

Subnational Diplomacy in Climate Action Plans of Border States in India

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Abstract

Subnational action on climate change in India is driven by the State Action Plans on Climate Change (SAPCC). The idea behind the SAPCCs was to decentralize action beyond the National Action Plan on Climate Change (NAPCC) especially with regards to the State and Union List. In India, like most other nations, diplomacy and international negotiations remain exclusively in the realm of the central government. But effective response to climate change would require Indian states to engage in bilateral negotiations at least with countries of the same physiography. This should help in exchange and development of technology and creating databases on risk assessment as climate change goes beyond spatial borders and is a shared security issue. The rationale behind the SAPCCs also opens up furthering of the scope of sub-national diplomacy. This article examines the SAPCCs of the Border States and their missions on strategic knowledge of climate change as an example in order to suggest the need for greater subnational action in the form of climate change diplomacy. Relying mostly on document analysis this paper explores whether engagement in subnational diplomacy would maintain the constitutional spirit while pushing the limits of subnational action for climate change in India. It aims to explore climate policy in India's federal system to understand the extended role the subnational Indian states therein can play.

KEYWORDS

Climate change, subnational diplomacy, federalism, SAPCC, Border States, strategic knowledge mission

INTRODUCTION

The goal of this paper is to examine the health of India's federalism by shedding light on subnational diplomacy by Border States and contribute

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in the understanding of multi-level climate governance. Climate change is a human issue that is driven by human activities and affects human societies by environmental change (Huxtable and Thi Yen, 2009). Considering the seriousness of the issue and international pressure, India slowly started to formulate plans regarding climate change. The Government of India in 2008, launched a National Action Plan on Climate Change (NAPCC) containing missions that ranged from solar energy adoption to strategic knowledge building. It intended to address the issue by engaging with development as a “co-benefit” and counter to climate change (GoI, 2008). The “national missions” would look into climate mitigation and adaptation.

Subnational level state initiatives have been recognized as an important driving force behind climate policies (Jørgensen, 2011). It is a global commons problem and local and regional governments have become key actors in tackling this issue across the world. India too devolved the NAPCC into State Action Plans on Climate Change (SAPCCs). These local level plans were designed in order to create a directional shift, a transformative change (Dubash and Jogesh, 2014). These plans took up state subjects such as agriculture and water from the missions of the NAPCC. The rationale of decentralization in the SAPCC also points out to a more robust form of Union and State interaction in the form of cooperative federalism. It involves a better and more cooperative sharing of powers and responsibilities at all three levels (national, subnational, local). An act of participative policymaking it helps for improvements in terms of cost-effectiveness and feasibility.

There have always remained an absence of domestic debate regarding climate change, the reason being different strengths and priorities of the State Governments. The functioning of the relations between the Indian Central Government and its subnational units (States and local governments) is “*in essence, a work in progress.*” (Nanda, 2015, p.4) The Union Government in India does not allow for much freedom on matters involving international treaties to its states. However when it comes to issues that are of high risk and probability such as climate change, there needs to be a rethinking. A more pragmatic approach to an issue like this needs to think beyond spatial borders. The whole South Asian region is at equal risk to climate change and it must be considered as a regional issue rather than a domestic one. Such areas of concern especially are the 9 states bordering neighboring nations i.e. Pakistan and Bangladesh. Pakistan shares borders with Kashmir, Punjab, Gujarat and Rajasthan. While Bangladesh share borders with five Indian states – West Bengal, Assam, Tripura, Mizoram and Meghalaya. The states in this region share

a similar physiography, all of them would face joint problems due to global warming. Additionally, the Border-States in India are responsible for facilitating India's engagement with its neighborhood. They also strive for greater autonomy when it comes to trade and commercial ties with neighboring countries.

In China, local provinces do not need approval from Beijing for small scale projects beyond its borders. A province can engage with neighboring countries based on its strategic location giving it partial autonomy. Moreover, it has already been noticed that in economic issues regions closer to border are more inclined

to engage in trade and improving people-to-people contact (Maini, 2014). Barmer in Rajasthan and Kutch in Gujarat are similar examples. Additionally, India has no constitutional mechanisms, unlike Switzerland and Germany, where states are consulted on foreign policy issues including climate change.

The border-states share the risk with the neighboring countries and can come to common terms regarding creation of strategic knowledge on climate change. These states share the risk due to climate vulnerabilities and can form links in order to improve their resilience in the worst case scenarios. Border- states can conduct strategic bilateral relationships while ensuring that they stay hand-in-hand with the Union government yet also help in following through the recent Paris global climate agreement.

This paper first explores the structure of Indian federalism and explores it with regards to subnational diplomacy by states. Secondly, examples of subnational diplomacy by other nations is used to highlight action against climate change. While throwing light on the need for SAPCCs, action plans of the Border States with regards to strategic knowledge are examined. We try explore the cross-border cooperation in terms of climate change. Finally, based on the States behavior of moving beyond the borders the paper concludes by engaging the question of whether India can take the risk of allowing such freedom to its states. This question should help in assessing the health of India's recent federalism (Amitabh Matoo and Happymon Jacob, 2009). This paper recommends that increased knowledge connectivity among Border States and their regional nations regarding climate change could usher an improved version of cooperative federalism in India. The research relies for the most part on qualitative methodology rather than quantitative as the knowledge of federalism and its components involve ideas and texts. It is difficult to invent quantitative paradigms to measure subnational diplomacy across Border States. This

is also difficult to measure because data sets on these activities are mostly unavailable.

THE INDIAN STATE AND SUBNATIONAL ACTION

The institutional framework of foreign policy and interaction between the Union Government and States in India is contained in the Constitution of India. The constituent assembly led by Dr. B. R. Ambedkar drafted the constitution in a period of 2 years. It is one of the largest written constitution with 25 parts, 448 articles and 12 Schedules with about 100 amendments. The Indian constitution defines itself as a “Union of States” rather than a federation even though it is federal in nature. This is an implication that Centre would be playing the dominant role and the states would be the constituent units. Some call it “quasi-federal in nature” (Lijphart 1996, p. 259). Unlike a regular federal government, India is called quasi-federal for the sole reason that it does not give complete autonomy to its constituent units. The constitution separated the governments at the Union and State level with separate legislative, executive, and judicial components for governance. The constitution further defines the jurisdictions, powers and functions of the both the Union and State governments. The constitution in its arrangements creates three Lists that spelt out in detail the legislative, administrative, and financial relations between the Union and the States. This demarcations are enumerated in the Seventh Schedule of the constitution. It clearly delineates a Union List (97 items), a State List (66 items) and a Concurrent List (47 items) where both the State and Union have jurisdiction. The Union Government is however prevailing in case of any conflict in the Concurrent List. Further the Union Government has the power to draw state boundaries, create new ones even dismiss an elected State government rule. The Union has greater powers and responsibilities and is responsible for development of all sections and communities.

Entries 10 to 21 in the Union List deal with diplomacy. It clearly defines that there “cannot be multiple sovereignties or multiple identities in external affairs” (Gupta, 2013). It removes any ambiguity about external relations of India. In order to maintain wholesomeness of the foreign policy as well as the sovereignty of the Nation the function has been rested in the Union Government’s hands. The Indian Constitution in the Seventh Schedule defines foreign policy as “all matters which bring the union into relation with any foreign country” in the Union List. The Union government at the Centre is the trusted avenue for all external entities to enter negotiations in India (Hazarika, 2014).

However this idea has been undergoing a change in the last decade due to the rise of coalition politics, liberalization of the Indian economy in the form of globalization and increasing political weight of the State leaders. There is increased State led diplomacy across the world. It can be seen that “the exclusive grip of the Centre in this area is slowly being weakened by the activities of the units/members in federal unions” (Hazarika, 2014, p.34).

Additionally, states with an international border and economic agendas are present at the forefront of such foreign policy pursuits. Border States usually have historical, cultural, linguistic, religious, and ethnic

links with the bordering nation. A few examples of states exerting their presence over foreign policy can be seen when the Union Government was forced to seek a vote of confidence on Indo-US civil nuclear deal (Hazarika, 2014). Similarly in the case of FDI in retail it had to agree for a debate. The Ganga waters treaty with Bangladesh was also a sign of state governments exerting pressure on the Union Government. Besides the economic ventures States take, there are also instances of high State level political visits to strengthen socio-cultural contacts (Hazarika, 2014). States have engaged in economic diplomacy with foreign audiences. The Ex-Chief Minister of Gujarat Narendra Modi and Chief Minister of Andhra Pradesh Chandra Babu Naidu are known for such engagements (Hazarika, 2014).

But some authors contend that the opposite is happening and instead of states acquiring a bigger role in foreign relations the Centre still exercises a degree of “discretionary control by influencing the external agencies.” (Hazarika, 2014, p. 40). It holds the role as regulator of economic and other activities. But without a clear legislation or Act it is difficult to jump to conclusions. As Obja Borah Hazarika (2014), puts it is “nearly impossible to classify a nation as federal or not, instead pushing analysis to take cognizance of the fact that federalism and sovereignty are best understood in a continuum, making government classification and typologies essentially redundant for epistemological enquiries” (Hazarika, 2014, p. 41).

However it has been the case that the centralized foreign policy resists interventions by subnational elements as India is essentially a unitary system with federal features. Earlier when there was one party dominance the union government did not take into consideration the interests and sensitivities of Indian states when pursuing foreign policy. All major international treaties that India has signed after independence have never

been discussed in parliament in advance neither the state governments informed about them (Nanda, 2015). The treaties are further modified at will by the Union government as there is no need of approval or ratification, to begin with, from the parliament (Nanda, 2015). This has led to a curious case of only particular regions being dominant in the foreign policy discourse. Regional leaders have asserted their disagreement on foreign policy issues with the Union Government but they have not used or developed intuitional mechanisms to address these grievances. As Professor M.P. Singh puts it, instead of federalization there has been regionalization in India which has strained the democratic institutions of this country (Nanda, 2015). This has further resulted in policy paralysis.

Issues that a nation faces have clear demarcations between high and low politics. The high core politics are matters that are important for the survival of whole state like national security, foreign affairs and military. These questions are engaged on the national and international level. In India these are led by the Union Government. The low politics are those that are practiced by the regional authorities like education and health care. With trans-border issues such as climate change and increased globalization, the boundaries between high and low politics have been blurred. This allows subnational entities to project their “legitimate domestic activities in international affairs” (Kuznetsov, 2015, p.61). This subnational state engagement is an extension of domestic politics but outside the regional and national borders. Most scholars and researchers agree that subnational action in international relations is a positive event in federal countries. The reason being, it promotes democratization and rationalization of foreign policy decision making (Kuznetsov, 2015).

SUBNATIONAL DIPLOMACY AROUND THE WORLD:

Subnational governments lack legal personality in international law, but the scholarship around subnational diplomacy is shifting. Subnational state diplomacy or paradiplomacy is categorized into three types- global paradiplomacy, trans-border regional paradiplomacy, and trans-regional paradiplomacy. In this paper the focus is on trans-border regional paradiplomacy, the interaction between national and sub-national governments based on geographic proximity and shared interests (Eatmon, 2009).

Similar to India, the US government retains exclusive power to engage in international relations with foreign governments. Because nations are expected to present a unified national position. However, US states are challenging this constitutional situation. The United States and Canada

have displayed trans- border regional subnational diplomacy. Climate Change Action Plan was signed between six American States (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) states and five Canadian provinces (New Brunswick, Nova Scotia, Newfoundland and Labrador, Prince Edward Island, Quebec). This signatory took place while their respective federal governments were still debating on the Kyoto Protocol (Eatmon, 2009). Additionally, Western states have developed regional climate initiatives along US-Mexican borders too. In 2007, the Western Climate Initiative was adopted and signed by Arizona, California, New Mexico, Oregon, Washington, Utah and Montana further observers to the Initiative included Mexican states (Baja California, Chihuahua, Coahuila, Nuevo Leon, Sonora, Tamaulipas) (Eatmon, 2009). Even the Climate Registry established in May 2007, has 39 US states, six Mexican states, and nine Canadian provinces as its Board Directors. The aim of the Registry being to provide data support for regional agreements (Eatmon, 2009).

The US federal government did not sign the Kyoto protocol, but states used alternative policy vehicles to accomplish similar goals via subnational diplomacy (Eatmon, 2009). The subnational states in this regards have been able to contribute more in areas of climate change or nature conservation more than the central governments (Kuznetsov, 2015). Another important point to keep in mind is that US considers climate change as an issue of high politics, this makes the cross-border engagements for the state governments easier.

In Canada, there is an absence of institutionalized coordination mechanisms between states and the federal level. However, subnational entities can be consulted on an ad-hoc basis to assist before international discussions regarding climate change, but it is purely optional (Gayard, 2013). The Quebec regional province has gone beyond its borders to engage in international climate negotiations. Officially the UN negotiations do not allow non-sovereign states to participate in the Conference of the Parties (COP). But Quebec uses intra-channels by sending separate representatives with the official Canadian diplomatic delegation (Chaloux, Paquin and Séguin, 2015). It organizes parallel negotiations by way of bilateral and multi-lateral meetings to ensure non-sovereign states to engage in global climate change regulation. It has been considered as been redefining cross-border relations on climate issue by engaging with subnational states entities across the border (Chaloux, Paquin and Séguin, 2015).

In Belgium, by way of a constitutional framework the regions are intrinsically involved in preparation of its positions on climate change

on the international stage (Gayard, 2013). A creation of a system of coordination in order to ensure that subnational state entities and the central government cooperate and create a coherent Indian position to any climate change issue. The Belgium model should help in creating mechanisms that allow large involvement of states without weakening of the country's position on the international stage. In Belgium the governments agree for a cooperation agreements domestically in inter-ministerial conferences. These deal with different aspects of climate change and showcase the character of cooperative federalism.

Brazilian foreign ministry also engages in subnational diplomacy by way of having multiple offices in major cities across Brazil. This helps in communication by ambassador level officers and local leaders on issues of regional integration and trade. It helps connecting the state and municipal authorities as well as NGOs with the foreign ministry (Gateway House, 2014). Even though there is absence of legal competence for subnational diplomacy (Setzer, 2015). Four Brazilian states (Amazonas, Amapá, Mato Grosso, and Pará) established an MOU with two Indonesian provinces (Aceh and Papua) to focus on Reducing Emissions from Deforestation and Degradation (REDD+) programs. This led to another network of subnational states with similar physiology and goals between Brazil, Indonesia, Mexico, Nigeria, Peru, Spain, and the US (Setzer, 2015).

Happaerts, Van den Brande, and Bruyninckx (2010) have elaborated the transnational networks of regional governments participating in the international climate change regime such as the Network of Regional Governments for Sustainable Development (nrg4SD). These regional networks improve policy making by creating cooperation between subnational governments. (Happaerts, Van den Brande and Bruyninckx, 2010) They also influence decisions of their respective nations via international organizations.

Across the world we see increased assertion on part of the sub-federal governments to involve in climate change negotiations. An understanding of federalism and intergovernmental negotiations would help in redefining international regulation of global issues. It is crucial to include and redefine responsibilities of different non-state actors in understanding of governance of climate change (Chaloux, Paquin and Séguin, 2015). Climate change has given an opportunity to act beyond borders and transnational networking is helping subnational and regional governments achieve this (Kuznetsov, 2015). It could be very well said that climate change has allowed increased democratization in federalism. This is by creating a facet for subnational action in international affairs.

CLIMATE CHANGE IN THE INDIAN FEDERAL SYSTEM:

To begin understanding the SAPCCs with respect to the Indian federal system it is important to understand the relation between the environment (climate change) and its relation with the Indian constitution. As is with most of the older federal constitutions, environment is nonexistent on the List. Although newer constitutions do contain environment. In India the paradigm shift regarding environment came in the mid-1970s. The term “environment” was not present originally in the constitution. There were initially no guidelines on matters related to the environment, forests, wildlife, or management of natural resources (Chakrabarti and Srivastava, 2015). In fact the Directive Principles of State Policy also do not propose any directives regarding the environment. However, now with time there is are roles defined for creation of policies, plans, and, programs on environment and its implementation (Chakrabarti and Srivastava, 2015). The constitutional legislation created jurisdictions over how environment can be co-governed by States and the Union.

Climate Change, which comes under the umbrella of environment is devoid of a clear cut legislative responsibility in India (Jørgensen, Mishra and Sarangi, 2015). It does not find a mention as the distribution of legislative powers and administrative responsibilities between the States and Centre was established earlier before climate change became a global issue. Additionally climate policies are usually given low preference in India as growth oriented policies are more voter friendly (Chakrabarti and Srivastava, 2015). Air and environment would rest in the residuary powers of the Union Government as it is not mentioned in either of the three Lists. Therefore, in India the Union Government has jurisdiction over environment all over the country (Chakrabarti and Srivastava, 2015). Further, climate change subjected to international agreements making it a component of foreign affairs (Jørgensen, 2011).

As Jørgensen, (2011) elaborates the areas relevant to climate policy such as trade representation, United Nations Organization, agreements and conventions with foreign countries are part of the Union List subjects with the national government exercising exclusive power over it. The major policy making is done at the central level like many other countries (Jørgensen, 2011). This involves the Prime Minister, the Union Parliament, a couple of federal ministers as well as civil societies and research institutes. The Planning Commission and Finance commission are also part of the centralized long-term policy making (Jørgensen, 2011) However sectors that are emission intensive such as industries and transport are present in the State List. This is why Kirsten Jørgensen (2011, p.5) in her paper argues

that although it may seem as the States have no power regarding climate policy but “despite the Centre’s strong legislative powers and executive rights, the subnational state level disposes of a number of important legislative powers relevant to climate policy.” This she elaborates by the inventive systems created by the States in the renewable energy sector. The role of states in initiation, experimentation and implementation of climate policy throws light on the specifics of federalist climate governance in a fast emerging market economy (Jørgensen, 2015). She further argues that the idea of decentralized actions would “(1) allowing more experimentation by more policy-makers, (2) local tailoring of specific action to fit more aptly the environmental preferences of constituents of various states and locales, (3) testing the political response of innovative regulatory and policy actions, and (4) gaining the benefit of local expertise and experience in enforcing programs and policies” (Jørgensen, 2011, p. 7).

SAPCCS AND KNOWLEDGE SYSTEMS:

As discussed earlier, the SAPCCs are the logical culmination of subnational action for climate change in India. The NAPCC and its state-wide implementation takes place in two levels, first the Union government decides the goals and second, the obligation to implement resides at the subnational level (Mishra et al. 2011). The 8 missions of the National Action Plan in a way focus on India’s domestic developmental needs even though their inception was a response to international developments (Atteridge et al., 2012). The directional shift in the development was to prioritize high economic growth. The

SAPCC revolves around future development agendas and priorities of the state governments. It serves the climate policy at the international realm and domestically helps the subnational development interest (Atteridge et al., 2012). The common denominator across the SAPPCCs is to engage in “principles of territorial approach to climate change, sub-national planning, building capacities for vulnerability assessment, and identifying investment opportunities based on state priorities” (MoEFCC, 2010).

Among the 8 missions prescribed by the NAPCC is the Mission on Strategic Knowledge for Climate Change. This mission envisages a knowledge platform that would be a super highway for sharing information and data regarding climate change (GoI, 2008). It would help in easy access of relevant data when required for designing policy. The National Mission on Strategic Knowledge for Climate change encourages technology collaborations and creation of knowledge networks in climate science, climate modeling,

adaptation across GDP critical sectors, energy generation technologies and emission inventories (GOI, 2010). It aims to be an information and knowledge depository that helps various stake holders to respond to climate change. This is very important as climate change is a “knowledge intensive issue where new knowledge on impacts, vulnerability and especially adaptation, needs to be continuously generated and fed into decision making at both policy as well as practice levels” (Huq and Stott, 2015). Knowledge is an important determining factor in designing policy measures and plans to respond to climate change. The knowledge present in the Indian domain is outdated, conflicting, and inconsistent with reduced capacity to assess its credibility and relevance (Government of Rajasthan, 2014). These factors make it an obstacle for its utility.

The reason this research chooses strategic knowledge as an item to measure cross-border engagement is because information and knowledge about climate change is the first step in creating and adopting accurate policies regarding adaptation and mitigation. It is an important component of policy making. Further, it is one of the easiest in terms of increased cross border engagements. Subnational climate action is indeed witnessing a new form of engagement - government authorities with universities and technical institutes in order to obtain the strategic knowledge that is required for public sector agencies. The engagement of states with their bordering nations for climate change for at least climate change would show that there is an amount of ambitious and independent policy making. We can infer the assertion of Indian States beyond the limits defined in the constitution. That the states are willing to push beyond the Union List in order to engage with a trans-border issue. Although Jørgensen et al (2015) argue, there exists some ambitious policy making by way of creating new institutions and management when it comes to renewable energy policy. This paper tries to measure how far it holds true for knowledge creation and subnational diplomacy.

At present, 30 states have submitted their draft SAPCC to the Ministry of Environment, Forest and Climate Change (MoEFCC) and are available for public perusal. This research will be confined to the 8 Border States.¹ We

¹Government of Punjab. 2014. Punjab State Action Plan on Climate Change.
Government of Rajasthan. 2014. Rajasthan State Action Plan on Climate Change.
Government of Gujarat. 2014. Gujarat State Action Plan on Climate Change.
Government of Meghalaya. 2014. Meghalaya State Action Plan on Climate Change.
Government of Mizoram. 2012. Mizoram State Action Plan on Climate Change.
Government of Tripura. 2011. Tripura State Action Plan on Climate Change.
Government of Assam. 2015. Assam State Action Plan on Climate Change.
Government of West Bengal. 2011. West Bengal State Action Plan on Climate Change.

will be excluding Kashmir from the study as the geopolitical configuration of the state is highly conflictual. Cooperation on an issue would require a more delicate and intensive study. The border states of the most vulnerable regions have been taken into consideration for this study, therefore the states sharing borders with China, Bhutan, Nepal and Myanmar have been excluded.

The SAPCCs of the Indian States were examined in respect to what these states intend to do, including their envisaged objectives with regarding to developing strategic knowledge of climate change. This examination explores policies with regards to technology exchange and engagement with the neighboring nation on basis on similar regional physiography. I have examined in this study whether states' climate action plans indicate knowledge creation objectives and measures while engaging in subnational diplomacy for generating the desired results. A summary of key strategies and activities proposed in the selected SAPCCs for the strategic knowledge mission is as follows:

STATES SHARING BORDERS WITH PAKISTAN:

Gujarat: Gujarat is the only state with a dedicated Department of Climate Change directly under the Chief Minister. By its own admission its state action plan "goes beyond what has been proposed under the National Missions of the NAPCC." The Department of Climate Change envisages to build strategic partnerships overseas and within India for enhanced technological and technical skill transfer for implementing adaptation and mitigation measures in the State. The Mission for Strategic Knowledge does mention the need for knowledge partnerships with institutes working on Climate Change but they are mostly to engage in renewable energy development. However it does not mention regional cross border engagement with Pakistan with which it also shares a climate sensitive coastline.

Rajasthan: The Rajasthan State mission on Strategic Knowledge on Climate Change intends to create a knowledge system to reduce vulnerabilities. It plans three strategies to deal with climate change by way of knowledge creation, management and application. It will work with the Climate Change and CDM cell as a nodal agency. In terms of international engagement it does include presenting data analysis to a wide scientific audience abroad. It does not include specific engagement with Pakistan, but there are issues in the border districts of Barmer, Jaisalmer and Bikaner that are home to pastoral nomads. There is a decrease in grazing areas across the region on both sides of the border.

Punjab: This is one of the states that shares a very identical physiography with its bordering nation Pakistan. The state faces adverse impacts due to water shortage. Its plan for knowledge creation allows for technology watch groups to carry out research on technology selection in Punjab. The Punjab SAPCC proposes creating a dedicated Centre for Excellence as an R&D body to engage in research and technology for climate change issues. This will also help in technology development through international cooperation. The Punjab climate action plan does plan to “build alliances and partnerships through global collaboration in research & technology development on climate change.” It also envisages to collaborate with academic institutions in order to obtain regional models. It is one of the most pragmatic SAPCCs on the Western side border states as it also intends to use the international border to create Solar power and work on canalization of Sakki/ Kiran Nallah which are in the border districts of Gurdaspur.

STATES SHARING BORDER WITH BANGLADESH

Assam: Assam as part of its Mission on Strategic Knowledge envisages the creation of a Climate Change Knowledge portal that would engage is assessing district wise vulnerability. It also intends to develop a group of climate scientists. It acknowledges the need to gain expert input from international policy watch groups to improve policy translation between the state, national and international climate regime. This is to improve the development process. Although Assam is not directly affected by rising sea levels due to climate change. It does, however, bear the brunt of the changes in Bangladesh (Ziegler, 2013). With already existing conflict, climate change adds to the melting pot by increased migration and resource scarcity making it among the most vulnerable.

Meghalaya: Meghalaya’s State Action Plan envisages the creation of a dedicated Climate Change Agency that will coordinate and advice on climate change issues. It will act as contact point for the state government and external funding agencies regarding climate change. It will collaborate with external stakeholders as well as the different Departments of the Government.

Mizoram: This state is also among the most vulnerable to climate change especially due to its close proximity to Bangladesh. The border regions are also highly vulnerable to outbreaks of malaria. In its plan intends to integrate process of assessment of vulnerability it focusses on bottoms up approach resulting in improving adaptation and mitigation projects. A new authority is also proposed by the Mizoram state plan that creates initiatives for strengthening of the state level activities for disaster risk reduction.

It also underscores the need to have cooperation with Bangladesh and Southeast Asia to strengthen disaster reduction plans.

West Bengal: About 42% of the state area is flood prone and is manifested across the state by various modes. Floods can be due to excess water carried over from transnational and interstate borders foster exchange of data related to climate change, good practices and policy initiatives across states of the country. It proposes an institute for climate change research & ecological design which would focus on data and information generation and management. West Bengal's institute would be a knowledge domain for transitional research and share data and best practices and policy across different states across India and countries with similar physiography. This is indeed a new move ahead, where sharing of knowledge between states and across borders is proposed. The State of West Bengal approaches this in a unique manner and take the mission for strategic knowledge a step ahead it encourages in creating an Institute for Climate Change Research & Ecological Design or Management. This would include climate change issues as well as food and energy security.

Tripura: Tripura's state mission on strategic knowledge aims to build a system that could cover the insufficient observational and scientific information base. It will help in selection of technology while making vulnerability assessments. Tripura along with West Bengal is among the most pragmatic and ambitiously independent State action plans. The SAPCC acknowledges the need for a trans-border planning process with Bangladesh to manage the heavy precipitation it receives. The climate sensitive region of Agartala and nearby towns is closely connected to it sharing the border with Bangladesh. It suggests improving regional cooperation with regions of similar ecology. It also suggests initiatives to be formulated for disaster and risk reduction by cooperating with Bangladesh and Southeast Asia

Weak and fragmented knowledge base is the common factor in all the knowledge missions. Nearly all the Indian states examined obtain a part of its climate projections from national centers or international institutions that are not specific in nature. The impact assessments used in all the SAPCCs mentioned above have used only one regional climate model developed by the Hadley Centre, UK (INCCA, 2010). The projections lack precise statistics of extreme events that is required for creating detailed regional adaptation strategies. The climate change knowledge at national level is comparatively better known than at the state specific level or regional level. The biggest challenge regarding scientific assessment of climate change in India is the absence of data. It is important for states to reform the current approach to data generation (Mishra et al., 2011).

A cursory study of the state action plans reveal that there are specific examples where the regional perspectives is prompting states to have a look beyond their borders for creating policies in order to improve implementation of nationally determined actions. Most of the state action plans suggest development of an institute of strategic knowledge that would provide for building S&T with regards to climate change. However, states have not been ambitious enough to independently experiment with the national missions defined in the NAPCC. There has been only few instances where there is a push for cross border engagement without driven by regional requirements and context. These initiatives are very incremental in nature as opposed to being experimental. The states have not gone out of the way to create specific collaboration plans with their bordering regions or to discuss issues of climate change. Even for climate change induced migration there is no intimation of dialogue. The State Plans also do not suggest forming regional networks on climate change. Towing with the national agenda the states do not view issues of climate change with security lens.

THE WAY FORWARD

Besides the improved democratic structure of Indian federalism due to subnational diplomacy there are many other factors that propound the need for subnational action for regional collaboration. A lot of issues related to climate change need to be addressed at the multi-country and regional level. Large ecosystems such as river basins, forests are all inter-country. Climate change induced disasters such as cyclones, floods, sea level rise of drought can be trans-border depending on the region. Cyclones in Bay of Bengal could impact India and Bangladesh. The world's largest mangrove forest- the Sunderbans is shared between India and Bangladesh and must jointly addressed to protect the ecology and life forms from salt water (Rahman, n.d.). Transport and trade corridors such as the BBIN (Bangladesh, Bhutan, India, and Nepal) need to be planned taking climate change dimensions into consideration (Rahman, n.d.).

Unexpected monsoons cause great damage to agricultural fields on both India and Pakistan. Heavy rains damage large amounts of wheat crops. Sea level rise due to climate change also poses risk to Karachi and other sea facing cities of India (Preventionweb.net, 2008). There is lack of knowledge and coordination between India and Pakistan even though they are among the most vulnerable. Bangladesh, India and Pakistan are also known as among the least integrated regions in the world (Bhatiya, 2015). Additionally, there is no regional strategy to deal with climate change in this area (Bhatiya, 2015).

Local traditional methods of dealing with climate change need to be shared across borders. The pastoral nomads of Barmer, Jaisalmer and Bikaner use migration, a traditional phenomenon, as a mitigation strategy against the drought (Government of Rajasthan, 2014). This sharing of best practices and knowledge between nations would act as confidence building measures building a cooperative agenda between them (Bhatiya, 2015). Climate change can be better handled by creating consensual knowledge which would create a scenario for diplomacy and improve negotiation on other cross border issues (Sjöstedt, 2009). These bilateral relationships between Indian states and their bordering nations would benefit the whole region. The region around vulnerable borders represents an economic opportunity and massive development challenge (Bhattacharyya and Werz, 2012). Building ecological infrastructure would help regions adapt as a whole.

Climate technology can be employed as a soft power tool to empower communities. Technology exchange could help foster improved social and public good in foreign policy. Most of the research in India is driven by the government, by spending 66 percent share of National Gross Expenditure into R&D (Relia, Mitra and Ramasami, 2014). A large share in public investment creates the right direction on public and social good and also creates potential for building strategic alliances (Relia, Mitra and Ramasami, 2014).

There is a need to understand climate models at regional levels and assess region specific risks and impacts. This is further needed to develop research and policy action in response to current and future vulnerabilities. The collaboration initiatives between Border States and their regional Nations with regards to data sharing could involve promotion of information sharing and establish technology market initiatives between borders. These networks could also apply political and normative pressure from multiple directions to improve climate policy across the nation.

For an effective policy on climate change there has to be coordination between all three levels (national, subnational and local). Climate change brought down to the level of domestic and state interests will help in informing “accurate intelligence on interests, motives, perceptions and internal political dynamics” that will help in improving international cooperation with same interest allies (E3G, 2013). As when it comes to national policy making the federal systems make it more complex as the state entities may have policy priorities that are different from the Union Government. Providing the constituent units with the flexibility to reach climate action goals would usher a more unique collaborative mix. This flexibility should also allow trans-border regional engagement.

In traditional federalism the central government sets standards and states are the first-order implementers. But a better way of approaching it is the states' share in national standard setting. This will help states function as "laboratories of democracy, generating innovative policy responses to the particular problem of national, and, in the case of climate change, global dimensions" (Engel, 2015, p.2).

However, scholars argue that division of powers might be seen as an obstacle to implement a true national level policy. Some scholars consider centralization to be the solution for climate change (Bélanger, 2011). The case of Canada, serves as a good example for India. Considering the urgency of the climate change problem India should "set aside their centralist reflexes and encourage the provinces to continue experimenting" (Bélanger, 2011, p.29). The central government setting up solutions for all states may not be the right remedy for climate change. The experimental policy making would help in contributing towards the national climate change goal. The most creative public policy is found at the local village or municipal level of the government not that the Union or national level. Maturity in policies would be attained by local innovation across India. "Countries should remain sovereign unities, but have to give up some of their competences and be willing to more cooperation" in order to be successful in the climate change regime (EU-Asia Dialogue, 2012). In order for India to be a successful participant of the Paris COP21 agreement, it has to accept a new diplomacy. The earlier classic diplomacy was about taking a compromising position. Climate Change offers less possibilities of compromise and requires a comprehensive solution (EU-Asia Dialogue, 2012).

Some authors argue that subnational entities engaging in diplomacy could cause the decline of central governments control. They suggest that this could lead to decrease in authority within the nation state model (Michelmann and Soldatos, 1990). As the central government is the accepted authority in foreign affairs. The margin for conflict in subnational action increases when they undertake agendas that goes against the central government's position (Setzer, 2015). In order to prevent damage to the national position there could be some supervision on subnational diplomacy by the central government. This should allow "harmonization of national and subnational actions as a vital precondition" for foreign policymaking to prevent fragmentation of states (Kuznetsov, 2015, p.64). Another issue that could crop up when engaging in subnational diplomacy is at the political level. A rift intergovernmental cooperation as seen in Belgium. More so when state parties are different from the national level parties. These political instabilities can lead to policy failures. In the case

of Belgium these political disagreements made it difficult to come to positions on key issues in international negotiations (Gayard, 2013). But as Jörgensen, (2011, p.1) suggests India could do very well to “dispose of the potential and independent political forces for its own climate protection initiatives.” A criticism of this whole exercise is that subnational diplomacy improves bilateral relations between border nations provided their constituent entities have attained success in subsequent projects. India on the other hand does not have a friendly neighborhood. The geopolitics of south Asia have been constantly confrontational (Kuznetsov, 2015).

CONCLUSION

Climate change is no longer an emerging challenge. We are already witnessing erratic floods and droughts, these are manifestations of weather deviations inducing extreme events. There is extensive capacity building required for India to understand climate change impacts as well as adapt and mitigate the risks that emanate from it. This will require multilevel stakeholders. The national level has succeeded in attaining a decent Climate Change agreement in Paris now the task lies in addressing it at subnational level. The government must allow plans to be region specific and not a uniform national one as the topography vastly differs across India (TERI, 2014). Climate policies that are taken from state level are more considerate with the socio-economic conditions and other factors on the ground.

Climate change is an issue beyond borders (CANSA, 2015). Trans-border subnational diplomacy is very effective in challenges that do not respect borders and have impacts across international frontiers (Kuznetsov, 2015). Subnational diplomacy can fill in the gap and address the inadequacies of the international climate regime. The federal structure in India needs to accommodate these changes, as these regional networks will help foster policy improvement. As Alexander Kutzenov (2015) puts it, “regions that border with foreign countries naturally, meaning by the force of geography, have to find points for mutual understanding with their neighbors” (Kuznetsov, 2015, p.76). India-Bangladesh relations have implications for West Bengal, Tripura, Meghalaya, Mizoram and Assam. This is the same for Punjab, Rajasthan and Gujarat. States sharing international borders and ecosystems with other nations are always at a chance that national policy may affect the progress of the respective states (Nanda, 2015).

Research and academics help greatly to increase sustainability and protect the environment by way of providing essential knowledge to make informed decisions. The subnational action provides opportunities for dialogue, learning and innovation with our neighbors. Knowledge as an entity is

strengthened with sharing rather than diminished, it helps in being better neighbors in a globalized society (Johnston, 2014). Scientific knowledge can help by being a guide to making policy choices. Foreign policy could be improved in its interaction with science as long as it maintains scientific autonomy and integrity, with ensuring the geopolitical representativeness of the bodies and manage conflicts (Skodvin, 2000).

A cross border engagement should help in formulating a detailed study to suggest the adaptive strategies that need to be undertaken. It is critical that regional leaders share best practices for setting the region on the path for risk adaptation and sustainable development. For border states, the regional governments have to find better solutions for vital issues such as environment, emergency management, education, migration, etc. even if they require independent policy making. The collaborative initiatives of the Border States with their neighboring nation's vis-à-vis entering agreements and MOUs promote information-sharing and can establish market initiatives in the long run. Of all the environmental challenges India has faced, climate change is the biggest. The steps taken in this regard could set a precedent for other trans-border subnational diplomacy initiatives. The important questions that point towards further research should engage in making subnational diplomacy better. What institutions must be created to make subnational diplomacy effective? (Sjöstedt, 2009). How could subnational diplomacy add to the international climate regime? How should the Union government and state government distribute the work for climate diplomacy? A golden rule would be to avoid ambiguous situations where legality of subnational diplomacy is contested (Kuznetsov, 2015).

The process of SAPCC creation has been a novel experience for states (Jørgensen, Mishra and Sarangi, 2015). This is indeed a new step in a way of cooperative federalism. As for the implementation of the Strategic Knowledge Mission for Climate Change, the study of border state's climate action plans shows that states haven't been very proactive to engage in subnational diplomacy in the region, though varyingly. The study suggests that federal structure in India is slowly moving away from being over-centralized due to subnational governments doing more than just implementing the central level policies. But it is not fully experimental in terms of cross border engagement. This is a clear indication that the federal structure has evolved since Independence and the system is considerably more democratized. It points towards an improved health of the federalism.

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