
# Rethinking India's Approach to International and Domestic Climate Policy

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India has traditionally approached climate change as a diplomatic issue, insisting that the developed world – because of their disproportionate role in causing the problem – should lead the way in reducing emissions, and provide the developing world the finance and technology to do so. While this approach is entirely justifiable and has served India well in the past, there are compelling reasons for the country to rethink its approach to international and domestic climate policy. First, climate change is likely to have profound and devastating impacts in India, impacts that will make the task of development and poverty eradication considerably harder. Second, there are several cost-effective actions that India can take that serve its development as well as climate interests. Rethinking our approach would translate internationally into our joining, even leading, a 'coalition of the willing' that advocates for an ambitious and strong rules-based global climate regime. Domestically, it would translate into a proactive exploration of lower-carbon opportunities for growth that foster development, while investing in climate adaptation and resilience. Rethinking our approach at the international and domestic levels, however, calls for strong institutions for climate governance.

This paper, after a brief context setting section, lays out elements of an approach to international and domestic climate policy that is likely to serve India well in the long run.

## Context

Climate change, often characterized as the 'defining issue of our age', is predicted to have profound 'impacts on natural and human systems on all continents and across the oceans.'[1] These impacts are likely to cause devastation in India, a country with 7500 km of coastline, extensive tracts of low-lying

areas, high population density, poor infrastructure and continued reliance on agriculture for livelihoods. With the 1°C warming that has already occurred since pre-industrial times, Himalayan glaciers have begun to retreat, and there has been a marked increase in the frequency and intensity of heat waves,[2] droughts, extreme rainfall events[3] and floods. If the world warms to between 2.6°C and 3.2°C, as the UN climate secretariat estimates it will based on current country pledges, this will have serious, pervasive and irreversible consequences for India – not just in terms of impacts on peoples and ecosystems, but also on economic growth, livelihoods and wellbeing. Climate change is predicted, for instance, to reduce agricultural incomes by 15-25% by the end of the century in India.[4]

## International Climate Policy

India's position in the international climate negotiations is set within larger geo-political developments that also inform and influence its broader foreign and energy policy. With the US retreat from the Paris Agreement, the Brazilian President Bolsonaro's equivocation on it, and the defeat of the Labour Party in Australia which advocated strong climate measures, the momentum that led to the Paris Agreement has begun to dissipate. There is a leadership and imagination vacuum in global climate politics, which India could seek to fill.

For example, India could reach out to China, which has long been its negotiating partner in retaining differentiated responsibility, to forge a mutually beneficial alliance on the global solar energy transition. India leads the International Solar Alliance and provides a substantial market, while China has technological leadership in solar panels and storage technologies. Both countries are involved in the Asia Infrastructure Investment Bank. As the Africa region develops its infrastructure, an India-China alliance could help provide a vision of and the technological and financial means for realizing a low-carbon yet cost-effective future. In addition, and consistent with this approach, India could seek to realize its potential as a leader of vulnerable nations. Doing so would also be viewed favourably in the South Asia region, by vulnerable countries such as Bangladesh, Bhutan and Nepal. Notably, these measures allow India to be a climate leader even as it takes advantage of opportunities for economic and political gain; that is, they do not require the country to sacrifice economic gain and political position for climate policy.

Based on approaches such as these, India could join forces with others to form part of the 'coalition of the willing' in global climate politics. Such a coalition is a particular need at this juncture in the negotiations. With the conclusion of the Paris Rulebook negotiations in Katowice, Poland, in December 2018, the politically charged negotiations on obligations, rules and institutions are at an end, and the regime has shifted gears to the day-to-day business of implementation. The Paris Agreement builds on nationally determined contributions (or NDCs) from countries to reduce greenhouse gases, complemented by a normative expectation of progression and 'highest possible ambition' that calls for these contributions to be strengthened over time.[5] These terms – 'progression' and 'highest possible ambition' – are not defined either in the Paris Agreement or its Rulebook. Further, while the Rulebook fleshes out informational requirements, and operationalises an enhanced transparency framework, global stocktake, and implementation and compliance mechanism, it still preserves, out of political necessity, considerable flexibility, autonomy and discretion for states; this is particularly evident in their near-absolute control over the content of their NDC.[6] States could choose to exploit this discretion and create a political and implementation drag in the process, or they could choose to progressively strengthen their NDCs, enhance the quality of the *ex ante* and *ex post* information they provide, and trigger a virtuous cycle of ever ambitious actions necessary to meet the temperature goal of the Paris Agreement. It is in India's interest to be part of the 'coalition of the willing' – nations that seek to progressively strengthen their NDCs, and enhance their ability to meet the procedural requirements of the Paris Agreement and its Rulebook as well as the substantive objective of the climate change regime.

Specifically, first, India should provide information on its NDC, set against the larger context of its development aspirations and resource constraints.[7] This information should include the planning processes the country has engaged in to reach its NDC, which in turn should include meaningful stakeholder consultations and attentiveness to the human rights impacts of climate change action or inaction.

Second, India should clearly explain how its NDC is fair and ambitious, and on what objective criteria and benchmarks. This approach would allow India to ask how these criteria and benchmarks could be applied to the NDCs of other countries as well, turning its long-held emphasis on the principle of equity in climate change negotiations into a practical and applied measure. It is by providing robust information in the context of its NDC that India can introduce into the global assessment of progress criteria and benchmarks which assess 'relative fair shares'.

Third, in relation to ex-post tracking of progress in implementing its NDC,[8] India should identify objective defensible indicators to assess its progress with its NDC, take proactive efforts to address capacity gaps in implementation and reporting, and gradually improve the quality, precision and detail of the information it provides. India's implementation should demonstrate a high degree of 'due diligence' (best possible efforts) in meeting the objectives of its NDC.

Finally, in relation to the global stocktake process every five years,[9] India should work with negotiating partners (such as South Africa) and vulnerable nations to ensure that the 'hooks' on equity in the Paris Agreement and the Rulebook are duly exploited. India should submit its vision of equitable burden sharing and 'relative fair shares' to enable a meaningful assessment, albeit a collective one, at the international level of progress towards the global temperature goal.

India's ability to take a leadership position in this 'coalition of the willing' will require a substantial scaling up of the capacity and resources – human, financial, legal, research and institutional – it devotes to engaging in international negotiations, and complementary backchannel processes.[10] The country's delegations to the climate negotiations are considerably smaller than those of other nations of comparable size and stature. The composition of the delegations tend to favour bureaucrats rather than experts, and there are limited formal channels for national positions to be informed by outputs from the growing research community working in these areas in India. In rethinking our approach to climate policy, international and domestic, India must also rethink its engagement with experts, and the processes for doing so.

Ultimately, the effectiveness of the Paris Agreement, given its hybrid architecture, lies in the strength of the NDCs that parties submit. The strength of the NDCs will in turn depend on international processes that can catalyse more ambitious domestic actions, as well domestic political will and institutional capacity for formulating and delivering ambitious NDCs. It is to these domestic issues that we now turn.

## Domestic Climate Policy

As the reality of climate change looms, and its impacts become more real, India – as is true of other countries – increasingly needs to view climate change as a developmental challenge, and not simply as a diplomatic one. Simply put, climate change will make development outcomes more challenging. For example, global pressures to limit greenhouse gases and the emergence of new technologies will make it more complicated for India to power its industries and provide electricity to its citizens in conventional ways. Agriculture, on which a substantial portion of the population still depends for livelihoods, may be particularly hard hit. Cities and coastlines may be subject to disruptions from climate-related events. Water cycles may be disrupted, and the timing and availability of water through rainfall and in India's rivers may shift. And heat waves and shifting disease vectors will complicate the problem of ensuring public health. Climate change is not an isolated challenge to be addressed by one part of the government;

it is a problem that requires mainstreaming of climate considerations through all sections of the government's decision-making apparatus.

As this discussion suggests, the institutional requirements of managing climate change are considerable. In the last few years, India has begun planning for climate change – including through a National Action Plan, eight national missions covering adaptation and mitigation, and 32 state action plans and greater investment in scientific infrastructure. Yet, a deeper dive into these efforts reveal that the research and analytical capacity in each of these areas is weak, coordination is limited, implementation is patchy across these efforts, and the strategic thinking for truly transformative approaches is lacking.[11]

Building the capacity of Indian states to address the complex challenges of climate change is but in its infancy. The country needs to go much further down this path, devising and implementing a robust institutional structure that can generate appropriate knowledge, design policy and infrastructure interventions, coordinate across sectoral line departments and across scales of governance, ensure accountability for implementation, and provide an interface to business and civil society groups. Development remains India's number one priority. But development untouched by climate change is no longer possible. Addressing climate change adds to India's problem of developing adequate state capacity. A forthcoming edited volume coordinated by the Centre for Policy Research, *India in a Warming World*, explores how India can truly internalize climate concerns in both its energy consumption and natural resource sectors so as to address climate mitigation and adaptation.

## Mitigation

Climate change mitigation, or the limitation of greenhouse gas emissions, has always been tied to India's global negotiating stance. If wealthier countries, and not India, are largely responsible for the problem, why should India undertake costly mitigation actions? A decade ago, the National Action Plan on Climate Change proposed exploring actions that lead to both development and climate benefits. This principle of 'co-benefits' has guided our actions since, but actions that meet this principle have not been fully pursued and developed. Here, India's status as a late developer is an advantage: we have not, as yet, locked into energy production and consumption patterns, and so can take advantage of new technology and knowledge to build a lower-carbon development path.

India's cities provide a particularly good example.[12] The country is urbanizing rapidly, but much of urban India remains to be built. The next couple of decades afford an opportunity to set up cities where transport needs (and hence emissions but also congestion) are lower due to sensible planning that locates work and living spaces near each other; the travel needs that remain are met increasingly with high-quality public transport and walking (rather than private automobiles); new buildings are designed to need less cooling and heating through intelligent design. Planning processes for urban spaces need to be focused on the multiple objectives that a city should meet in these times – of livability, low congestion, efficient functioning and a small environmental footprint.

India's electricity system provides another instructive case.[13] Long ridden with problems of unreliability, poor service and loss-making, Indian electricity is likely to be shaken up by the recent steep decline in costs of renewable electricity to levels where it is competitive with coal power. However, the transition is likely to be turbulent, and create winners and losers. For example, industries may choose to shift to renewables thereby increasing the financial burden on distribution companies. Coal-mining regions may, over time, have to move to other industries.[14]

Notably, these changes are inevitable and are being driven by global technology trends, not by national climate policies alone. Recently, Tata Power became the most recent example of a company that is planning to pivot from coal to solar for economic reasons.[15] But planning for this future under the rubric of a transition

to a low-carbon economy could help unlock possible synergies between green power, energy access and energy security. Alternatively, failure to plan for this transition may be costly, particularly for the poor. Moreover, the likelihood of green, yet competitive electricity opens the door to electrifying other sectors, such as transportation and cooking. But the challenges involved in managing these transitions, in terms of hardware required, institutional rules and making sure potential losers are not left behind, are substantial and require immediate analysis and planning.

India's cities and electricity sector are but two examples. Mitigation also encompasses transportation networks (including for freight), industries, agriculture, forest management and use, and food consumption patterns, to name a few. For India, a consistent approach – built around understanding the synergies and trade-offs across multiple development objectives and climate mitigation – needs to become part of the policy framework across these sectors.

## Adaptation

It is increasingly clear that despite our best efforts, countries collectively are unlikely to mitigate sufficiently to avoid at least some – potentially significant – effects of climate change.[16] India, perhaps even more than other nations, has to pay considerable attention to the adaptation and resilience of its economy and society.

Doing so is as complex as reducing greenhouse gas emissions, and perhaps even more so. For example, adaptation in agriculture requires preparing India's agricultural systems for heat stress and unpredictable rainfall patterns against a backdrop of existing farmer distress, a creaky system of price stabilisation prone to rent-seeking, and highly inadequate insurance and risk management mechanisms available to farmers. In this context, large existing entry points into food security and employment, such as the public distribution system and the Mahatma Gandhi National Rural Employment Guarantee programme, could usefully be rethought and repurposed from the perspective of providing climate resilience. In brief, the scale and scope of potential climate impacts require mainstreaming of climate considerations systematically across development programmes, rather than an approach that rests on marginal band-aids.

In another example, India's long coastline is particularly vulnerable to climate impacts.[17] Climate change is likely to decrease the productivity of fisheries through changes in ocean temperature and acidity levels, already stressed by non-climate effects such as fertiliser run-off, with impacts on livelihoods of fisher communities. Because these effects are non-linear, beyond a point, coastal systems may be stressed beyond the point of recovery. In addition, extreme weather events and sea level rise are likely to reshape coastal zones and increase risks and costs of inhabitation on coasts. Addressing these challenges includes but goes beyond disaster preparedness. It requires, for example, coordinating the work of different departments, some of which have a protective mandate and others that seek to maximize production: these need to be harmonized around coastal resilience.

Apart from agriculture and coasts, urban areas, forests and water management also pose a complex challenge. In all these areas, the challenges of mainstreaming climate change are simultaneously scientific, economic, social and institutional.

## Conclusion

As the spectre of climate change grows ever clearer, it is becoming increasingly obvious that pursuing development without internalizing climate change considerations risks ignoring a big piece of the puzzle. A central element of the new government's agenda must thus be to internalize and mainstream climate considerations.

Fortunately, in relation to international policy, addressing climate change can also bring economic and political gains. It can enable India to work its alliances to become a leader in an impending global clean energy transition. And it opens possibilities for the country to become a political leader, notably of vulnerable nations.

Domestically, there is considerable work to be done. This involves rethinking India's energy system in a world that prioritizes clean energy, including tackling the thorny question of remaking India's problematic electricity distribution sector. To manage impacts on agriculture, coasts, cities, water and forests, the new government will need to invest in dedicated scientific and institutional capacity, tasked with internalizing the climate challenge and the implications climate change holds for development.

## END NOTES

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