Drivers of Climate Action in Indian Cities

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Introduction

In the recent years, there has been a marked shift in the global climate governance regime. The traditional UNFCCC mechanism is being complemented with involvement of a host of other organisations. For example, networks, transnational organisations, and multi-lateral banks are also increasingly partnering with sub-national and non-state actors across the globe to tackle climate related issues (Hermville, 2018).

The Paris Agreement officially recognises the role of 'non-party stakeholders'* (UNFCCC, 2019) in the global effort to mitigate and adapt to climate change. With this, the importance of sub-national and non-state actors has grown over the years within the UNFCCC regime (Hermville, 2018;Kuyper, Linnér, & Schroeder, 2018). These actions are being recorded officially by the UNFCCC under the Non-state Actor Zone for Climate Action (NAZCA) platform. According to the website, a total of 22,470 actions have been recorded covering 14,538 actors (United Nations, 2019).

The United Nations Climate Action Summit convened by the UN Secretary General is a testament to it, with several philanthropies, industries, businesses, cities, and companies pledging action. Given this large scale participation, both non-state and sub-national actors have the potential to contribute to effective climate action across the globe (Hale, 2018; Hall & Sastry, 2019). This level of involvement could lead to the achievement of the 1.5 degree target set out in the Paris Agreement.

Although India is the 3rd largest contributor to global emissions, the country has a very low per capita emission rate (Union of Concerned Scientists, 2019). The country with its diverse geographic profile is highly vulnerable to natural disasters. Being the second most populous nation, this vulnerability is exacerbated by growing population and urbanisation (NDMA).

Administratively the country is divided into, 29 states, 400 cities and 9 union territories. The states and cities within the country are considered as sub-national entities. Under the federal governance structure in India, the Ministry of Environment, Forests & Climate Change first institutionalised climate action under the National Action Plan in Climate Change in 2008. Climate action by states in India is organized under their State Action Plans on Climate Change (SAPCCs) which draw their guidance from the National Action Plan on Climate Change. There are eight missions (MOEF&CC, 2019) under this, covering both mitigation and adaptation actions.

While the NAZCA platform captures data for both non-state and sub-national climate action, it does not capture the length and breadth of action on the ground being carried out by sub-national entities. We are witnessing a period of extraordinary innovation in global climate governance. Cities, businesses, civil society groups, and other sub- and non-state actors are increasingly significant actors in world politics. In this light, the project 'Strengthening sub and non-state climate action in the Global South (ClimateSouth)' aims to fill two crucial gaps in the world's response to climate change, i) by generating an evidence base to expand the participation and leadership of climate action by cities, companies, civil society groups and other sub-national & non-state actors in the Global South ii) to understand the effectiveness of such action. This work is being carried out in India and Kenya, while simultaneously collating information on transnational climate initiatives. The project aims to understand the various development linked climate oriented actions that sub-national entities in India are undertaking.

Methodology

The ClimateSouth project involves data collection at the micro-level in India and Kenya, for specific climate related activities. Secondary data is being collected for

* *According the UNFCCC definition non-party stakeholders represent a broad spectrum of interests, and include representatives from business and industry, environmental groups, farming and agriculture, indigenous populations, local governments and municipal authorities, research and academic institutes, labour unions, women and gender and youth groups*

both adaptation and mitigation related activities. For this purpose, a questionnaire has been prepared covering natural and man-made risks. Natural risks cover floods, droughts, landmass movement, epidemics, tropical cyclone, extreme weather events, and water salination. Man-made risks include air pollution, waste management, energy, building, transport, and land-use. The secondary data collected is supplemented with expert interviews.

Climate action- Indian Cities

Cities are home to over half the population of the, and contribute to 80 per cent of global GDP (Dobbs, et al., 2011). A study (United Nations D. o., 2019) conducted by the UN projects that by 2050 68 per cent of the world population will live in urban areas. The majority of this projected growth will happen in the Global South, particularly in India and China (Swilling, et al., 2018). While cities are the centres of economic growth, they contribute significantly to global emissions (ibid). Cities face a multitude of climate related challenges like sea level rise, flooding, extreme heat, etc. This makes these spaces highly vulnerable and this is being increasingly recognised across the globe (Chu, et al., 2019).

There are nearly 50 cities in India that have a population over a million. These cities often experience disasters which lead to devastating social and economic losses. In the aftermath of these disasters; cities face a slew of related problems ranging from loss of critical infrastructure to biological epidemics like water and vector borne diseases (TERI, 2019). Increasing socio-economic inequalities and the resultant rise in informal settlements also lead to differential vulnerabilities among different socio-economic groups within the city (Anand, Koduganti, & Revi, 2014).

The secondary data collected for 46 cities (with a million plus population) shows that, majority of the cities face high risk of flooding (more than 50% of the sample), followed by extreme weather event risk and biological risk (TERI, 2019).

Indian cities are not far behind from the rest of the world in terms of action. The landscape of climate action is quite different from what is observed in the Global North, which can be attributed to the federal structure of governance in the country. Initial data analysis suggests that Indian cities are doing much more than what is captured on the NAZCA platform (ibid). There are various networks like C40, 100RC, International Urban Cooperation (IUC), that facilitate knowledge and experience sharing across the world.

The below figures illustrate the existence of action for a particular natural risk and man-made risk along with the policy mandate for the same. Most action being captured is centrally mandated (Central/State mandate) owing to the federal structure of governance in India. National acts/schemes/ programmes guide cities to act on certain risks. For example, the Solid Waste Management Rules,

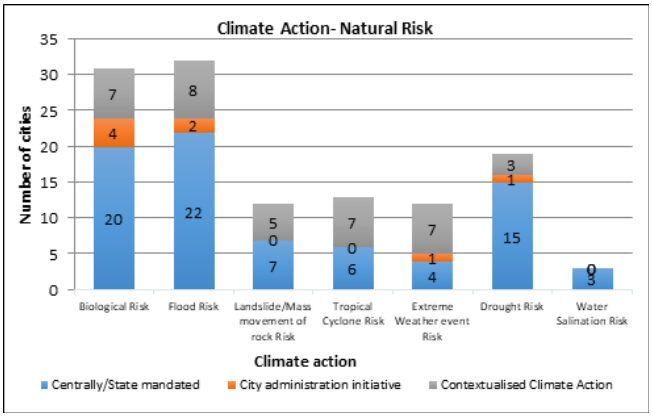

Figure 1: Climate Action- Natural Risk

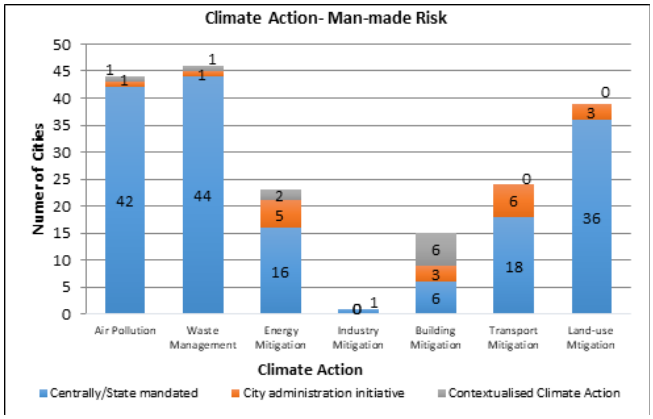

Figure 2: Climate Action- Man-made Risk

2006 provide directives for cities in matters relating to collection, transportation and disposal of wastes. A few city administrations (City administrative initiative) have taken initiatives to addresses specific risks within cities. For example, the city of Ahmedabad, Gujarat was one of the first cities to address the issue of extreme heat by preparing a Heatwave Action Plan. While central guidelines exist, the impacts of climate change are highly context specific. In our analysis a handful of cities have undertaken climate action that is highly context specific (Contextualised Climate Action). City level disaster management plans would fall under this category.

Drivers of Climate Action

Apart from the central/state government mandates, a multitude of factors drive climate action in cities. It becomes important to understand these drivers to ensure effectiveness, scalability, and continuity of action. From an initial analysis (TERI, 2019), the drivers for the climate action can be divided into 6 categories:

Table 1: Drivers of Climate Action- Cities

Centrally mandated action
» Action being carried out under the national acts, schemes or programmes. A majority of the actions are integrated into developmental agendas or programmes.
» Ex:National mandate for cities to have Solid Waste Management (Solid Waste Management Rule, 2016)
Event driven action/ Reactive action
» Emerging trend from the data suggests that cities act on certain risks only after having experienced a disaster.
» Ex: Ahmedabad city prepared a Heatwave Action Plan after a devastating heatwave in 2010
Partnerships with transnational organisations/external funding agencies
» Actions taking place in cities are steered through the interests of transnational organisations/ external funding agencies. The support is being provided in a technical or financial capacity.
» Ex: Effective implementation of climate action in Surat as a part of the Asian Cities Climate Change Network
Local Leadership/ Political willingness
» City level action has also been pioneered through the initiatives of local leaders, elected representatives, members of the civil society and the general public.
» Ex: Mayor of the city of Rajkot pledging emission reductions
Citizen/Civil Society driven action
» Interventions by CSOs and citizens on emergent issues in cities have often forced city administrations to take action. This has sometimes led to judicial rulings to ensure implementation of action.
» Ex: Citizen level action leading to effective waste management and conservation of lakes in the city of Bengaluru.
Informal partnership (city administrations and CSOs/research organisations /NGOs)
» These informal collaborations exist to tackle the issue of differential vulnerabilities within the city. Often, successful implementation of one action has led to a sustained partnership with the city administration.
» Ex: MHT collaborating with the Municipal Corporation of Ahmedabad in preparation of extreme heat during summer.

Conclusion

Sub-national actors can play a crucial role in the achievement of NDC targets set by national governments With the Paris agreement officially recognising the role of non-state and sub-national actors in the preamble of the Paris Agreement, these actors are raising the political momentum for ambitious climate action. As indicated by our findings states and cities in India, are increasingly focusing on climate action. However the efficacy of their actions is affected by constraints in technology, finance and capacity in general. Given the crucial role subnational entities play in the climate action landscape of the country, it is perhaps worthwhile to explore how they can be recognised and incentivised within the official governance mechanisms in India.

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