Ensuring sustainable growth for India

in a fair global climate agreement

July 2015

CANSA

Overview

In December 2015, the nations of the world will gather in Paris for the Conference of Parties 21 (COP21) to negotiate a climate deal that will take us into the 2020s. At that event, India will be one of the key players to help deliver a historic and ambitious deal. India is still a developing country, but with a population of 1.2 billion it emits large amounts of CO_2. This briefing puts the case that India has a key role to play in laying down the foundations of a Paris climate change agreement in which equity and sustainable development become drivers of climate ambition.

India is urging inclusive sustainable development so as to ensure decent living standards for its citizens. It has set a goal to achieve a human development index (HDI) of 0.9 by 2030. At present, its HDI is about 0.6, ranking 135 in the world. A level of 0.9 would put India on a par with EU countries. One of challenges for India and the world is ensuring that the Indian development goal can be met while global greenhouse gas (GHG) emissions reduce on pathways that are consistent with below 2°C global warming.

Ahead of COP21, India must present its Intended Nationally Determined Contribution (INDC), outlining how this challenge can be achieved. We recommend a two-tier INDC, in which India firstly offers to contribute unconditionally to the global effort to tackle climate change, in line with a clearly argued explanation of its equitable share; and secondly, offers to go further than its fair share, conditional on being provided with financial and technological support, to help ensure the total global effort is consistent with a below 2 °C global warming pathway.

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India and the Paris deal

Six years ago, at COP15 in Copenhagen, countries pledged to take action to limit carbon emissions up to 2020. India pledged to keep its emission levels below business as usual and reduce the carbon intensity of its economy (that is carbon emissions per US$GDP). Since then, it has embarked on a plan to increase low-carbon energy, including solar power, across the country. However, the Intergovernmental Panel on Climate Change (IPCC) has predicted that the combined reductions and pledges since COP15 are well below what is needed to stay within 2°C of global warming. There is a significant gap between the global vision of a safe climate and what the nations of the world, especially developed countries, are willing to do about it.

COP21 presents an opportunity to close the pre-2020 gap, especially by developed countries, and put the world on a new, low-carbon track in a post-2020 climate-change deal. There has been increasing pressure on emerging economies such as India, China, Brazil and South Africa to contribute more to the global effort. India, in particular, is feeling that pressure. It is a lower-middle income developing country with high emissions (5% of the global total) due to the size of its population.

The current process under the United Nations Framework Convention on Climate Change (UNFCCC) calls for countries to propose their INDC. This presents an opportunity to change the narrative and show how a fair climate deal in Paris can be the key to India achieving a higher HDI and becoming an energy secure, climate resilient country.

Why equity is critical for an ambitious deal

As the Paris meeting approaches, we face the prospect of an agreement that, while marking a major breakthrough, is likely to be too weak to stabilise the climate system. The mitigation contributions put forward by developed countries (the US, EU, etc) to date are significantly below their equitable share and are inconsistant with a below 2°C global warming pathway. A new approach to achieving an equitable and ambitious deal is vital. The way to do this is to include a coherent equity framework and assessment process.

An Equity Reference Framework (ERF) is proposed that accounts for the UN principle of common but differentiated responsibilities and respective capabilities (CBDRRC), and acknowledges the need for fair access to sustainable development as much as the urgent challenge of stabilising the global climate.

Such an approach to equity can help all countries show how their INDCs are consistent with a fair share in the global effort. But more importantly, it can empower developing countries, such as India, to support goals of inclusive and sustainable development. Such a framework regards a country's level of development need as integral to its 'national circumstances', and it supports the view that India's equitable share of climate action should not be at the expense of its ambition for inclusivity and sustainability.

Using the ERF, the next section of this briefing makes the case for it being in India's favour to promote a fair and ambitious climate deal in Paris. The final section details the implications for India's approach to COP21.

A modern equity reference framework

The equity framework used in this report – designed and built by the Climate Equity Reference Project[1] – is based on high-level equity principles, most notably the Framework Convention's key principle of CBDRRC.

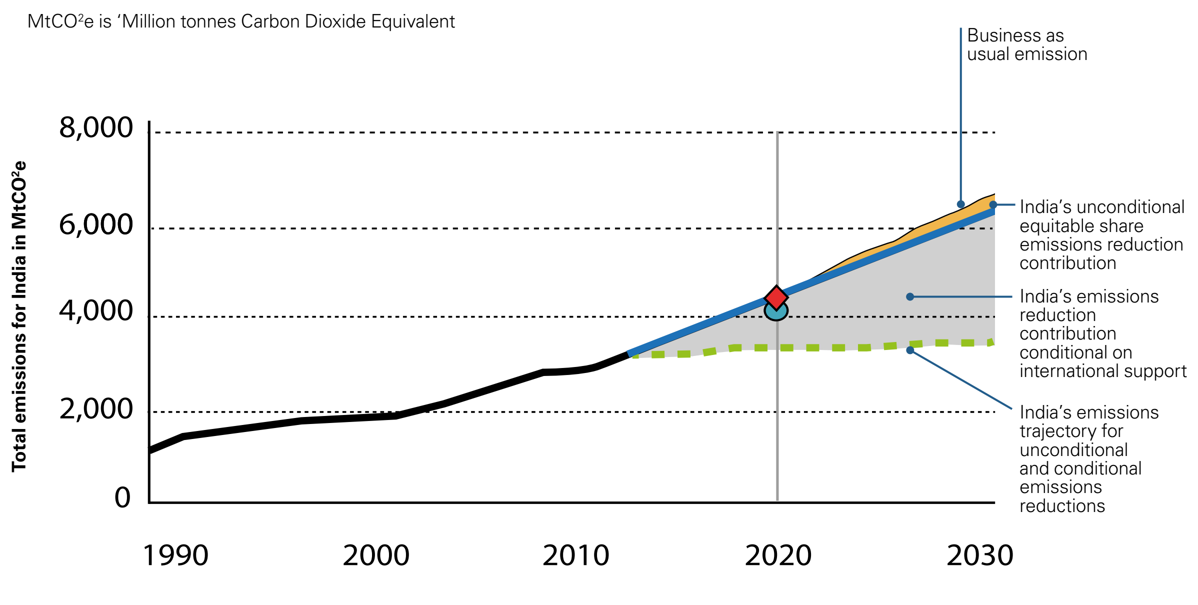
The Climate Equity Reference Project framework supports an 'equity band' approach, in which there is considerable flexibility allowed for defining equity. We offer equity settings that are defined by three conceptions of progressivity (of how progressively a country's economic capacity to cut emissions is calculated) and three conceptions of the date from which a country takes emissions responsibility (historical responsibility). These settings are:

- Low-equity case: No progressivity, and historical responsibility since 1990
- Medium-equity case: Moderate progressivity,[2] and historic responsibility since 1950
- High-equity case: High progressivity, and historical responsibility since 1850.

Figure 1 shows that India's fair-share emissions reduction is very small (only 6% below BAU in 2030 at the medium-equity setting, requiring a carbon intensity of its economy to improve by 47% between 2005 and 2030). In addition, India's conditional contribution can help meet the gap left by developed country efforts towards a below 2˚C pathway, by offering to take deeper reductions (40% below BAU) with international support. A table showing India's fair share of the emission reductions, expressed as emission reduction relative to BAU and carbon intensity improvements, is in the annex below.

India's sustainable development needs are expected to result in an increase in emissions. Reducing these from a high peak in the future would require enormous effort. We put the case here that India should therefore be prepared to offer an ambitious contribution this December, conditional on international support, in order that its emissions peak as soon as possible and the cost of future efforts is reduced.

Figure 1: 2°C global mitigation pathway, medium-equity setting



For comparison, India's 2020 Copenhagen pledge is also shown: the red diamond is the unconditional pledge, the blue circle the conditional one.

India among developed and emerging economies – 2°C pathway

Despite its low per capita GHG emissions, India is the fourth largest GHG emitter in the world. At the same time, it is a lower-middle income country, and the only emerging economy in that country group. India is compared below with both developed countries and emerging economies.

'Fair shares' refers to the emissions reductions that each country should be responsible for delivering in a fair and equitable global deal. Figure 2 shows the emissions reductions, in million tonnes, that countries need to achieve below their 2030 BAU emissions. It is clear that India's 2030 equitable share reduction below BAU is small, except in the low-equity case, which we consider inequitable and unfair.

In Figure 2, the data presented for all the developed economies show INDC pledges that are far smaller than their fair shares. Developed countries could support mitigation efforts in developing countries to reduce this gap. If such financial pledges were made, the discrepancies between their pledges and their fair shares could be significantly reduced.

Figure 2 does not give a complete picture. For example, the South Africa efforts appear small because South Africa's total emissions are smaller than other countries. In comparison to its own BAU emissions however, it actually has to achieve 33% below BAU compared to India having to achieve 6% below BAU, in a medium-equity setting. By comparison, figure 3 shows the same data in terms of the tons per capita reduction required by countries compared to their 2030 BAU per capita emissions. Here, India's far lower level of development is reflected in its much smaller fair share of the global mitigation obligation. Thus South Africa, with much higher per capita emissions, has to reduce much more on a per capita basis than does India. The per capita target for India with the medium- and high-equity settings is almost zero.

Figure 2: India among developed and emerging economies, 2°C pathway. Showing countries' 'fair share pledges' (the emissions reductions, in million tonnes, that countries need to make below their 2030 BAU emissions) for different equity settings.

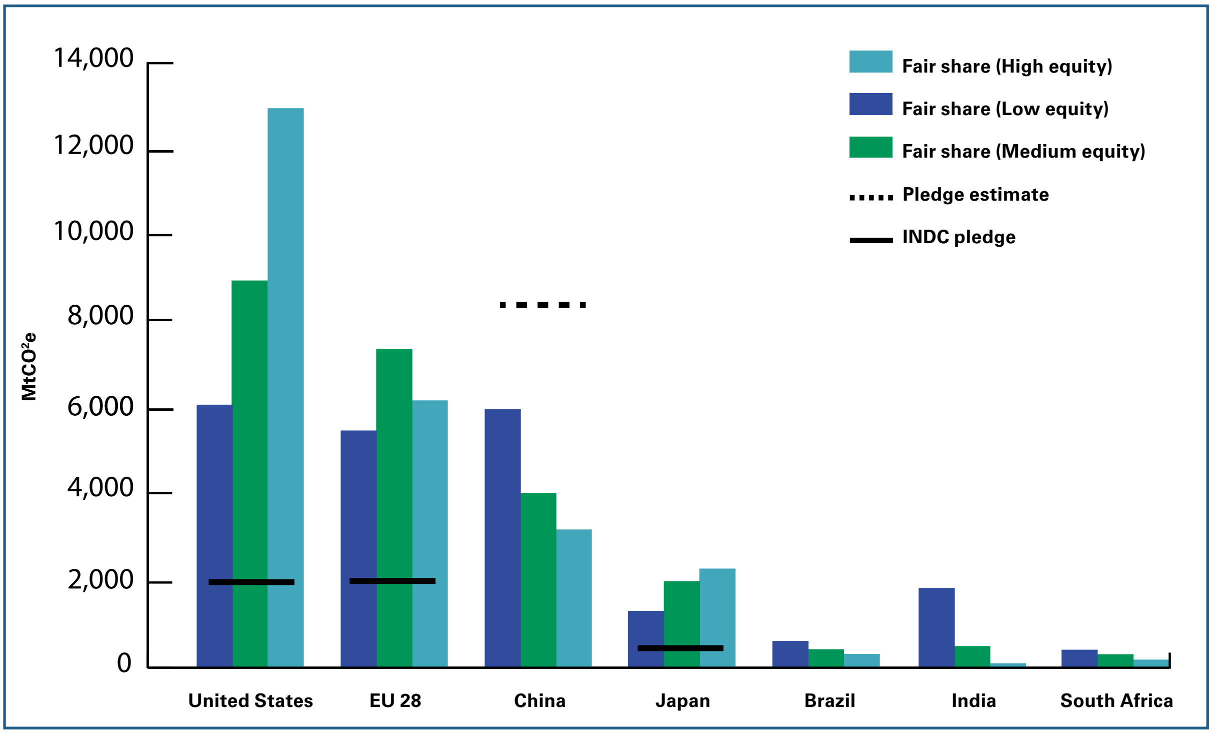
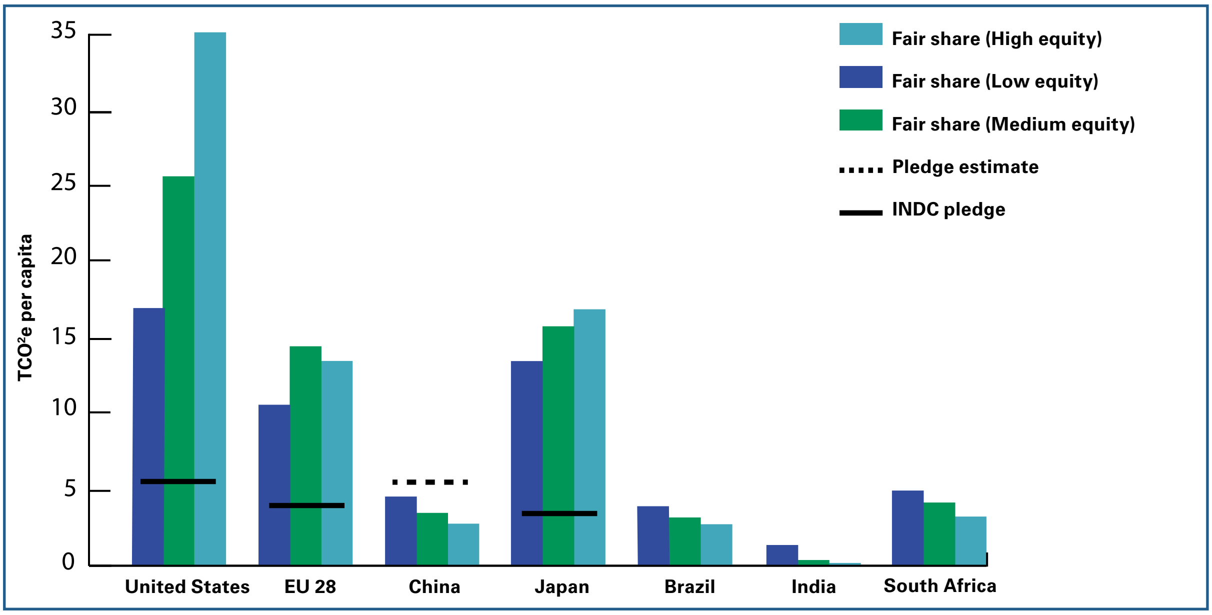


Figure 3: India among developed and emerging economies, 2 °C pathway, fair share in tonnes/per capita.

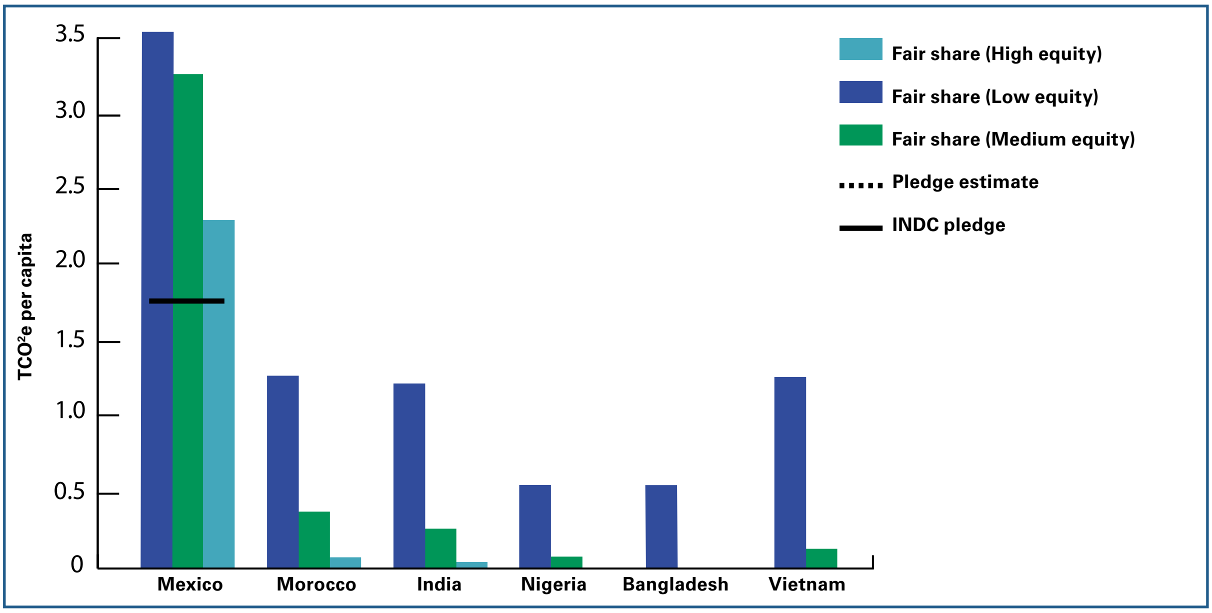


India among lower-middle income countries – 2°C pathway

Figure 4 shows India grouped with lower-middle income countries, in terms of per capita emissions reduction from 2030 BAU per capita emissions. Mexico, an upper-middle income country, is also shown here for comparison. This puts the efforts of India and other lower-middle income countries in perspective. In terms of required absolute tonnes reduction, India's equitable share will be significantly higher than all the countries shown in the diagram, but the equitable share (expressed in terms of per capita emissions reduction) is comparable to that expected of Morocco. In the low-equity settings, the Indian effort is of the same order as Bangladesh and Vietnam, as all three of these countries have a very low development level, which is not adequately captured by low-equity settings.

Figures 3 and 4, in particular, demonstrate very clearly that it is in India's interest to call for an equitable deal in Paris, which would include an equity reference framework.

Figure 4: India among developing economies, 2°C pathway, fair share in tonnes/per capita.



The implications for India in the Paris agreement

Although the level of carbon reduction required for India to fulfil its fair share is much smaller than the levels for developed countries, the analysis above shows that it is not a trivial amount and would draw on India's political, institutional, financial and technological resources. More importantly, the global decarbonisation challenge will require India to curb its emissions far beyond its own fair share of the effort. **This further reduction should be enabled by international financial and technological support. Inevitably, implementing it will require concerted attention and active cooperation by India.**

Mitigation cannot be India's primary concern. Rather, it should prioritise resource efficiency, energy access, clean cooking fuel, agro-ecology and all the rest of its inclusive development agenda. And in terms of adaptation, it will have to build its disaster-response capacities, its agricultural resilience, the habitability of its cities and the resilience of its transportation systems. All of this will require significant resources, a strong policy push, and a great deal of political capital. It will also draw significantly on India's technical and entrepreneurial capacities.

So what is India's role in a global climate mobilisation?

We recommend that:

- India should continue to focus on poverty eradication and inclusive development[3] that take proper account of its pressing social-environmental constraints (water stress and water security, air pollution and public health, soil depletion and food security, groundwater salinisation, habitat loss, and so on), and achieve the goal of 0.9 HDI.
- India's inclusive development plan should explicitly account for the challenges that will arise from global climate constraints – both emission constraints and the constraints that will come with sharpened climate impacts[4, 5]. These challenges are immense, for any ambitious global mitigation pathway will require India's emissions – as emissions everywhere – to peak very soon.
- Critically, India should clarify and quantify its requirements for international support to ensure that inclusive growth can occur within climate constraints. India should therefore put forward scenario-based INDCs that consider different levels of international support and also explain how such support is consistent with equitable global cooperation in an ambitious climate transition. India should provide clear information and the conditions relating to its 'conditional' offers, so as to ensure that the offers are matched with finance, clean technology and capacity building – and are therefore achievable.

By presenting a 'two tier' INDC, with an unconditional and conditional offer based on an ERF approach, India would be affirming its intention to pursue a low-carbon, sustainable development path that seeks to maximise both social and climate-related benefits. India would be helping to lay down the foundations of a post-Paris regime in which equity and sustainable development are drivers of, rather than obstacles to, climate ambition.

And finally…

There will almost certainly be an agreement in Paris. The real question is whether it will be a successful agreement, one that motivates ambitious climate action in a way that works, one that prioritises inclusive and sustainable development throughout the world. Such an agreement can indeed emerge in the next five years, but only if developed countries support developing countries in their efforts towards low-carbon, inclusive growth. These are the true stakes in Paris, and India can help to make them clear.

Annex

The following table shows the fair share of the emissions reduction for India, as shown in the charts above, in tonnes CO_2e below BAU, and in tonnes per capita below BAU, in 2030.

It also expresses the fair share of the emission reduction for India into an emissions reduction as % below BAU in 2030, and intensity improvement (that is GHG emissions per US$GDP) from 2010 and 2030.

For comparison, it also gives the total BAU emissions growth (a 4.3% per year annual growth rate) and GHG intensity improvement (a 2.2% per year improvement rate) projected from 2010 to 2030.

Scenario		Fair share of reduction				BAU	
Pathway	**Equity setting**	**Tonnes CO2e below BAU**	**Tonnes CO2e/ capita below BAU**	**Emissions reduction % below BAU**	**Intensity % improvement: 2005 to 2030/ 2010 to 2030**	**BAU growth: 2010 to 2030**	**BAU intensity improvement: 2010 to 2030**
1.5˚c	High equity	74	0.05	-1%	-45% / -37%	134%	-36%
1.5˚c	Medium equity	456	0.31	-7%	-48% / -41%	134%	-36%
1.5˚c	Low equity	2116	1.43	-32%	-62% / -57%	134%	-36%
2.0˚c	High equity	61	0.04	-1%	-45% / -37%	134%	-36%
2.0˚c	Medium equity	378	0.26	-6%	-47% / -40%	134%	-36%
2.0˚c	Low equity	1765	1.20	-27%	-59% / -53%	134%	-36%

Endnotes

1 The analysis presented here is based on the Climate Equity Reference Project's 'Equity Reference Calculator'. This is an online effort-sharing calculator that takes historical responsibility, national capability and development need into account to calculate each country's fair share of the total climate effort, based on user-specified technical and equity-related settings. For more information, see climateequityreference.org

2 In the 'Moderate progressivity' setting, there is a low-income threshold below which individual income is exempted from the calculation of national capacity. In this report, this income threshold is set at $7,500 (in purchasing power parity terms) annually (approximately $20 a day). This is just a bit above a global poverty line.

3 *Defining Thresholds to Achieve Decent Standards of Living*, Vasudha Foundation, equity.vasudha-foundation.org/defining-thresholds-achieve-decent-standards-living/

4 *See Low-carbon development in South Asia: Leapfrogging to a green future*, Christian Aid, christianaid.org.uk/resources/policy/climate/low-carbon-south-asia.aspx

5 *Long-term Energy and Development Pathways For India*, Indo-German Centre for Sustainability, igcs-chennai.org/wp-content/uploads/2012/04/India-Low-Carbon-Inclusive-Growth-Scenarios-2014-1.pdf

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