasized on cap and trade program in his global interactions, domestically, he preferred economic ways to regulatory mechanisms to control GHG emissions (Carlarne 2010, 52) (B.Gerrard 2016).

Obama's climate actions were executive actions rather than legislative measures requiring Senate ratifications. This included promulgation of Climate Action Plan as well as his decision to sign the Paris Accord of 2015. Executive actions were adopted since 2009 prior to Copenhagen COP when his efforts to enunciate a legislative measure on climate change before COP2009 remained unsuccessful. His most significant domestic action was the Climate Action Plan announced on June 25, 2013. This executive plan, with seventy-five goals, was based on three key pillars:

- Cut carbon pollution in America.
- Prepare the US for the impacts of climate change.
- To lead international efforts to combat global climate change and prepare for its impacts.

The first pillar of this plan addressed carbon pollution from industries (The White House 2013). It emphasized on the utilization of clean energy solutions to reduce emissions from power plants and adopted a decentralized approach to implementing it. Obama administration imposed the toughest ever energy emissions for vehicles (The White House 2013, 7). The Plan targeted reduction of HFCs and methane emissions through domestic efforts and international collaborations involving multiple stakeholders.

Measures to address the domestic impacts of climate change was the second key pillar of the plan. It included several initiatives to prepare the United States for climate change impacts such as climate resilient investment in communities, protecting economy and natural resources by identifying vulnerabilities in key sectors, promoting resilience in health sector, climate insurance, land, and water conservation, addressing floods, droughts, and wildfires and exploring science to assess and manage impacts of climate change in the country.

Since impacts of climate change don't know any political boundaries, it could be addressed only through intergovernmental efforts. The plan stressed the need for collaborative international efforts with the US to lead the platform. Hence, the third pillar focused on enhanced multilateral engagement with major economies and increased bilateral cooperation with emerging economies like India and China (UNFCCC 2018).

The plan also contemplated a revived US leadership in global climate change negotiations to negotiate a new ambitious, inclusive, flexible, and legally binding agreement by the end of 2015, which shall bind all countries in the post-2020 period. Climate Action Plan by Obama, thus integrated domestic and international efforts in climate change mitigation and adaptation. Since Kyoto renunciation by the US, Obama administration accentuated climate change with several domestic measures and bilateral engagements, which culminated in the historic decision of signing the Paris Agreement on 3 September 2016 (The White House 2016). Decision of the world's largest GHG emitter and the most crucial negotiator of international climate change discussions to join the Paris Agreement was considered as success of the global community in their attempts to address climate change issues, raise climate resilience, adaptation, and mitigation till the recent decision of the present incumbent of the Oval office to withdrew from it. This decision of withdrawal from the Paris Accord is as significant as its decision to join the Accord.

Shifting towards bilateral efforts to combat Climate Change: Indo- US Co-operation

It should also be noted that India and the United States constitute two significant actors in climate change negotiations. These two nations exhibit different agenda at the international arena. Despite the conflicting and contrasting positions held by India and the United States in climate negotiations, recent times have witnessed a positive surge in bilateral cooperations and initiatives with a strong focus on technical and economic energy cooperation on clean energy mechanisms. Since the inauguration of Barak Obama and his global efforts focusing on developing clean energy co-operation in bilateral relations, US-India bilateral engagements are more focused on energy co-operation with prominence on clean energy technology and renewable energy mechanisms.

Strong strategic relations on energy co-operation exist between the countries since the initiation of India-US Energy Dialogue in 2005. In furtherance to it, the Partnership to Advance Clean Energy(PACE) was launched in 2009 to accelerate inclusive, low carbon growth by supporting research(PACE-R), deployment of clean energy technologies(PACE-D), and promoting energy access through PEACE initiative (Office of the International Affairs). PACE aspires to support India's target to deploy 175 GW of renewable energy by 2022 and reduce the emissions intensity of its GDP by 33 to 35 per cent by 2030 from its 2005 level with multi-party engagements. It includes in its ambit, promotion of policy and regulatory framework to increase clean energy installations, pilot projects on innovative business models, exploring financial mechanisms, and capacity building techniques (Press Information Bureau 2015) (USAID 2016). Accordingly, the U.S. Department of Energy (DOE) and the Government of India have established Joint Clean Energy Research and Development Center (JCERDC) designed to promote clean energy innovations with the participation of experts from both countries.

Several bilateral developments followed successful progress of PACE. These developments strengthen and enhance energy co-operation between the two nations. In 2015, Prime Minister Modi and the then President Obama agreed to strengthen bilateral climate change co-operation, phasing down of HFCs in accordance with Montreal Protocol, expanding PACE-Research and accelerating Clean Energy Finance along with increased US support to India's efforts to increase renewable energy in electricity generation consistent with India's intended goal to

increase solar capacity to 100 GW by 2022 by enhancing cooperation in clean energy and climate change (The White House 2015) (UNFCCC 2015). MOU was signed in 2016 to enhance cooperation on energy security, clean energy, and climate change (Press Information Bureau 2016). It aimed to increase incentives for R and D, technology transfer and deployment of clean energy techniques; to expand its contribution to international efforts in GHG emission reductions and enhance resilience to climate change. It prioritizes among others, promotion and access to renewable energy and envisages constitution of Clean Energy Finance. Through these strong engagements, the United States extended support to India's ambitious project of International Solar Alliance (MEA 2016).

Despite the decision of President Trump to withdraw from the Paris Agreement, and his decision to redesign the Green Climate Fund, bilateral relations between the US and India has strengthened during the Trump Administration. In April 2018, during US-India Strategic Energy Partnership, the emphasis was on setting the stage for deeper and more meaningful engagements through government and industrial channel to enhance energy security, expand energy and innovation linkages across our respective energy sectors, strengthen strategic alignment, and facilitate increased industry and stakeholder engagement in the energy sector. Under the Partnership, four primary pillars of cooperation are included: (1) oil and gas; (2) power and energy efficiency; (3) renewable energy and sustainable growth; and (4) coal (Press Information Bureau 2018). Hence, bilateral relations continue with more vigour but more on economic terms than combating climate change.

United States withdrawal from the Paris Agreement: Implications for Climate Change Cooperation with India and Global Climate Governance

The consensus after completion of the Paris Agreement was highly optimistic, especially because of its three key features: its aspirational goals, nuanced form of differentiation, and rigorous oversight (Rajamani, Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics 2016, 493-96) (Clark 2018, 115). The Paris Agreement aimed to bring both developed and developing countries to address the impacts of climate change with a bottom-up approach. Unlike the Kyoto Protocol with stringent, mandatory, and legally binding emissions reductions which were not acceptable to countries like USA and China, the Paris Agreement adopted a less coercive, information-based approach (Jorge Vinuales 2016). Provisions of the Paris Agreement were framed to bring USA and China

to the negotiating table with both legally binding and non-binding political commitments towards climate change (Clark 2018, 108). Paris Accord was thus favourable to the USA which inspired Obama to sign it as an executive agreement. Hence the decision of Trump administration to withdraw from the Paris Accord is a challenge and shock to climate change negotiations.

Obama has earlier signed the Paris Agreement as an executive agreement than a treaty agreement which required ratification by the Senate (Mulligan 2017, 16). Article II section 2 of the Constitution of the United States requires advice and consent of the Senate by a two-thirds majority for the president to enter into international treaties. Additionally, the president enters into executive agreements on behalf of the country which does not require consent and advice of Congress, legal authority of which is assumed to be derived from either congressional legislation, Article II section 2 treaty or the president's constitutional powers (Wirth 2015, 544). The president's power to enter executive agreement was discussed by the Supreme Court when it upheld that 'the president has the authority to make "executive agreements" with other countries, requiring no ratification by the Senate or approval by Congress, this power having been exercised since the early years of the Republic' (Am. Ins. Ass'n v. Garamendi 2003). Obama used this power to sign the Paris Accord as a political agreement under his foreign policy than a treaty to avoid advice and consent of the Senate (Durney 2017, 235) (Valeri Richardson 2016). This nature and method of signing the Paris Agreement made Trump's decision to withdraw from the Paris Agreement easier than had it been a treaty (CRS 2016).

In his statement on withdrawal from the Paris Accord, President Trump highlighted the reason for his withdrawal from the Paris Agreement as its terms are unfair to the United States (The White House 2017). In his statement, he specifically targeted India and China pointing that India and China are more favoured than the USA under the Paris Agreement which enables them to enhance their energy consumption particularly coal production. He also opened the doors for further negotiation, 'but begin negotiations to re-enter either the Paris Accord or a entirely new transaction on terms that are fair to the United States, its businesses, its workers, its people, its taxpayers.' He declared that

[t]he United States will cease all implementation of the non-binding Paris Accord and the draconian financial and economic burdens the agreement imposes on our country. This includes ending the implementation of the nationally determined

contribution and, very importantly, the Green Climate Fund which is costing the United States a vast fortune. (The White House 2017).

In furtherance to this presidential statement, the United States administration informed that they had formally moved the UN to initiate formal requirements to withdraw from Paris Accord but intended to remain in UNFCCC and climate change negotiations (Laura Kolen 2017). The earliest the United States could officially withdraw from Paris Agreement would be three years after the Agreement has come into force (UNFCCC 2015). As it came into force on November 4, 2016, possibly the US could withdraw by November 4, 2019, and would be in effect after a year. (UNFCCC 2015). Surprisingly as the year of withdrawal coming into force coincides with next presidential elections, if the incumbent could not retain his office, there are chances that the US might never leave Paris Agreement (Clark 2018, 123).

Moreover, Trump declared to withdraw from the Paris Agreement only and has mentioned his intention to continue in UNFCCC and climate negotiations. Thus, international obligations to combat climate change don't cease with this withdrawal when the US remains the party to the framework convention, the base of all protocols and agreements for climate change actions. Domestically, the Paris Agreement could have its ramifications. Judiciary could consider it as a part of customary international law and could apply in the US domestic law. Additionally, it is the federal government decided to withdraw from Paris. But several states which are proactive in addressing climate change like California and Pittsburgh could use provisions of this agreement to deepen their commitments to tackle climate change. States, indigenous tribes, and several business leaders have committed themselves for implementation of the Paris Agreement (2018 UN Climate Change Negotiations 2018).

Possible outcomes of this withdrawal could generate mixed outcomes. Ceasing all financial obligations could ensure financial savings for the US domestic economy through an end to all financial help extended to developing countries for developing resilient climate technologies. Thus, clean technology initiative would cease and lead to the revival of GHG-intensive technology and consequently boost its market for American industries. It would redefine international relations of the United States with more emphasis on domestic policies, national interest, and sovereignty (Richard K. Lattanzio 2017, 5).

Some scholars highlight that this withdrawal would have several severe consequences. Firstly, this would undermine the Paris Agreement. Secondly, there would be a deficit in leadership in global climate governance. Thirdly, it would set a bad precedent in other countries efforts on mitigation as it fails to achieve NDCs. Fourthly, this exit would provide the US more space for emission than mitigation or reduction, thus making it more difficult to achieve the goals of Paris Agreement. Fifthly, cutting financial assistance would increase the burdens of developing and low-income countries. Lastly, a cut in funding for research would compromise the quality of future IPCC reports and thus qualified for future negotiations (Zhang Hai- Bin 2017, 220).

Why did Trump decide to withdraw from the Paris Agreement? Some scholars cite distinct reasons for his decision — first, the relation of Trump Administration with fossil fuel industries and interest groups. Second, current social and political polarization in the US society might have influenced his decision which he hopes would be helpful in the next elections. Third, President Trump is skeptical of climate change and hence have not acknowledged the existence of climate change like his predecessors. Fourth, the emphasis on America first then his international relations. Obama considered the Paris Agreement as a venue for championing America's concerns on climate change and believed that it would enhance climate security through increased reliance on clean energy which in turn would expand the scope of industries, jobs, markets, and public health. Last, his personal preferences and US domestic politics might have influenced his decision to withdraw from the Paris Agreement (Zhang Hai- Bin 2017, 221).

In short, climate change policies of the US federal governments focused on economic growth than national security. While Democrats tried to address climate change through increased multilateral and bilateral negotiations, Republican presidents adopted a home first policy with more emphasis on domestic economy and markets. Climate change mitigation and adaptation was significantly emphasized by Obama's Climate Action Plan, which was, however, repudiated by the incumbent of White House. The US withdrawal from the Paris Agreement would severely threaten climate change adaptation and mitigation efforts around the world. When developing countries stress on CBDR and historic emission liability, US withdrawal would increase their burdens- financially and in emission reduction rates. This would result in increased inequity issues with the most GHG emitter free of responsibilities and free to emit but burden sharing being left on low-income countries. It could also lead to the leadership deficit in international climate negotiations with the largest emitter and most significant

negotiator outside the realm. China could replace the US as a leader to an extent but due to its political-ideological commitments could not gather support from majority countries'. India could also rise as a level player with her project of ISA which, however, needs more direction and emphasis on bilateral engagements than a multilateral collaboration. Though China and India could be the possible upcoming players, the game of climate mitigation and adaptation would witness barren gallery without the US as a major player.

Conclusion

The overall objective of this chapter has been to assess the chronology of contestation and cooperation between India and the United States in international and bilateral climate strategy. With that objective the chapter first offers a brief overview of international climate law developments, highlighting the perspectives, and imperatives for the conflicting positions exerted by both the nations. The major point of contention revolved around fixation of climate responsibility. While India articulated and relied on the historical emission rates, for the United States, any meaningful climate action was possible only by taking into consideration the current emission rates and by imposing responsibility on the major growing and developing nations. The difference in approach of both the nations is not only because of their domestic imperatives, but also because of the differences in terms of institutional and governance structures, linkages between science and policy, public opinion, and the role of civil society. Despite the contrasting position taken at the global level, both the countries have evolved substantial legal and policy measures to tackle and adapt to climate at the domestic level. In addition, the last decade has also witnessed a surge in bilateral and institutional cooperation between both the countries in climate change with a special focus on clean energy. However, this evolving cooperation is threatened to be destabilized by the US administration's decision to withdraw from the Paris Agreement. The US withdrawal has tremendous political and legal implications for the climate change regime. The need of the hour is to leverage India's role as a leader in climate negotiations while continuing to maintain and nurture the bilateral cooperation linkages between the United States, India, and international climate change strategies.

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