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COMBATING CLIMATE CHANGE: THE GROWING NEED FOR STRENGTHENING INDO-CHINA CLIMATE PARTNERSHIP

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Introduction

South Asia is one of the most vulnerable regions to the impacts of climate change. The Fifth Assessment Report of the International Panel on Climate Change (IPCC) clearly states that climate change is posing serious challenges to the security and stability of entire human and natural eco-systems in the South Asia region. The dangers that are posed by climate change such as rising sea level, melting of glaciers, falling agricultural production, frequent floods and droughts are impeding the economic growth and development of the entire region. As one of the most thickly populated regions in the world which houses around 18.47% of the world population, the impacts of climate change on South Asia have serious ramifications on the security of other countries as well (Worldometers 2017).

Needless to say, India, being a dominant player in the South Asia region is severely suffering from the risks of climate change.² The failure to combat climate change effectively has raised serious challenges to food, water, health and energy security of the country as a whole. The widespread effects of climate change on agriculture and rural livelihood is resulting in large scale migration of people from rural areas to urban areas and thereby making the cities overcrowded by straining the availability of resources. Likewise, in the coastal areas which are already suffering from climate change, a slight rise in sea level is forcing the rural population to migrate to cities creating a new subset called 'environmental refugees'. Hence, climate change being an

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²A study conducted by the Central Research Institute for Dryland Agriculture (CRIDA) in 2011 in Hyderabad reveals that 'around 27% of India's geographical area is directly affected by the aftermaths of global warming.'

issue closely linked with human security draws our immediate attention and intervention. Though this problem is perceived as a creation of the western countries primarily, now India, being a predominant player in the South Asia region and as the third largest individual greenhouse gas (hereafter GHG) emitter country in the world, has more responsibility than any other country in the South Asia region to address this enormous crisis more strategically and diplomatically. However, India cannot deal with the present crisis singlehandedly as it is a transnational issue which has wider implications and consequences. With the withdrawal of the United States from the Paris Agreement, the central question arises now is who will take this Agreement forward or the Agreement itself will face an early demise like in the case of 1997 Kyoto Protocol?³. It is in this context, closer co-operation between India-China in the climate change sphere becomes significant.

India and China are the two players that have responsibility and potential to foster South-South climate cooperation as these two countries together constitute around 28.4% of the world's total GHG emissions (World Resource Institute, 2014). At present, China is the largest emitter of GHG in the world while India holds 4th position in terms of total emissions (World Resource Institute 2014). The development trajectory of India and China is largely dependent on traditional energy sources such as coal and other fossil fuel energy sources. China has already become the world's largest consumer of coal in these years. India's coal consumption is also on the rise and in 2015 it became the second largest coal consumer in the world (International Energy Agency 2015).⁴ In this context, any developmental programme envisaged by these two countries without taking into account their ever growing emissions will have serious socio-economic and environmental implications for the whole of South Asia region. Hence, in this changed scenario, India and China have responsibility to engage in climate negotiations and bilateral partnerships to reinvent ways to limit their rising emissions which contribute to the overall warming of the earth.

³The Kyoto Protocol was an international treaty adopted in 1997 which set binding emission reduction targets for developed country Parties. United States had signed this Kyoto Protocol earlier, but later it withdrew from it citing the Byrd-Hagel Resolution (S.Resolution 98) which stated that U.S won't be party to any agreement unless and until it includes large developing countries like India and China (Kyoto Protocol had excluded India and China from taking up emission reduction targets) and secondly, U.S cannot be party to an Agreement which restricts its economic growth by setting emission reduction targets.

⁴BP Statistical Review of World Energy (2015) shows that in 2014 India's coal consumption had touched a record height of 644 million tonnes.

If climate co-operation between India and China is being materialised that would be a significant turning point in the entire efforts to combat climate change in the Asia-Pacific region. Risse and Kappen (1995) notes 'climate Change is a trans-national issue which can be addressed only through collective action and sharing responsibilities.' Liberal internationalists of IR School also share the opinion that 'in issues such as climate change, States have mutual interest and therefore, a co-operative strategy in these issue areas will surely lead to absolute gains for common good' (O' Neil 2009, Hass, Keohane and Levy 1993). Robert O Keohane and David G. Victor (2011) also share almost similar opinion. They observe that 'forming climate partnerships and regimes are extremely important because of the complicated nature of climate politics and due to the co-operational issues revolving around it'.

For India and China, today climate change is not only an issue area that affect their national security interests alone but also an issue that pose tremendous challenges for the maintenance of their hegemony in the region. One of the reasons for the pro-active approach of both the countries in Paris climate change negotiations was this realization that any reluctance or indifference from their part to engage in climate negotiations would seriously undermine their role in the regional as well as global level. This paper makes an attempt to explore why Indo-China climate partnership becomes an inevitable necessity in today's climate governance architecture especially with the withdrawal of U.S. from Paris Agreement and how both the countries would benefit out of this mutual cooperation.

Imperatives that drive Indo-China Climate Cooperation

Signing of the 'Agreement on Cooperation on Addressing Climate Change' in 2009 was a significant landmark in enhancing the strategic partnership between India and China on this issue area. With the signing of this agreement, both the countries were heralding a new era of climate diplomacy by agreeing to the fact that climate change issue needs collective solutions and action plans such as forging bilateral/multilateral partnerships and building institutional mechanisms. There were mainly three factors that led to the signing of this significant agreement in the initial stage. The first indeed was the vulnerability of both the countries to the impacts of climate change. Second reason was the rapidly growing emissions from these two countries and thereby increased pressure upon them from other countries in the region as well as from extra-regional actors to reduce their emissions. Thirdly, the call from Small Island States to provide them with a

leadership role on this issue also persuaded both India and China to proceed with the signing of the agreement in 2009.⁵

Nevertheless, now among the many other reasons, one of the most important reasons that necessitate the climate cooperation between India and China is the withdrawal of U.S. from its Paris promise. India, China and United States were among the early ratifiers of the Agreement and each one of them had submitted their individual Intended Nationally Determined Contributions (hereafter INDCs) to the United Nations Framework Convention on Climate Change (UNFCCC) in the initial phase of the Agreement itself. India pledged that it would strive to reduce the emission intensity of its GDP by 33% - 35% by 2030 compared to its 2005 level (Government of India 2015). On the other side, China's promise was that it would peak its emissions by 2030 by reducing the CO₂ emissions per unit of GDP by 60 to 65% against the 2005 level (Dept. of Climate Change, National Development & Reform Commission of China 2015). While, United States' Paris promise was much below than these two countries. U.S. could pledge only 26 to 28% GHG emission reduction below 2005 level in 2025 (CRS Report 2015). When Donald J. Trump assumed the Office of the President of United States in 2017, doubts loomed over to what extent U.S. would remain committed to its Paris pledge. The most widely discussed question at that time in the climate policy platforms was that whether President Trump will backtrack U.S. from its Paris promise? Finally, putting rest to all speculations, on 1st June 2017, President Trump officially declared the U.S. withdrawal from Paris agreement. The main reason that Trump Administration gave for the U.S. pull out was that 'the Accord will undermine U.S. economy and will put U.S. in a tremendous disadvantageous position' (The White House press release 2017). He claimed that remaining in the Agreement would cost U.S. close to \$ 3 trillion in lost GDP and 6.5 million jobs (The White House press release 2017). However, some argue, the truth is far from reality. 'Resources For the Future', an independent Organization in U.S. which conducts rigorous economic research, points out that U.S. can easily achieve its Paris goal with a lower carbon tax rate within the scheduled time frame and "U.S. GDP will see a decrease between just under 0.10 percent and 0.35 percent per year from now until 2025" (Chen and Hafstead 2016). In the case of job loss also, the statistics as claimed by Trump has been disputed by various agencies in U.S. itself. The Natural Resources Defence Council (2017) in U.S. claims that if U.S. is complying with the Paris Agreement, that would naturally lead to the

⁵By 2015, both the countries set up a Joint Working Group (JWG) to evaluate their domestic action plans and monitor the implementation of their collaborative projects.

development of clean energy technologies and this clean energy sector can provide more job opportunities to people than in the coal industry sector.

The second important factor that entails Indo-China climate partnership is the aspirations of both the countries to uphold equity and fairness in climate change negotiations. For a long time, decisions related to climate change matters were taken in closed greenroom meetings among the developed country parties. Contrary to that, with the emergence of India and China as major bargaining powers in international politics, more democracy in decision making process has been restored. Nevertheless, recurrent attempts from the part of developed countries to dilute the principle of 'equity' in climate change negotiations and unwillingness to own their responsibility for the past emissions have necessitated the emergence of a new power structure under the collective leadership of India and China to represent the just, democratic aspirations of the developing country Parties in different negotiations. The BASIC⁶ bloc, Alliance of Small Island States (AOSIS) and G77 were influential in representing the genuine concerns of developing world in negotiations.

Another important hurdle that deepens inequality in the climate change regime is the scarcity of resources- both financial and technological resources. The 2007 Bali Action Plan was an important landmark in terms of initiating a new debate on finance and technology transfer to the South. India and China have always maintained that the Bali Action Plan would continue to be the centre of all future climate change negotiations.⁷ The Paris Agreement also had acknowledged the importance of providing financial and technological support to the developing countries to enable them to achieve the objectives enshrined in the Agreement. However, the future of Green Climate Fund has been jeopardised with the U.S. withdrawal from the Paris Agreement. U.S. had pledged \$ 3 billion to the Green Climate Fund earlier. Now, with the withdrawal of U.S., financial and technological help for late developers like China and India would be stalled. In this context, for resource mobilization and to pressurise other developed countries to deliver on their promises, a strong partnership between India and China is imperative.

⁶The BASIC bloc is a bloc of countries made up of Brazil, South Africa, India and China which are committed to act as a bridge between the developed countries and developing countries in climate change negotiations under the UNFCCC.

⁷In the 2011 Durban Conference, decision by Conference of Parties (COP) to establish a \$ 100 billion Green Climate Fund for developing countries was a continuation of the 2007 Bali Action Plan initiatives.

India and China are not only two influential actors in international politics but also two largest economies in the world. China is the second largest economy now, while India is the fourth largest one. It is sure that the growing energy demands from both the countries and the mutual competition for establishing their respective supremacy in the Asia-Pacific region will give way to more emission and higher pollution in the immediate future. For a long time, India and China had stood away from taking up commitments pointing out mainly three reasons- historical responsibility of developed countries for past emissions, common but differentiated responsibility principle and respective capability criteria. Nevertheless, now, both the countries are supposed to lead the efforts to combat climate in the absence of U.S. as there is no other alternative. Moreover, the call from AOSIS, LDCs (Least Developed Countries) also demand India and China to take up the emission reduction commitments.

Major Constraints in Strengthening Indo-China Climate Cooperation

There is no doubt that China is one of the largest trading partners of India for the past many years. However, there are both cooperative and competitive elements in the relationship between both the countries. There are scholars who argue that “Sino-India bandwagoning and the non-UN climate arrangements have not only increased the scale and scope of fragmentation in global climate governance but also undercut the effectiveness, appropriateness and legitimacy of the UNFCCC process” (Fuzuo Wu 2015). Nevertheless, IR scholars have a different view on this. Realists view that cooperation between both the countries is difficult to achieve in the present context as both the countries are in a fierce competition with each other in order to establish their respective supremacy/hegemony in the Asia-Pacific region. They argue that, this may entail even military conflicts in the region. While, liberalists point out that possibilities for cooperation exist in Indo-China relations as both are emerging economies and share similar concerns and larger trade interests. They believe that in a world where countries are highly dependent on each other, mutual cooperation in trade and commerce will gradually lead to partnership and cooperation in other issue areas such as climate change where both have their own security interests. Jairam Ramesh, Former Minister for Environment and Forests, Government of India points out that ‘climate change is an area where “Chindia”⁸ can possibly happen as climate change provides an opportunity to change the political climate between India and China’ (Varma 2010). Nevertheless,

⁸The credit for coining the phrase “Chindia” goes to Jairam Ramesh. He used the word “Chindia” to denote the importance of cooperation between India and China on different issue areas including climate change. He has elaborated this concept in detail in his 2005 book ‘*Making Sense of Chindia*’

what stands as a hurdle in furthering the relationship and engagement between both the States is the absence of mutual trust.

It is a fact that, though India and China share decades old relationship, their bilateral partnership has quite often been characterised by trust deficit and mutual suspicion. India is wary of 'China rise' and on the other side China is wary of India's increasing rapprochement with the U.S. Recently China's attempt to block India's entry into the Nuclear Suppliers Group (NSG) and China's unwillingness to support India's candidature to the U.N Security Council, have widened the gulf in the relationship between both the countries. China's increasing ties with Pakistan, its unprecedented economic growth and overarching influence in the Asia Pacific region is posing new challenges to India's security. In the midst of these new challenges including the issue of unsettled border disputes between both the countries, how mutual trust and cooperation can be promoted is a pertinent question to be addressed. In a scenario of U.S. withdrawal from the Paris Agreement, further inaction of any of these major players on this issue area due to their fear that it would hamper their economic growth would have serious repercussions on the future of a global climate change regime. As of now, the future of Paris agreement itself is dependent on the collective leadership of India and China.

Another important factor that determines the climate policy of countries is the attitude of domestic players. Media, political parties, environmental groups, business organizations, civil society etc play a major role in climate policy decision making. However, these groups may have divergent interests and this may impede the State from taking up a decision based on consensus. Hence, realists in IR School, view climate change issue primarily as a political problem rather than a scientific or economic problem (Giddens 2009). Still there is a small section of people in India and China who argue that climate change issue is a construction of the western world to contain the economic growth of developing countries. Dubash (2012: 202) observes that "'growth-first realists' view climate change negotiations as a geopolitical stratagem by industrialized countries to contain the new and emergent economic powers particularly China, but also India, Brazil and South Africa." Therefore, 'growth-first realists' place low priority to environmental concerns and prioritize the 'growth' perspective. However, on the other side, there are 'sustainable development realists' who argue that what is the need of the hour is a shift from 'growth' perspective to more towards environmentally sustainable goals. For them, climate change is a security threat rather than a issue that affects economic growth. In the midst of these variant strands of thought, differences of opinion and lack of consensus among various domestic

constituents on how to address the problem, act as a hurdle in framing a comprehensive policy on climate change.

In the changing scenario, India and China have no other way but to work together to achieve the objectives set by the 2015 Paris Agreement. If India and China evade from complying with the promises that they made under the Paris agreement, it would be a death knell for the Agreement itself, especially in the context of the U.S. withdrawal. One of the most important reasons for the failure of the 1997 Kyoto Protocol was the non-participation of many developed countries like U.S. in it pointing out that the Protocol had excluded large economies like India and China from taking up emission reduction commitments. Now, the newly framed Paris Agreement which includes India and China is facing a similar crisis with the exit of U.S. from it. Though India and China have already reiterated their commitment to the Paris Agreement even after the pulling out of U.S. in June 2017, it is a question to be addressed that how long and how far these two countries can shape the future of climate change regime without the political, economic, scientific and technological support of U.S. And also, there are concerns that U.S. exit may dissuade other developing and developed countries as well from actively pursuing their respective emission reduction goals which they promised already.

Possible Areas of Climate Change Cooperation between India and China

Though India and China are two fastest growing economies in the world, national circumstances of both the countries are totally different. As per statistics of the Government of India (2013), 21.9% of the total population of India is still living below the international poverty line of U.S. \$1.25 per day. As it is the case, as of now India is not in a position to completely forego its aspirations for higher economic growth. Surely for India, balancing between its environmental and developmental ambitious is a serious challenge today. There are economists who argue that in a country like India where poverty and income disparity is very high, taking up emission reduction commitments by containing the 'growth' ambitions would be suicidal. On the other side, we may have to agree that the Chinese economy is in a relatively better position. While China registered 9.8% Gross Domestic Product (GDP) growth rate during a period between 1980 to 2014, India's growth rate was only 6.23% (International Monetary Fund World Economic Outlook 2015). As per the World Bank reports, China's poverty rate is also relatively low. It was only 6.5% in 2012 which is much below than that of India (The World Bank 2016). Hence, in a scenario where India's economy is lagging behind than that of China, China is supposed to shoulder more responsibility. Moreover, as the largest GHG emitter country and as the second largest economy in the world, China is

expected to lead the initiatives to combat climate change in the Asian continent. The Small Island States and Least Developed Countries in the region are also looking up to China and India for providing them with a collective leadership by setting up a more equitable and just climate change regime which accommodates the interests of all. In the 2007 Bali Conference and in the 2009 Copenhagen Conference, India and China had taken a common view with regard to emission reduction by upholding the interests of small developing countries. As ‘security’ is a thrust area for both the countries, cooperation on climate change will be mutually advantageous in order to design joint mitigation and adaptation strategies. Cooperation on issues like climate change later may lead to cooperation in other areas as well.

One of the key areas in which cooperation between both the countries can be further strengthened is the renewable energy sector. Though Chinese economy is largely dependent on coal, it has now embarked on efforts to experiment with solar and wind energy sources. Reports says “over the past few years, China has become the world’s leading manufacturer of solar panels, owner of the world’s largest network of hydropower stations and a major global player in wind turbine industries” (Ong 2012).⁹ India also has a huge renewable energy market today and it is expecting more investment from China in this sector. As both the countries intend to move towards a low-carbon economy in the near future, mutual cooperation in the renewable energy sector is decisive for the development of both the countries. It is important for India and China to strengthen their ties in the clean energy technology sector as it has a huge market globally. In 2010, both the countries had signed a Memorandum of Understanding (MoU) on cooperation on green technologies. Development of green energy is highly expensive today as it incurs large investment costs. It is a fact that the transfer of green technology from developed countries to developing countries can be realised only through bilateral/multilateral agreements, international collaborations or market based mechanisms as it is a highly expensive affair.¹⁰ In the current scenario, in the absence of U.S. support, only through collaboration with China and other developed countries, India can achieve the goal of technological self-sufficiency.

⁹Recently with the support of a Chinese company called TBEA, a green energy park was inaugurated in the Gujarat state of India.

¹⁰The Government of India (2006) report titled ‘comprehensive energy policy report’ states that it is important for India to encourage commercialization and development of new technologies including solar energy technology, bio-fuel technology, nuclear energy utilization technology etc to achieve better energy efficiency and higher economic growth.

At present, in the domestic level, India and China are facing common twin challenges-combating climate change and ensuring energy security. Only by designing new energy-efficient projects, developing clean energy technology and promoting investment in the renewable energy sector, these challenges can be overcome. Also, it is important for both the countries to invest more in research and development due to the complicated Intellectual Property Rights issues revolving around technology transfer regime. As per the 2009 Agreement, some of the possible areas of cooperation between both the countries are; ‘cooperation in energy conservation and energy efficiency, clean coal, methane recovery and utilization, afforestation and sustainable management of forests and ecosystems, transportation and sustainable habitat.’

Conclusion

Impacts of climate change are not limited to any one particular country or region. Its effects are pervasive. Only through joint action plans and rigorous mitigation and adaptation strategies, these challenges can be tackled. The Paris agreement is the last resort for the world countries to put up a joint fight against climate change at the global level. Though the Paris agreement has not set any binding emission reduction targets for countries and it rests primarily on the INDC commitments of the individual countries, its effective implementation is inevitable in the efforts to bring down the global temperature level well below 2 degree Celsius above the pre-industrial level. In order to spearhead these efforts, it is important that China and India to join hands with each other especially in the absence of U.S. In South Asia and Asia-Pacific region, India and China can be effective partners in addressing the challenge as both have ‘responsibility’ and ‘capacity’ compared to other developing countries in the region in tackling the issue. As the first and third largest emitter countries in the world, China and India have the ethical responsibility in providing a collective leadership to the small island states in the region in their negotiation efforts with the developed country Parties in the international platforms.

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