Mapping ‘consistency’ in India’s climate change position: Dynamics and dilemmas of science diplomacy

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Received: 16 June 2014/Revised: 24 October 2014/Accepted: 12 December 2014/Published online: 8 January 2015

Abstract India’s position on climate change negotiations is likely to have far reaching implications for the success of global climate cooperation. Since the beginning of negotiations, the principle of equity and common but differentiated responsibilities (CBDR) remained the centerpiece of India’s stand. The stand started to evolve at the 15th Conference of Parties to the United Nations Framework Convention on Climate Change at Copenhagen in 2009, when India accepted voluntary commitments to reduce emission intensity. Though India still swears by CBDR, status of the principle in the negotiations has become doubtful after the Durban Climate Conference in 2011 committed all parties to take emission targets. This paper traces major transition points in India’s negotiating position over the years and provides a descriptive context of its climate-related concerns. It analyzes the interview responses of 15 top scientists, experts, and negotiators to build upon core areas of climate change issues in India, its future role, and position in negotiations. Interviewees, in general, were in favor of protecting the carbon space for the poor who had very low emissions.

Keywords Global climate negotiations · Science diplomacy · India · Commitments · Policy

INTRODUCTION

At the beginning of climate negotiations in 1991, India positioned itself as a defender of the global South and as a producer of ideas and international norms and rules on climate change. It projected itself as a coalition builder and an aggressive protector of its own interests during negotiations that reflected a deep North–South divide as well as major differences within both these groups (Sengupta

2012). The Convention that finally emerged calls for equity and makes a clear differentiation between the responsibilities of the developed and developing countries, known as the common but differentiated responsibilities (CBDR) and respective capabilities. It notes that the “largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs” (UNFCCC 1992). This remained India’s primary position until COP-15 in Copenhagen in 2009 when *de facto* dilution of the principle began: India and three other members of the BASIC group—China, Brazil, and South Africa—took voluntary commitments to reduce their emission intensity. India pledged a 20–25 % cut in emission intensity of its gross domestic product (GDP) by 2020 compared to 2005 levels (India 2010b). Two years later at COP-17 in Durban, India signed on an agreement that commits all parties to take binding emission targets. However, India announced at the subsequent two COPs in Doha and Warsaw that its actions will be guided by the principles of equity and CBDR.

The question is: how do we account for quick changes in position? India’s political and ethical location in climate change has been dictated to a large extent by the Ministry of Environment and Forests (MoEF), Ministry of External Affairs (MEA), and the scientific community. As far as the scientific evidence on climate change is concerned, it is the Intergovernmental Panel on Climate Change (IPCC) that largely dictates and drives the major agenda for climate change debate (Chaturvedi and Doyle 2010). As the IPCC is being led by an Indian, R. K. Pachauri, India’s position on climate change becomes more curious. For instance, the report of the Working Group II of the IPCC’s Fourth

Assessment Report warned in 2007 that Himalayan glaciers would disappear by 2035 (Parry 2007). The claim was attributed to Indian glaciologist Syed Hasnain and was challenged by another Indian glaciologist Vijay Kumar Raina in a report published by the Ministry of Environment and Forests (Raina 2009). The IPCC later admitted its mistake (Black 2010; Lynas 2011).

In order to account for inconsistencies, it is possible to look for several explanations: be it the scientific evidence, civil society organisations, role of personalities, and international pressures either of coalition building or adjusting to the US interests. Personalities played little role until the appointment of Jairam Ramesh as Minister of State (independent charge) for Environment and Forests in May 2009, just in time for the Copenhagen Summit (COP-15). But it is not the public opinion or political leadership that matters as it is not a common mass issue. The discourse is elite—scientific and diplomatic. It is a ‘science diplomacy’ issue. There is a growing consensus among scientists that climate change will impact India in different ways, but there is an uncertainty on the extent and pace of it as the models and predictions need to become more credible and reliable. Therefore, this paper turns to the ‘scientific community’ as the role of science remains central and paramount. But at the UNFCCC, diplomats want consensus either through dialogue or coalition power which may turn the whole debate into individual political interests. Both diplomats and scientists have their own roles to play and cannot do without each other. India has argued in international fora that responses to and action on climate change must be based on science and not treated as a “post-modernist religion” (Doyle and Chaturvedi 2010). This paper is intended toward examining such science–diplomacy interface representing the roles of both—diplomats and scientists—in framing the climate change debate.

The first section of the paper outlines the context and background of India’s climate change position. The second section presents reasons for the change in India’s position along with a descriptive context of climate-related political concerns in India and the relevant history of the global climate negotiations. The sources of supporting arguments come from Earth Negotiations Bulletin, Indian parliamentary debates, country reports, UNFCCC documents, and published research papers. The third section presents the future scenario with the help of scientific perception of 15 top scientists, policymakers, IPCC lead authors, experts, and climate negotiators through semi-structured interviews with open-ended questions providing lengthy discussions. The interviews were conducted between June 2013 and August 2014 with participants at major international and national conferences on environmental issues. The interviewees, who represented India’s top institutions and laboratories engaged in leading edge

climate change research and modeling, were asked questions aimed at finding out their major concerns and policy suggestions in their area of expertise and the role of India, especially in taking commitments. They were geologists, physicists, climatologists, biologists, and economists from the Indian Institute of Science (IISc), the Indian Institute of Tropical Meteorology (IITM), the Indian Institutes of Technology (IITs), the Defence Research and Development Organisation (DRDO), the Physical Research Laboratory (PRL), and India Meteorological Department (IMD), and universities. Their responses were coded into frames suggested by Hulme (2009). Frames organize central ideas with core values and assumptions and pare down complex issues by giving some aspects greater emphasis (Nisbet and Mooney 2007).

The coding of interview responses was done on the basis of direct answers. For example, every interviewee was asked two main questions—(i) should India take binding commitments and (ii) why? The attribution of frames was not mutually exclusive as interviewees generally subscribed to more than one frame. For example, those recommending India to accept binding commitments also subscribed to the development and global injustice frame, and the reason for their view was not necessarily due to planetary tipping point.

MAPPING CONSISTENCY

Right at the beginning of the negotiations in 1991, India presented a non-paper (India 1991) in the Intergovernmental Negotiating Committee (INC) based on the equity principle that every human being has an equal right to the atmospheric resource. It called upon the affluent developed countries to cut down their emissions as well to bear the incremental costs of mitigation and adaptation actions implemented by the developing countries. The proposals received wide support from developing countries. India was able to make significant progress in the negotiations through the Group of 77 (G-77) and China, to protect the former’s overriding developmental priorities (Dasgupta 2011a). India’s principal objective in the entire post-UNFCCC negotiations on climate change—from Rio right up to Copenhagen—has been to defend the ‘differentiated’ architecture of the climate regime that it had worked to inscribe within international law, and to ensure that no fresh legal obligations were placed on it (Sengupta 2012, p. 107). However, India made adjustment to its initial position taking into account the concerns of other partners in the developed and developing countries in the spirit of ‘give and take.’ For instance, India and G-77 posed stiff opposition to emission trading and Clean Development Mechanism (CDM) at COP-3 in Kyoto but later gave up this position as a trade-off for dropping the

article on voluntary commitments by developing countries (ENB 1997).

Building of coalition

At the first Conference of Parties (COP) in Berlin, Germany, India took the lead within the G-77 by preparing the first draft decision on adequacy of commitments (ENB 1995). It stressed the need for a protocol that imposes commitments only on developed countries listed in the Annex 1 of the UNFCCC. The Organization of the Petroleum Exporting Countries (OPEC) took a different position from the G-77 due to the fear of harm to their economy as a result of climate action. G-77 appeared deadlocked, and India, on behalf of 72 developing states (excluding OPEC)—also referred to as the Green Group—tabled its proposed elements of a mandate for consultations on commitments. The draft decision, which became known as the Green Paper, was a collective effort of developing countries and environmental NGOs. It proposed a 20 per cent reduction in carbon dioxide (CO₂) emissions of the industrialized countries by the year 2005 (ENB 1995). The result of COP-1 was the Berlin Mandate, which was the beginning of the Kyoto process (Oberthür and Ott 1999). The Kyoto Protocol negotiated at the third COP at Kyoto, Japan, in 1997, gave a concrete shape to the legally binding commitments of 37 developed countries to reduce their GHG emissions by 5.2 % from their 1990 levels (Kyoto Protocol 1997).

The run-up to voluntary commitments

Efforts to change the basic architecture of UNFCCC started at COP-1 in 1995 when Germany proposed that ‘more advanced’ of the developing countries also accept mitigation commitments (ENB 1995). Another effort was made to introduce an article on voluntary commitments at COP-3, which was opposed by India saying that it would create a new category of parties not established in the Convention. The article was finally dropped (ENB 1997).

Just before the signing of the Kyoto Protocol, the US Congress unanimously passed the Byrd–Hagel Resolution that forbids the US from taking any emission commitments or becoming party to any protocol which would “result in serious harm to the economy of the United States” (US Congress 1997). The refusal of the US to accept mandatory caps on greenhouse gas (GHG) emissions until emerging emitters such as India and China do so (Joshi 2013) laid grounds for the Copenhagen Accord in 2009 which was a weak agreement rejected by many countries on charges of being non-transparent (ENB 2009). In March 2001, the US formally pulled out of the Kyoto Protocol after the failed

COP-6 in The Hague calling it “fatally flawed,” as it would damage its economy, and exempted developing countries from fully participating (ENB 2001).

Under pressure to accept commitments, India proposed nationally appropriate mitigation actions by developing countries in the context of sustainable development, supported by technology and enabled by finance and capacity building in a measurable, reportable, and verifiable manner at COP-13 in Bali (ENB 2007). The first indication of a major change in India’s position came when in the run-up to COP-15 in Copenhagen, the then minister for environment and forests, Jairam Ramesh, suggested to the then Prime Minister, Manmohan Singh, that India should delink itself from G-77 and take emission cuts commitments “under a new deal without any counter-guarantee of finance and technology (Sethi 2009; Rastogi 2011).” The reason cited for such an action was that “It [the current stance] takes away from India’s aspirations for permanent membership of the [United Nations] Security Council.”

The change in position raised several hackles in India. Parliamentarians were the first to demand a special debate in the Lok Sabha (lower House), where the minister sought to convey the impression that he was not doing it on his own but had the backing of the Prime Minister (Ramesh 2009). He, however, toned down his stand and announced that while he will be flexible, there will be three non-negotiables: India will not accept a legally binding emission cut, a peaking year, and international review of mitigation actions that are not supported by international finance and technology. He announced that India was ready to cut its emission intensity by 25 % from its 2005 levels by 2020.

There was a virtual revolt from India’s top negotiators. Chandrashekhar Dasgupta and Prodipto Ghosh, the two veteran negotiators on the Indian team, refused to board the plane to Copenhagen. They agreed to join the team only after assurances by Ramesh after an intervention by the prime minister. Dasgupta told *The Times of India* (2009): “we have been offering unilateral concessions, without obtaining any reciprocity.” Industry’s apex body, the Federation of Indian Chambers of Commerce and Industry (FICCI), which normally does not take a public stance against the regime of the day, wrote an anguished letter to the prime minister about the country’s changed position. Delegation leader Shyam Saran, a veteran Foreign Service officer and former Foreign Secretary, who was also Prime Minister’s Special Envoy on Climate Change, returned from Copenhagen before the arrival of Ramesh. There was a feeling running across the delegation that India had played its hand too early and there was “nothing left to negotiate” (Hindustan Times 2009).

The Copenhagen accord, which commits Parties to meet the scientific objective of limiting global warming to 2 °C,

was not adopted by COP-15 but was only taken note of (ENB 2009), since it was negotiated only by a select group of world leaders (Walsh 2009). It was a deal “thrashed out in a single day between five major powers and then presented as a *fait accompli* to the rest of the world” (Grubb 2010). India and China accepted voluntary commitments to reduce their emission intensity by 25 and 45 %, respectively. However, the ultimate analysis at the altar of science shows that the national pledges were too paltry to limit the global warming to 2 °C but may lock in the world into exceeding 3 °C warming (Rogelj et al. 2010).

From Copenhagen to Durban

At the next COP in Cancun, Ramesh laid the foundation for the Durban agreement. Deviating from his prepared speech, he suggested that all countries must take binding commitments under appropriate legal forms (Dasgupta 2011b). At the Mexico City pre-COP ministerial, the minister circulated a ten-point paper on International Consultation and Analysis (ICA) to facilitate “transparency and accountability” for the actions of all countries, including developing countries (India 2010a). The paper proposed that the frequency of reporting by Parties should depend on their gross emissions. This would have the effect of creating a new category of ‘major emitters’ in the climate regime and would have effectively undermined the per capita principle, had the proposal not been rejected by other developing countries (Dasgupta 2011b). The minister also dropped India’s demand for equal per capita access to the global atmospheric resource and replaced it with ‘equitable access to sustainable development’ which was incorporated in the Cancun Agreements (UNFCCC 2011, Para 6). At the Durban conference in 2011, India’s new environment minister Jayanthi Natarajan strongly defended equity and CBDR as the centerpiece of the climate discussion but finally signed on an agreement that makes no mention of the two principles (Sethi 2011). At the same conference, Canada, an Annex 1 country, pulled out of the Kyoto Protocol (Gillies 2011).

STRATEGIC AND DIPLOMATIC CONSTRAINTS

The question is this: what did India get in return for giving up its long-standing position? First of all, India received wide international acclaim for its actions. Atteridge et al. (2012) summed up the situation thus: “Ambitions for raising India’s global status as well as concerns about regional security and national economic interests incentivize the country’s political leaders to seek broader geopolitical alignment in particular with the United States and China.” Proclaiming India as an emerging power in

international climate negotiations, Michaelowa and Michaelowa (2012) saw a strategic reorientation toward more frequent use of integrative elements, greater flexibility, and dynamics. Domestically, it was seen as the result of India’s quest for a permanent seat on the United Nations Security Council (UNSC). By disengaging from the G-77 and aligning its environment position with that of the United States, India fulfilled almost all the conditions listed by the Council on Foreign Relations special report: *UN Security Council Enlargement and US Interests* (McDonald and Patrick 2010). The report urged the US President to make the UNSC expansion contingent on the position of the aspirants on issues ranging from non-proliferation to climate change. It lists leadership of Non-Aligned Movement (NAM) and G-77 and problematic nuclear policy as India’s weaknesses as an aspirant for permanent UNSC seat. On the non-proliferation front, India signed a deal with the US in 2008 to separate its civil and military nuclear facilities and throw open its civilian facilities to international inspections by the International Atomic Energy Association (IAEA) (Bajoria and Pan 2010).

FUTURE PROJECTIONS, PERCEPTIONS, AND IMPLICATIONS

What are India’s options? What are the implications of taking binding commitments? If India takes binding emission reduction commitments, will it then be able to fulfil them? We asked these questions to 15 top scientists, experts, and negotiators. When seen in the backdrop of India’s dominant climate change discourse, the results were surprising. Dubash (2009) identified three groups leading the debate—growth-first stonewallers, progressive realists, and progressive internationalists. Going by the kind of international exposure they have one would expect them to be internationalist. However, their responses show them to be realists. Isaksen and Stokke (2014) show Indian climate discourse shifting from Third World to Win–Win. Scientists were also found to be in this category.

Scientists’ view

Scientists treat climate change as a physical phenomenon that can be observed, quantified, and measured. The solutions they prescribe are straight forward—reduce GHG emissions and remove them from the atmosphere by protecting sinks. But how to achieve this and who should bear the burden depends on their worldviews, beliefs, values, and attitudes which they organize into frames. Hulme (2009) suggested six frames for climate change—market failure, technological hazard, global injustice, overconsumption, mostly natural, and planetary tipping point. We have added

development to the list because climate change is considered a development issue in India. ‘Market failure’ refers to the negative externality when firms or individuals neglect the potential harmful effect of their actions on others. ‘Technological hazard’ is considered as a risk from consequences of new technology. Climate change as ‘global injustice’ is seen as a direct result of the economic domination by Northern interests and transnational corporations. The ‘overconsumption’ of the few is at odds with the finite resource base and the fragile ecology on which we depend for survival. The ‘mostly natural’ frame is attributed to climate deniers who argue that global warming cannot be attributed to human activity. ‘Planetary tipping point’ is the most alarmist of frames and its proponents are ready with ‘Plan B’ through geoengineering.

None of the respondents subscribed to the ‘Mostly Natural’ frame. All of them said there was so much uncertainty in the models and future projections that it was hardly possible to select the sectors which should be the first to receive attention for action. Nine of the interviewees said that development was a major issue, and eight subscribed to global injustice frame as people likely to bear the brunt of climate change did not contribute to the problem.

Three said conditional ‘yes’ to binding commitments, i.e., only if everyone is a party. One scientist suggested that even if India takes no commitment, it should reduce its dependence on fossil fuels in the interest of its own energy security: “India imports 80 % of its petroleum needs, which is unsustainable. It should switch to renewable energy as quickly as possible. There is nothing wrong with emission cuts if other parties take similar commitments.” One scientist from the IIT said that the emissions of the rich are very high and those of the poor are very low. “We have to frame domestic policies so that the poor do not become even poorer in the event of India taking commitments. For this, we have to release some carbon space from the rich and give it to the poor.” Another scientist who wanted India to take commitment suggested unilateral action and using green technology. All the three ‘yes’ candidates believe that there is nothing to fear from commitments. The future binding commitments may be in the form of emission intensity like the ones India has already agreed to on a voluntary basis. Or India may push for a cap at a higher level, which means it can increase its emissions just like Australia was allowed in the initial Kyoto commitment. All three do not believe the planet has reached the tipping point yet, but two of them suggest resorting to geoengineering if it comes to that. All three believe green technology is the solution. Interestingly, this group believes climate change is also an issue of development and global injustice.

Six of the respondents were not in favor of India taking binding commitments. One diplomat and negotiator said

that “India was under immense pressure at the Copenhagen Summit to accept commitments so we settled for voluntary commitments, but it is not in India’s interest to take binding commitments without getting something in return.” One scientist and policy analyst was not in favor of India taking commitments when the global North is “reneging on every promise it had made during the Kyoto process.” Rejecting any idea of taking binding commitments, a geneticist noted that Indian negotiators need to realize that India’s interests lie with the interests of Indian people and the people of the region: “India was unsuccessful in raising critical issues like agriculture, biodiversity and water which are very important for India, whereas the impact of rising temperatures on the agriculture of the colder countries will be good. So, the North has no interest in negotiating on agriculture.” An agricultural scientist was in favor of holding on to equity and CBDR which was important for bringing quality life to the common man. A scientist from the IIT said that India cannot afford to be caught with a legally binding commitment and not fulfilling it: “We will face climate change if everyone continues to emit. India’s developmental needs and economic uplift of the poor was the priority for all scientists. Any commitments could create socio-economic problems in the country.” A top meteorologist contended that better climate monitoring and climate predictions are more important for predominantly agricultural country like India than taking binding commitments.

Six did not explicitly come forward with an opinion on whether India should take binding commitments or not, but offered an insight into their thinking through the frames they hold to look at the problem. They were very clear about what needs to be done as a matter of national policy. They want promotion of green technology and businesses to take some burden off the poor of the country.

Politics of business

If one wants to guess what will be India’s position at the Paris Conference in 2015 when every party to the UNFCCC is supposed to take binding commitments, one need not look beyond India’s new Prime Minister Narendra Modi. He earned the sobriquet of climate sceptic (Goldenberg 2014) when he told Indian school children in a nationwide televised interaction with them on the occasion of Teachers’ Day on September 5 that “climate has not changed, we have changed.” Then he snubbed the United Nations Climate Summit 2014 by preferring to avoid it and instead sending his environment minister Prakash Javadekar who criticized the meeting as an attempt to hold a parallel meeting bypassing the climate convention process (Chauhan 2014). Javadekar told the summit that India’s energy consumption will need to increase four times to

raise its Human Development Index to the level of the developed countries (Javadekar 2014).

Indian businesses and industry want the best of the both worlds. They are interested in Clean Development Mechanism (CDM) but are against taking any binding emission reduction commitments. The Federation of Indian Chambers of Commerce and Industry (FICCI) has warned that there would be a sharp drop in the output of energy-intensive sectors leading to overall fall in GDP growth and the energy-intensive sectors may become less competitive globally (FICCI 2007). The business lobby, like anywhere else in the world, is very strong in India. Fingers were pointed at this lobby when the proactive environment minister Jairam Ramesh was removed from the ministry before the Durban Climate Conference in 2011 as he had annoyed big business interests by also holding up environment clearance for many big projects (The Economic Times 2011; The Guardian 2011).

A study on the carbon mitigation potential of steel industry has shown that India is likely to fulfil the voluntary commitment of reducing the emission intensity of its GDP, but absolute emission will go up in all possible scenarios (Pal et al. 2014). It is possible that India may agree for decreasing emission intensity. Or it may ask for initially increasing its emissions till an emission peaking year, which it has not announced yet. It is also possible that India may block an agreement if other countries do not come forward with proposals acceptable to it. India has already shown that it is not afraid of international opinion by blocking the Trade Facilitation Agreement (TFA) in the World Trade Organization (Bellman and Kenny 2014).

The business lobby as well as Indian policy makers are going to face a moral pressure to rethink their climate strategy after the US-China bilateral climate agreement (Taylor and Branigan 2014), which removes a major hurdle to the global agreement at Paris in 2015. The US has shown its readiness to be part of the global agreement, but it will also depend on other countries, especially India, taking commitments. China has announced 2030 as its peaking year, but studies in India indicate that India's emissions are likely to continue to rise at least up to 2032 (Climate Modelling Forum, India 2009).

CONCLUSION

India had set for itself a principle-based red line of equity and CBDR that it considered inviolable. It stayed with this position till the 2010 Cancun conference, when the distinction between the developed and developing countries was blurred. In fact, India started to change its long-held position from 2009 when it agreed to take voluntary commitments at Copenhagen. At Cancun, the then

environment minister Jairam Ramesh suggested that every country should take binding commitments and throw open their national actions to international consultation and analysis. At Durban in 2011, India signed a European proposal for negotiating a new agreement or legal instrument which made no mention of either the equity principle or the CBDR. This major change in position was due to strategic and diplomatic constraints at that time and India's own ambition for a permanent seat in the UN Security Council. Despite the Durban agreement, India made it clear at Warsaw COP in 2013 that equity is an absolute and inalienable right. Although the scientific view is mixed on several issues, it is clear that India is unlikely to take binding commitments in 2015 until all countries commit to do so. Such commitments might put the most vulnerable people more susceptible to the changing climate policies which can increase the gap between the rich and the poor in India. An analysis of the present situation suggests that even if India is forced to accept emission caps, it may ask for setting higher levels just as Australia, Iceland, and Norway were allowed to increase their emissions under the Kyoto Protocol.

India's position on climate change negotiations will have far reaching implications for the success of global climate cooperation. For an India with commitments, domestic policy may have to be changed to bring more intragenerational equity. Scientists also suggest that bringing in new green technologies and renewable energy is a promising way forward.

Acknowledgments The authors thank Raj Kumar Gupta, Sanjay Chaturvedi, and Pushpinder Syal for diligently going through the manuscript and suggesting appropriate changes. Interviewees deserve our special gratitude for sparing their time for comments, suggestions, and outlook. The authors are indebted to the University Grants Commission, New Delhi, for funding this research.

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