

Reconsidering India's climate diplomacy and domestic preferences with a two-level approach

Reconsidering
India's climate
diplomacy

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Juan Zhang

*College of Philosophy, Law and Political Science, Shanghai Normal University,
Shanghai, China*

Xiaolong Zou

*School of International and Public Affairs, Jilin University, Changchun, China and
Institute of National Development and Security Studies, Jilin University,
Changchun, China, and*

Anmol Mukhia

*School of International Cooperation, Security and Strategic Languages,
Rashtriya Raksha University, Lavad, India*

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Abstract

Purpose – International climate politics are gradually changing in terms of new and ground-breaking policies and decision-making spearheaded by national governments. The growing global demand to combat climate change reflects the current challenges the world is facing. India's negotiations at United Nations Conference on Climate Change are based on "equity," "historical responsibility" and the "polluter pays" agenda, until a shift in the voluntary reduction of carbon emissions takes place. The purpose of this study is to understand why India, a "deal breaker", is seen as a "deal maker" in climate governance?

Design/methodology/approach – For a state like India, domestic preferences are equally important in introducing climate policies alongside its concerns over poverty reduction and economic development, which also stand with its sustainable development goals. This paper explains India's decision-making using a two-level approach focusing on "domestic preferences." This rationale is based on India's historical background as well as new upcoming challenges.

Findings – This paper shows that India has both the domestic needs and long-term benefits of combating climate change to cut carbon emissions, which gives the responsibility primarily to domestic audiences and international societies.

Originality/value – This paper uses an international political lens to critically analyze India's climate positions and politics from both domestic and international levels, demonstrating the importance of

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considering both short- and long-term goals. The outcome benefits not only the policymakers in India but also stakeholders in the Asia-Pacific and beyond.

Keywords Climate change, Climate negotiations, Climate justice, Diplomacy, Responsible power

Paper type Case study

Introduction

In the climate change debate, India is labeled as the world's third-largest greenhouse gas (GHG) emitter and it is predicted by the International Energy Agency (IEA) that India's emissions will increase by 2.5 times between 2008 and 2035 [International Energy Agency (IEA), 2013]. India is also the world's lowest emitter by "per capita" GHG emissions, yet just 15 years ago it was the fifth-largest source of GHGs (GHGs) globally when accounted for in total tons. The main sources of India's carbon emissions are energy sectors (26%), industrial production (19%), forestry (17%) and agriculture (13%). The implications of extensive carbon-emitting also translate from ecological security into economic security or vice-versa. If nothing changes climate change can reduce global gross domestic product (GDP) by 5%–20% each year (Stern, 2016). India ranks 131 out of 189 countries in the Human Development Index report 2020, and when compared to Brazil, Russia, India, China and South Africa (BRICS), India is the lowest in ranking. India is also vulnerable because of poor performance in environmental health policy, and most of its cities are the worst in the world when it comes to air pollution control. Environment Performance Index reflects India's performance ranked as 120 in 2008, followed by 123 rank in 2010, 125 rank in 2015, 155 rank in 2014, 141 rank in 2016 and 177 rank in 2018, respectively (Hsu *et al.*, 2018).

Historically, India's interest in climate politics stems from former Prime Minister Indira Gandhi's speech at the United Nations Conference on Human Development (1972), who accused the developed North (Annex I parties to the UNFCCC) countries as responsible for causing the global environmental problems (Vihma, 2011). It was followed by the Rio Earth Summit of 1992, which highlighted the agenda of "climate justice," and this idea became the negotiating foundation of India's policymakers. The idea was supported by the Centre for Science and Environment report entitled "*Global Warming in an Unequal World*." This report convinced the world that it was the historical responsibility of Annex I countries because they polluted the environment by releasing carbon during their respective drives for "industrialization" and "development" (Dubash, 2013). However, at the 2009 Copenhagen climate summit, India's flexible role exhibited a voluntary reduction of its carbon emissions, also followed by the relevant changes in domestic climate policies. According to Sengupta (2012), there are changes in India's behavior from the total refusal of climate cooperation in 1992, to conditional acceptance in 2007, and to offering "international consultations and analysis" in 2009 (Sengupta, 2012). At the Paris Agreement in 2015, India pledged to cut further GHG emissions by 33 to 35% relative to the 2005 level by 2030. At the Cop26 in Glasgow in 2021, Prime Minister Narendra Modi further pledged to cut emissions to net-zero by 2070, by reducing carbon emissions 1 billion tones by 2030 and also sharing 50% of renewable energy among others (Khadka, 2021).

The question arises: Why India, as a "deal breaker," is seen as a "deal maker" in Climate governance? What made India change its policy from rigidity to flexibility? How do India's domestic policies weigh in international climate governance? This article uses Robert Putnam's two-level game approach, which explains the phenomenon either through domestic or international constraints. This article focuses on domestic preferences, which help the negotiator and policymaker to bargain at the international level. A clause is made that India, as a political actor, plays a role in two parallel games. However, this paper focuses on the "domestic

preferences" of the state which elucidates India's decision-making. To collect the data and follow the pattern, India's portal "*Right to Information*" is used, which provides a timely response to citizens' requests for government information from all the Governmental Ministries of India. Moreover, for in-depth analysis, data provided by the World Bank group is used, and to see the comparison between the Brazil, South Africa, India and China (BASIC) countries, the international monetary fund (IMF) data-Mapper tool is used.

Review of literature

Climate change debate is governed by the United Nations Conference on Climate Change (UNFCCC) established on May 9, 1992, with one motive to control the GHG concentration in the atmosphere and combat human interference in the climate system. It was signed at the UN conference on Environment and Development (UNCED) also known as the Earth Summit. Under the UNFCCC in 1997, the Kyoto Protocol was signed and came into force on February 16, 2005, with the objective of industrialized countries commitment and economies limits with reducing GHG. UNFCCC acknowledged that countries need to act based on "equality," dividing Annex I (developed countries) and non-Annex I (developing and underdeveloped countries) in terms of "common but different responsibility and respective capabilities." India, as a developing country, falls under the non-Annex I category, which pushes the developed countries to reimburse in terms of financial assistance or technology transfer for their historical share in carbon emission. India, after independence, went through many challenges such as illiteracy, poverty, communalism, etc. but the major obstacle was, and still is its "economic growth." India was desperate to develop after 1991 (a balance of payment crisis) and to move towards economic pathways of liberalization. Economic development directly ecology and environment, and India has been trying to balance its domestic policies with international perimeters of climate governance. Literature can be divided into three broad categories such as:

- (1) climate diplomacy;
- (2) climate negotiations; and
- (3) climate justice.

India has keenly participated in the climate diplomacy, earlier known for deal breaker and now stands voluntary approach to combat climate change. [Mabey et al. \(2013\)](#) in their report title "The evolution of climate diplomacy and the international climate regime" highlights four different interlinked model of global climate cooperation which climate diplomacy must work:

- (1) absence of political conditions for agreement;
- (2) failure to construct a fair political agreement;
- (3) failure to capture the highest ambition possible; and
- (4) failure of implementation.

It says "climate diplomacy" is often seen as focusing on the past three areas, but it also has a key role to play in shaping its own and other states' national interest conversations. This is also due to climate change to many states is not in the national interest debate. Climate diplomacy is thus, in the practice and process of creating the international climate regime and ensuring its effective operation. The evolution of climate diplomacy therefore shapes the constructed climate regime ([Mabey et al., 2013](#), pp. 21-23). However, the developed nations and their negotiation blocs practiced climate diplomacy in an effort to shape international negotiations based on their priorities and in contrast, developing nations such as least development countries (LDC) have often lacked to actively engage in climate diplomacy, which result into limited influence in shaping negotiations ([Jallow and](#)

Craft, 2014, pp. 1-2). For environmental sustainability the nation actively engages in climate diplomacy with cooperation and collaboration to address the issues related to climate change. Tshering and Craft (2016) examines four major factors in regards to climate diplomacy, such as:

- (1) environment sustainability as a pillar of development;
- (2) carbon neutrality and moral authority;
- (3) multilateralism; and
- (4) coordination diplomatic engagement.

The nation must strive to use their capabilities across many sectors to get diplomatic engagement in all forms including multilateral negotiations.

In terms of climate negotiation, Streck (2012) writes negotiating an international framework to combat climate change is a collaborative effort which is more complicated and challenge faced by the international community today. As international negotiations cannot go beyond the ambition of the participating nations and also international process cannot stay at low level while taking serious actions in climate change. Hochstetler and Milkoreit (2014) assert that international negotiations about climate change raise fundamental questions as how the responsibility is taken addressing the problem among states. For addressing the climate change, distinction is created amongst developed and developing states. However, some developed states challenge the distinction and alleges developing states to participate in climate obligation. They examine, that developing states such as Brazil, China, India and South Africa (BASIC coalition) negotiated together in climate change meeting beginning with the Copenhagen Conference in 2009. The challenge still erupts to climate negotiations relate to politics, economy, culture, equity, and process. Dasgupta and Indian Foreign Affairs Journal (2011) gives an idea of “overriding priorities” within the UN Framework Convention on Climate Change that in reality does not require developing countries to take any binding emission mitigation commitments, which is because of focus on economic and social development and poverty eradication. But in actual, it requires the developed countries to stabilize and reduce emissions.

Mostly India has been fighting for the climate justice, due to its international settings as non-Annex I (mostly developing countries fighting for its right of economic development). Robinson and Shine (2018), says Climate justice is a concept that views climate change and attempts to combat it with ethical implications and considers how it can relate to wider justice concerns. It links human rights to achieve human-centered approach, safeguard the rights of vulnerable people and benefit of climate change and also its impact. This approach desires to respect and protect human rights particularly the most vulnerable faced by climate impacts and through climate actions. David Schlosberg (2012) gives four arguments to climate justice theory and its relations to policymaking:

- (1) Most of the climate change has two weaknesses, i.e. the identification of social and political misrecognition, and the influential capabilities approach. These two understanding helps us to understand political, social, and cultural conditions and leaves to address the question of how justice can be applied.
- (2) Adopting a capabilities approach to climate justice bridges the gap between ideal and abstract climate theory and reality.
- (3) This capabilities can be used to understand and address both individual and community level needs and vulnerabilities.
- (4) Capabilities approach says that justice depends on a revised understanding the relationship between human being and its capabilities that directly depend on the environment.

Thus, the alternative approach to climate justice would be with per capita argument or carbon egalitarianism. Meyer and Roser (2010) highlight who must pay for climate damage and gives three principles of action such as:

- (1) emitter pays principle;
- (2) beneficiary pays principle; and
- (3) community pays principle.

Each has its own merits, but the condition applies to the voluntary acceptance based on its benefits. Thus, for India, the whole idea of diplomacy, negotiation and seeking justice was motivated by its both domestic drawbacks as well as its international settings. The idea was driven by *vasudhaiva-kutum-bakam*, meaning not having hostility to anybody, even including the USA, because India is a developing nation and must seek global recognition with global aspirations (Figure 1).

The above figure illustrates the linkages between climate diplomacy and domestic preferences. The conceptual idea can be taken from Robert Putnam's (1988) Two-Level approach: Level I (International Level) is where the international negotiations with the other party take place in bargaining between negotiators from different countries, leading to a tentative agreement; while level II (National Level) stands for domestic negotiations with domestic constituents, with separate discussions within each party's constituents about whether to ratify the agreement. India's climate diplomacy is to grow its economy and energy domestically for the sake of poverty elimination. But India's aspiration of "India Way" or "responsible power" also motivates it to set its domestic preferences that support India's international status in climate governance and voluntary approach to climate change.

Domestic factors and India's climate policies

Climate change linked to poverty

World Bank report "The Poverty Impacts of Climate Change" highlights that; most developing countries are dependent on agriculture and other climate-sensitive natural resources for income, while they lack sufficient financial and technical capacities to manage increasing climate risk (World Bank, 2011). Former Prime Minister Indira Gandhi stated "poverty as the biggest polluter," especially emphasizing the developing countries' plight in

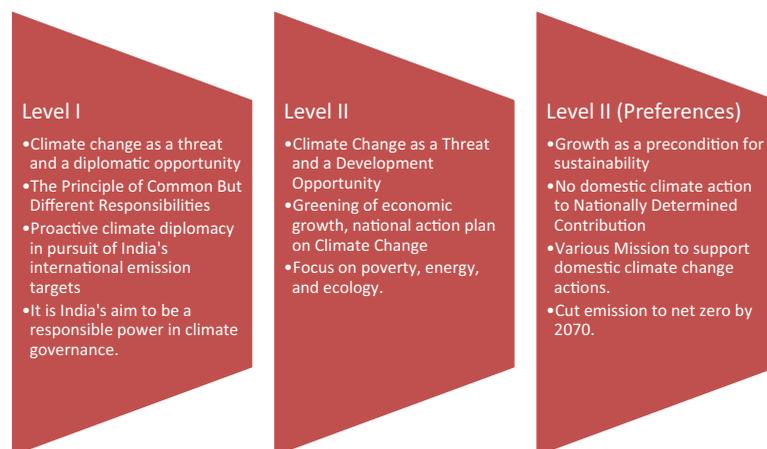


Figure 1.
Illustration of
linkages between
climate diplomacy
and India's domestic
preferences

contrast to industrialized developed countries. India's government has brought this argument up in almost every international climate negotiation. India is home to 30% of the world's poorest people and the majority of people are living below the poverty line with an income of only about USD 1.90 per day (World Bank, 2011). India ranks 101 amongst 116 on the Global Hunger Index in 2021 (Global Hunger Index, 2021), and 131 on the United Nations Human Development Index in 2020 (United Nations Development Programme, 2020). In a nutshell, eradication of poverty becomes the prime agenda in India's climate policies. Around 363 million people (30% of the population) live in poverty, where about 1.77 million people do not have shelter and 4.9% of the populations are unemployed.

Starting from December 1970, Indira Gandhi's campaign on *garibi-hatao* (poverty eradication) also included environmental concerns that were equally important. After a year, she took the initiative to set up a full-fledged Department of Environment in November 1980. These environmental challenges had direct or indirect impact on human habitat resulting in unproductive agriculture, energy security concerns, and unhealthy livelihood leading to further food scarcity, migration, unemployment, and underdevelopment. The World Bank report, *Groundswell: Preparing for Internal Climate Migration*, shows that the poorest people will be forced to migrate due to climate change (Rigaud *et al.*, 2018). Approximately 270 million people live below the poverty line, where India comes 117 in the global hunger index, with 1.77 million homeless people and 30.6% being internal labor migrants. Climate change impact shows to be more regressive, affecting the poor more heavily than the rich (World Bank, 2011). This makes India's decision-maker stand on the ground of UNFCCC's agreement "common but different responsibility and respective capabilities."

India's energy concern

A national Economic Survey (2021–2022) shows fluctuation have more seen in energy prices and energy index has recorded negative growth in 5 out of 12 months since January 2021. Important domestic factors, such as the demand for energy for India's growing population cannot be ignored, and this is the prime reason for the government to continually rely on nonrenewable resources. Approximately 600 million people in India are living without electricity. India is home to 18% of the world's population but uses only 6% of the world's primary energy [International Energy Agency (IEA), 2015]. According to IEA preliminary estimates, Global energy demand grew by 2.1% in 2017, and carbon dioxide emissions from the use of energy rose by 1.4% (Rigaud *et al.*, 2018). It is projected by the Indian news outlet *Economic Times* that India's energy consumption will grow the fastest amongst the major economies by 2035, and India's consumption growth for fossil fuels will be the highest (ET Bureau, 2017). Same case scenario argues that India's demand for gas will have expanded by 162%, followed by that of oil 121%, and coal 105%, with renewable rising by 712% (nuclear by 317% and hydro 7%). Thus, India must achieve a high level of energy security to maintain its ambitious growth rate of 8 to 10% of world primary energy. India is also facing an energy shortage which must be addressed in the near future.

India's ecological concern

The advent of urbanization and rampant deforestation has also had a negative impact on public opinion. The ecological problems, such as air pollution, water pollution, preservation and quality of forests, and biodiversity loss are major issues faced in India. It is that environment management will have multiple and growing dimensions. According to the World Bank (2015) report, the Ganga river basin is a home to more than 600 million Indians, with 860,000 sq km spread across 11 states (provinces). This is one of the longest rivers in India with 2,510 km in length, which flows east through the Gangetic Plain of northern India

and Bangladesh. Approximately 40% of the country's GDP is generated from this fertile region, but it is also the home of the poorest section of Indian populations (World Bank, 2015). The traditional river has also been placed to take bath, wash clothes, burn dead bodies and throw its ashes to the river, where approximately 3 billion liters of sewage is released, polluting the river every day, which also has negative implications on the environment by adding harmful toxic pesticides. The sickness, such as rashes, boils and numbness in the limbs, lung cancer, and liver failure result from the improper use of Ganga River. The article title "Pollution in Ganga claims more lives than bomb blast" shows that millions of people die every year from the polluted water of the Ganga river which goes unnoticed (PTI, 2011). However, this river also has the potential to supply India with renewable resources. The upper reaches of the River Ganga could accommodate enough hydroelectric power plants to support India's approach to climate mitigation and adaptation. Small hydroelectric power is the most economically viable form of renewable technology with an average economic cost of Rs. 3.56/kWh, compared to wind projects which are highly sensitive to the capacity utilization factor, and solar is the most expensive renewable resource (Ramesh, 2015). The 2021–2022 Europe's experience with renewable proves that these sources of energy could be highly volatile, depending on weather factors.

External factors and coalitions in climate governance

India in regional organization South Asian Association for Regional Cooperation

India has also maintained its role of regional power in South Asia since 1985 with the formation of the South Asian Association for Regional Cooperation (SAARC). According to the Stockholm International Peace Research Institute report, all the heads of the states of SAARC expressed their deep concern towards environmental degradation and climate change (Krampe *et al.*, 2018). SAARC commissioned a study on the Protection and Preservation of the Environment, and the Causes and Consequences of Natural Disasters in 1991, followed by the establishment of the Technical Committee on Environment in 1992. Until 2005, SAARC's focus was on natural disasters rather than other environmental issues. In the 2007 declaration of the 14th SAARC Summit, this concern expanded, including climate change and resulted in pursuing a resilient development in South Asia such as the SAARC Action Plan on Climate Change in 2008. This action plan identified cooperation in adaptation, mitigation and the risk management in climate change (Sengupta, 2012). Mahendra P. Lama says that the SAARC regional studies were organized to research the Greenhouse effect and natural disaster prevention and protection of the environment experienced in response to climate change (Lama, 2018). The 16th SAARC summit in 2010 had a target to come up with a regional response to climate change impact, where sharing of knowledge and capacity building was a core issue in maintaining ecosystems.

However, in maintaining country-specific targets, India alone would require US\$206bn at 2014–2015 exchange rates to implement these targets in 2015, and for the adaptation of agriculture, forestry, fisheries and ecosystems till 2030. Lama calls the SAARC summit a "political white elephant," a "talk shop of no consequences" and a "suffocating slow" institution (Lama, 2018). Also, SAARC has a very limited hold in Climate Change negotiation as a regional organization. This is because all SAARC countries belong to the southern developing and underdeveloped countries. This has certainly led India to identify itself with a larger group, such as G77 which comprises 133 developing countries, rather than just SAARC with its only 8 members, which has its focus primarily on disaster management, and is dependent on the North for seeking funds in terms of its mitigation and adaptation policy.

India in G77 as a developing economy

With the introduction of UNFCCC in 1992, India placed itself with developing nations such as Group of 77 (G77), a coalition of 133 developing countries. This G77, or the group of developing nations, urged the Annex I countries to take action on climate change and to financially support the non-Annex I (developing countries), which led to the voluntary reduction of global carbon emission by the developing countries. Also, the Kyoto Protocol required Annex I parties of the UNFCCC to limit them to quantified emission limitation and reduction objectives, while non-Annex I countries, including India, to be exempted from legally binding commitment ([United Nations Framework Convention on Climate Change, 1995](#)). Thus, India was able to protect socio-economic development while pushing developed countries to take more responsibilities ([Hurrell and Sengupta, 2012](#)). Subramanian and others perceive India's climate situation in terms of economic security, where the focus was on the per capita emission, cap and trade and carbon taxes ([Subramanian et al., 2009](#)). India agrees with the principle of "polluter pays," but the same principle has to be applied domestically. For example, taxes, such as coal tax on domestic as well as imported coal came into force on 1 July 2010 ([Pearson, 2010](#)).

India in BRICS as an emerging economy

The term "BRIC" was first coined in 2001 in a Goldman Sachs report referring to "emerging economies" because of the nominal or purchasing power parity (PPP)-adjusted GDP ([Neill, 2001](#)). India's position and image changed from developing to "the emerging economy," with the introduction of BRIC in 2006, which later was transformed into BRICS with the addition of South Africa. The organization initially included the four largest emerging and developing economies by either nominal or PPP-adjusted GDP. This distinguishes India as different from the G77 bloc focused on carbon and economic footprint. With this, the developed countries of the North began to take initiatives in a dialogue, such as the G8 + 5 dialogue in 2008 with emerging economies as a subside of the UNFCCC framework followed by the US-led Major Economies Forum on Energy and Climate in 2009. For example, India in 2002 developed sought for the Clean Development Mechanism in gaining funds for projects in India rather than being skeptical towards it.

Before the Copenhagen conference in 2009, India was in the line of G77, whose main goal was to break any deal that stands against the climate obligation until the developed countries fulfilled their demand. The Paulo Proposal was designed where the preliminary agenda of BASIC was put forward in climate negotiation during the COP 13 Bali Conference in 2007. However, since 2006, newly emerging economic powers in the G77 (Brazil, South Africa, India and China) have become both regional economic powers as well as major emitters of GHGs. By 2008, after 11 years of adoption of the Kyoto Protocol, the four countries were generating over 15% of the world GDP and over 30% of the global GHG as compared to their 20% share of the global GHG emission in 1998. In terms of its economic development, BRICS accounted for 24% of world GDP ([BRICS India, 2021](#)), where China accounts for 17.4%, India for 3.20%, Russia for 1.74% Brazil for 1.70% and South Africa for 0.357% as of 2020 ([Statistics Times, 2021](#)).

India as part of BASIC in climate negotiation

The premise is that India, as an advanced economy, does not fall in the category of developing nations, which were exempt from the Kyoto Protocol. Thus, the BASIC countries also began to negotiate closely together, being independent of the G77 ([Kasa et al., 2008](#)). From January 2005 to June 2007, the European Commission funded an applied research project entitled the "BASIC project" ([Qi, 2011](#)). The BASIC group comprised Brazil,

South Africa, India and China in October 2009, before the Copenhagen climate conference. BASIC had top priority over economic growth and poverty reduction, fossil fuels were the domestic energy supplies, all member states were vulnerable to climate change, and they all demanded international financing and technology transfer from the Annex 1 countries.

In Copenhagen 2009, India as a member of the BASIC group, was seen as a proactive flexible deal-maker. In 2007 at the G 8 Summit, India was invited as an observer and played a responsible role. This shows that India demonstrates its intention to take climate issues seriously and set high political goals towards it. Also the National Action Plan on Climate Change (NAPCC) was introduced in 2008 just before the G8 summit in Japan. Despite working within the same organization pursuing the same agenda, the four countries' profile in BASIC diverges widely, as they are integrated differently. In BASIC, India and China compete for resources and access to markets. Comparatively, India's per capita GDP is equivalent to many of the LDC, while South Africa is similar to many of the European Union (EU) countries. For Brazil, emission reduction lies in preventing deforestation, while for China it is industry and energy generation (Bidwai, 2011).

However, the GDP growth of four BASIC countries, which marked them as "emerging economies," also helped in presenting a strong coalition force at the Copenhagen climate negotiations. The above figure shows the steady growth of India and China from 2015 to 2018, but from the years 2010 there was a slight decrease. The presence of the group of emerging economies itself strengthens international negotiations on climate change. From the Copenhagen to Paris climate negotiation, India with other BASIC groups stood firm declaring the group's intention to follow its non-negotiable principle based on "equity" and "common but different responsibilities" (Figure 3).

Meanwhile, Figure 2, shows that the four countries have either approached or surpassed several OECD countries in the ranking of total CO₂ emission between the years 1998 and 2014. BASIC generates 15% of the world's GDP and 25% of global GHGs. At first, China expressed the BASIC group's concern that the other countries would isolate it based on

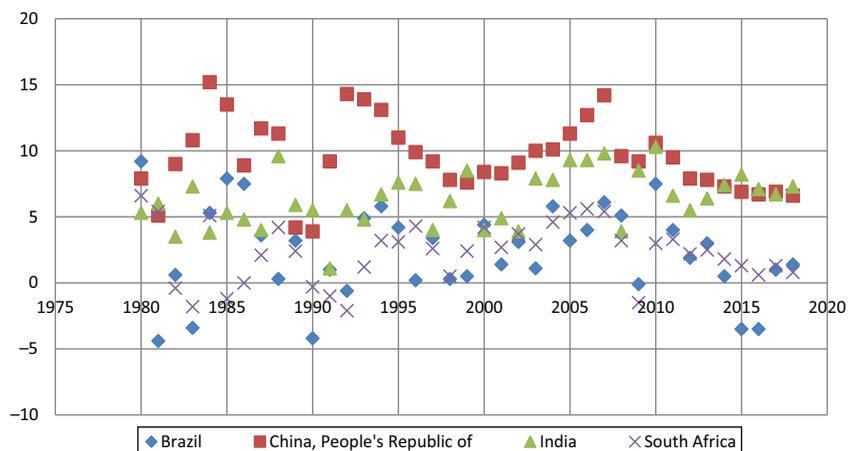
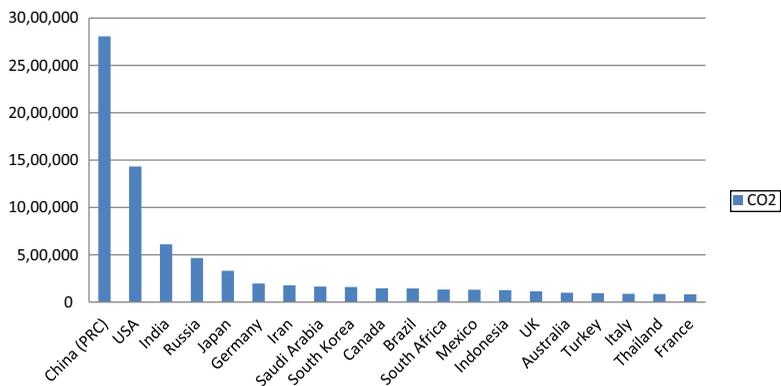


Figure 2.
Real GDP in BASIC
countries (Annual %
change)

Notes: Compiled with data from IMFDataMapper (1980 to 2020)



Notes: Top 20 countries by total fossil-fuel CO2 emission for 2014 from OECD

Figure 3.
CO₂ emissions by
countries

common but differentiated responsibilities (CBDR), when the biggest emitter was the USA. Before BASIC, other groupings of states, such as India, Brazil and South Africa had coordinated their policies through the India, Brazil and South Africa forum, but without China. The BASIC countries demanded an equitable “top-down agreement,” which imposed different obligations on different countries depending on their level of industrial development. What bound them together was their anxiety to resist the growing pressure from the Northern countries, especially the USA and leading EU states to dilute the CBDR principle through accepting climate-related obligations. All four BASIC countries did not accept emission caps when they worked with the underdeveloped countries. It strangely found an ally in the USA, which does not seek a legally binding emission agreement.

Global demand adjusting domestic policies

The major part of the two-level approach is the domestic level, where all the win-set is agreed upon. Sometimes, it is *vis-à-vis* the international level determining the preferences. In India’s case, it is domestic factors that have to be focused on, which are more complex in terms of decision-making. India repeatedly emphasize that the entire negotiation was based on no legal responsibility, and that any voluntary mitigation was to be compatible with the national development plans and priorities, and that the financial assistance and technology transfer should come from the developed world. India claims that it has the right to increase its emission now in the name of uplifting the poor and providing electricity to its 300 million citizens who are surviving without electricity. Moreover, Piyush Goyal (former Minister of Power, New and Renewable Energy and Coal) argued that the “polluter pays” principle should be applied (Vickery, 2015). The working paper entitled “Equity in Climate Change” highlights the four equity-based proposals, such as allocated equally on the per capita basis, historical responsibility for emission, ability to pay and related to future development opportunities (Mattoo and Subramanian, 2010). This report distinguishes some large and poor developing countries including India but excludes China. There can be no so-called “climate justice” when the per capita emission of many developed countries is in their metric tons as compared to India. Another argument shows if all nations continue their emission growth based on justice, it would certainly not lead to fairness in climate change, but will definitely exceed the 2°C target. Also, there is a perception of “free riders”

countries that India falls in, i.e. without making any contribution a nation-state can get satisfactory benefits. Thus, India along with the USA, China and the EU offers their Intended Nationally Determined Contribution (INDC) to move beyond their climate justice position.

Progressively, all countries were asked to publish their INDC since the 2013 UNFCCC meeting in Warsaw. India submitted its INDC to the UNFCCC in October 2015 with the commitment of cutting emissions 33%–35% by 2030 from its 2005 levels. India's effort was seen through eight missions of its NAPCC. Two of them focused on mitigation and five on adaptation, such as:

- (1) National Solar Mission as 20,000 MW of solar power by 2020.
- (2) National Mission for Enhanced Energy Efficiency as 10,000 MW of energy efficiency savings by 2020.
- (3) National Mission for Sustainable Habitat as Energy efficiency in residential and commercial buildings, public transport, etc.
- (4) National Mission on Water as water conservation and river basin management.
- (5) National Mission for Sustaining the Himalayan Ecosystem as conservation and adaptation practices and global monitoring.
- (6) The national mission for Green India, as 6 million hectares of afforestation by the Twelfth Plan.
- (7) National Mission for Sustainable Agriculture as drought proofing, risk management, and agriculture research.
- (8) National Mission on Strategic Knowledge for Climate Change, the focus was on the vulnerability assessment, research and observation and data management.

In addition, 85% of companies interviewed by business associations, such as CII were supportive of emission reductions by India; two-thirds of companies' delegates did not agree with the government stance in the Copenhagen negotiation ([Federation of Indian Chambers of Commerce and Industry, 2009](#)). More than 90% of companies surveyed by an American Consulting Firm were already engaged in green initiatives, moved by regulatory compulsions or the desire to build a stronger brand with consumers ([Bhattacharya et al., 2011](#)).

Analysis of India's concern towards domestic issues

The rapid development was further checked by India's ratification of the Kyoto Protocol in 2002 which prioritized "climate adaptation." India also established the Prime Minister Council of Climate Change in 2007, and the same year came to pledge at Heiligendamm, Germany. The reason was not to fully comply with the international pressure, but the preferences went toward domestic policies. For example, the most prominent case of the intergovernmental panel on climate changes (IPCC's) Fourth Assessment Report (FAR, 2007) was that the Himalayan glacier would disappear by 2035 [[Intergovernmental Panel on Climate Change, 2008](#) (IPCC)]. This led the Indian Government to establish the Indian Network on Climate Change Assessment which comprises 250 scientists drawn from 125 research institutes to study, assess and research climate change. Others, such as the Indian Institutes of Technology (IITs), were called for their scientific assistance and expertise on the Mission Clean Ganga. Moreover, the ministry signed a memorandum of understanding (MOU) with seven IITs, and IIT Kanpur itself produced 37 reports ([Ramesh, 2015](#)). Since 2007, the WWF reports show that five sizable rivers of Asia, such as Ganges, Yangtze,

Mekong, Salween and Indus are fast dying as a result of climate change, pollution and dams ([World Wildlife Fund, 2007](#)).

For the first time, India at the international level also announces its voluntary reduction of emission intensity of 20%–25% by 2020. This was followed by a Planning Commission (now NITI Aayog) to establish an Expert Group on “low carbon economy” in 2010 after the Cancun Agreement adoption at COP 16. This demonstrates that the emphasis of India’s negotiator (decision-maker) was on adaptation policies focusing to public interest. India, while keeping its developmental agenda, also has to tackle domestic concerns, which have to be supported by national policies. India’s concern towards climate change was followed by state by state environmental projects and national scheme implementation towards agriculture, Himalayas, Ganges River. For example, Ganga should be an important issue to be discussed in both domestic and international politics to combat climate change. The then ruling government Congress gave River Ganga the status of a “National River” and set up the National Ganga River Basin Authority on February 20, 2009, one month before the general election ([Ministry of Environment and Forests of India, 2009](#)). Moreover, the election manifesto shows that the Indian National Congress has also declared the sacred Ganges as a “national river” ([Kadam and Buland, 2009](#)). The Geological Survey of India confirms the receding of the river such as the Ganga (National River) due to global warming. The importance of Ganga became so focal in Indian politics that on March 30, 2017, the Uttarakhand High Court declared river Ganga and its tributaries India’s first living entities status, just like New Zealand’s Whanganui River was given living entity status ([Trivedi and Jagati, 2017](#)). Apart from air pollution, it is important to give equal importance to water pollution. Thus, the cleaning of Ganga became as both “rights-based” and “needs-based.”

Since 2015, after the Cabinet approved the Namami Gange Mission to protect, conserve and rejuvenate the Ganga River from 2015 to 2020 with a budget of 20,000 crores. Economic Survey (2021–2022) shows, until December 2021, there are 363 projects worth 30,841.53 crores sanctioned under the mission. In addition to this, the Clean Ganga Fund was established in 2014 to contribute to the national effort of cleaning river Ganga. There is also the Nirmal Ganga mission which covers 160 sewerage projects to create a cumulative treatment capacity of 5,024 MLD. Focusing on Ganga also serves other objectives. The river Ganga and its tributaries are also potential for hydroelectric with 51,700 to 128,750 megawatts which can minimize the demand for energy within India. According to the *India Energy Outlook report* (2021) of IEA, energy use has doubled since 2000, with 80% of demand met by coal, oil, and solid biomass [[International Energy Agency \(IEA\), 2021](#)].

The International Solar Alliance (ISA) was set up in 2015 to join the tropic of Cancer and the tropic of Capricorn countries by relying on solar energy. India also pledged during the Paris Summit to generate 40% of its electric needs from non-fossil sources by 2030. Concerning the domestic level, the Ministry of Science and Technology came up with innovative technology “Surya Jyoti,” a micro solar dome, for meeting the lighting requirements of rural households. The Group of Secretaries on “Energy Efficiency and Energy Conservation” constituted by Prime Minister’s Office File No.L-12043/01/2016-RH (PMO) identified this Technology for large-scale deployment (10 million homes). The Ministry of Science and Technology wanted to include this technology in the rural housing scheme of PMAY-G, so that beneficiaries of PMAY-G can also avail its benefits. However, in many cases, the households that are assisted in the construction of the house are located in remote areas where the provision of electric connectivity is still a challenge. This technology developed by the Ministry of Science and Technology could play an important role in meeting the lighting needs of rural households. The adoption of the same technology can also be advantageous in areas with connectivity, as this technology is based on the

renewable energy source, and hence will not involve any recurring monthly expenditures (Figure 5).

India's climate actions on adaptation are largely financed domestically. Figure 4 shows, the National Adaptation Fund on Climate Change (NAFCC) was launched in 2015, and covers 30 projects between 2015 and 2019 on the climate sectors such as agriculture, water, forestry as well as coastal and Himalayan ecosystem. The major target of INDC on the adaptation is in regard to the Himalayan studies. State climate change centers are set up in 12 Himalayan states. The Himalayan issue was also one of the major concerns of the UNFCCC. According to the World Glacier Monitoring Service, glaciers all over the world are melting, and the FAR of IPCC concluded that the Himalayan glacier is melting rapidly (2007). The article titled "Glacier Beating Retreat" written by Mridula Chettri highlights that glaciers in the Himalayas are receding faster than glacier in many other parts of the world, and if it continues, the glacier will disappear by the year 2035 (Chettri, 1999). An excerpt

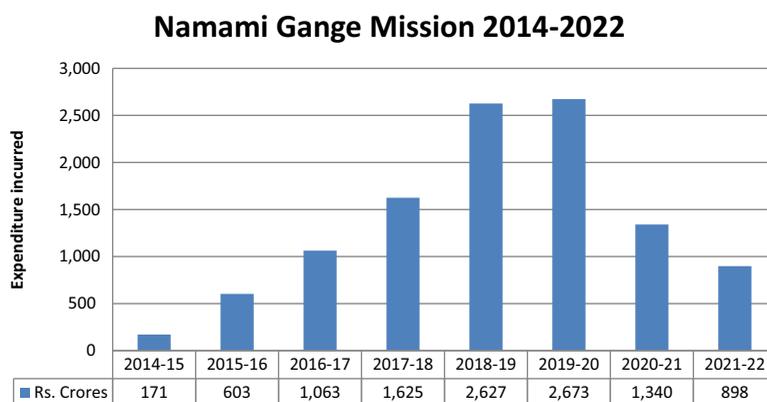


Figure 4.
Expenditure incurred
under Namami
Gange Mission as of
December 2021

Source: Economic Survey 2021–2022

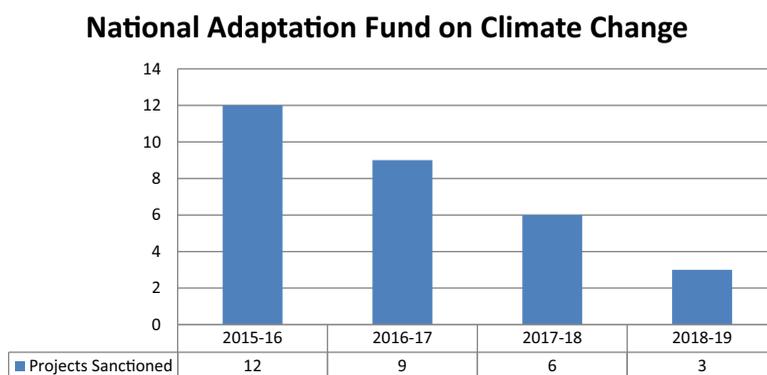


Figure 5.
NAFCC Projects
sanctioned from
2015–2019

Source: Economic Survey 2021–2022

from the Lok Sabha on the issue of climate change shows that the Himalayan glacier is one of the challenging issues which can affect water security and further ecological hazard (Table 1).

India's present climate goal vis-à-vis sustainable development goals

The 2030 Agenda for Sustainable Development Goals by World leaders in 2015 present the future for development by poverty eradication, environmental sustainability and achieving peace and prosperity. The Goal 13 of the SDGs: "take urgent action to combat climate change and its impact" addressed the issue of climate change. India's pre-2020 voluntary goal and NDC in the post-2020 reflects its achievement of SDGs. India has achieved 24% reduction in emission intensity of its GDP between 2005 and 2016 (PIB Delhi, 2022b). Prime Minister Modi (2018) says:

You know that India is one sixth of the global community. Our development needs are enormous. Our poverty or prosperity will have direct impact on the global poverty or prosperity. People in India have waited too long for access to modern amenities and means of development [...] We have launched the Make in India campaign for this. However, at the same time, we are insisting on Zero defect and zero effect manufacturing (PIB Delhi, 2018).

However, the irony is India slipped three spots from the rank 117 to rank 120 on the 17 Sustainable Development Goals adopted as part of 2030 agenda by the UN. The reason behind is major challenges including zero hunger, good health and well-being, gender equality and sustainable communities. The Union Cabinet chaired by the Prime Minister Narendra Modi, has approved India's updated NDC to be communicated to the UNFCCC. India's updated NDC captures this citizen centric approach to combat climate change. At COP26, India presented the following five nectar elements (*Panchamrit*) of India's climate action: such as to reach 500 GW Non-fossil energy by 2030, 50% of energy requirement from renewable energy resources, reduce total carbon emission by one billion tones, reduce carbon intensity of its economy by 45% and achieving net zero emission by 2070 (PIB Delhi, 2022a). As Prime Minister now proposed a "One-Word Movement," to the global community, such as LIFE or Lifestyle For Environment (PIB Delhi, 2022c). Thus, it is important for setting an example in the climate governance. The mitigation strategies have emphasized on clean and efficient energy systems; safe, smart and sustainable green mass urban transportation network; planned afforestation; and integrating green thinking across all production and consumption sectors.

Conclusion

A conclusion can be drawn from the facts that the Indian state, in its foreign policies tends to react to environmental challenges not only in terms of international pressure, but primarily in terms of its domestic preferences. India's foreign policy has been thoroughly tested, which dictates the cautious move in its strategy to advance its economic opportunities and political gains. This paper shows that climate diplomacy does not act separately in the foreign policymaking, but comes under the scrutiny of domestic factors. India has both domestic and international interests and tangible gains by making certain pledges to cut carbon emission. As demonstrated in the analysis, India has the domestic needs and long term benefit combating climate change, which gives the responsibility primarily to domestic audience and to international societies. This also motivates various actors at the domestic level to further benefit from seeking common grounds between stakeholders for energy innovations under this framework, at the same time continuing cooperation among such as BASIC countries for political and economic cooperation. India must desire to achieve its

Year	Events	International issue	Domestic preferences	India events
1990	IPCC First Assessment Report, INC	Increasing atmospheric concentrations of the GHGs, Global Warming	Poverty—Energy Demand, unemployment	India host Conference of selective developing countries on Global Environmental Issue
1991	IPCC Negotiation	National net GHGs emissions	Economic crisis	BOP crisis; Economic Liberalization
1992	UNFCCC signed at Rio	anthropogenic interference with Earth's climate system	CBDR	India signed UNFCCC
1993				India ratifies UNFCCC
2002	COP prioritizes climate adaptation			India ratifies KP; India host COP 8 in Delhi
2003				India established National CDM authority
2007	G8 + 5 Summit at Heiligendamm;	Bali Action Plan adopted	COP 13	PMCC was established; PM pledge at Germany
2008	COP 14		Need for cleaning Ganga; Ganga as home for 600 millions	National Action Plan on Climate Change
2009	COP 15 Copenhagen Accord	BASIC group formation	Formation of union ministry to report the Parliament	India signs MEF declaration, voluntary reduction of 20-25% by 2020
2010	Cancun Agreement COP 16		Clean Energy Cess	Planning Commission established
2015	Paris Agreement COP 21	Vacuum for Climate Governance	NAPCC with 8 missions, Himalayan studies, Ganga projects etc	Group on low carbon economy
2016	Paris Agreement came into force			India expand Solar Power goal; further reduction of 33–35 by 2030; ISA
2017	US Withdrawal for Paris		GST and abolition of Clean Energy Cess/ Compensation Cess on Coal production introduced	India ratifies Paris Agreement
2021	Glasgow Climate Pact COP 26			India support Paris Agreement

Source: Author compilation

Table 1.
India's climate
negotiation and
domestic preferences

goals in a domestic way such as no poverty, zero hunger, good health, quality education, gender equality, clean water and sanitization, clean energy, which has its major impacts and advantages in combating climate change.

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About the authors

Juan Zhang is an Assistant Professor at the College of Philosophy, Law and Political Science, Shanghai Normal University of China (SHNU). Her research interests include theories of Economics, China's labor market policy, Microeconomic econometric methods, etc. and has published a number of peer-reviewed journal papers regarding these topics.

Xiaolong Zou is an Associate Professor at the School of International and Public Affairs, Jilin University in China. He has obtained PhD in Asia Pacific Studies from Ritsumeikan Asia Pacific University in Japan. His research interests include urban and sustainability policy, global climate governance, etc. He has published several peer-reviewed journal papers regarding urban policy, regional sustainable development policy and climate change politics. Xiaolong Zou is the corresponding author and can be contacted at: zou_xl@jlu.edu.cn

Anmol Mukhia is an Assistant Professor at the Rashtriya Raksha University, Gujarat, India. His research interests include climate politics and policy and international relations between India and China. He has published several peer-reviewed works regarding geopolitics and energy diplomacy.

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