



Target 1.5

Time is running out to keep global warming below 1.5°C since pre-industrial era levels

The Intergovernmental Panel on Climate Change has come out with a clear scientific consensus that calls for a reversal of man-made greenhouse gas emissions, to prevent severe harm to humanity in the decades ahead. World leaders have been looking for greater clarity on the impact of accumulating emissions on climate. The IPCC's special report on global warming of 1.5°C, prepared as a follow-up to the UN Paris Agreement on Climate Change, provides the scientific basis for them to act. There is now greater confidence in time-bound projections on the impacts of climate change on agriculture, health, water security and extreme weather. With sound policies, the world can still pull back, although major progress must be achieved by 2030. Governments should achieve net zero CO₂ addition to the atmosphere, balancing man-made emissions through removal of CO₂. There is public support for this and governments must go even beyond what they have committed to. The Paris Agreement aims to keep global temperature rise in this century well below 2°C compared to pre-industrial levels and pursue efforts to limit the increase even further, to 1.5°C. The IPCC makes it clear that the human and economic costs of a 2°C rise are far greater than for 1.5°C, and the need for action is urgent. Human activity has warmed the world by 1°C over the pre-industrial level and with another half-degree rise, many regions will have warmer extreme temperatures, raising the frequency, intensity and amount of rain or severity of drought. Risks to food security and water, heat exposure, drought and coastal submergence all increase significantly even for a 1.5°C rise.

India, Pakistan and China are already suffering moderate effects of warming in areas such as water availability, food production and land degradation, and these will worsen, as the report says. Closer to a 2°C increase, these impacts are expected to spread to sub-Saharan Africa, and West and East Asia. The prognosis for India, of annual heatwaves by mid-century in a scenario of temperature increase in the 1.5°C to 2°C range, is particularly worrying. There is evidence to show it is among the regions that would experience the largest reductions in economic growth in a 2°C scenario. These are clear pointers, and the sensible course for national policy would be to fast-track the emissions reduction pledges made for the Paris Agreement. The commitment to generate 100 GW of solar energy by 2022 should lead to a quick scale-up from the 24 GW installed, and cutting down of coal use. Agriculture needs to be strengthened with policies that improve water conservation, and afforestation should help create a large carbon sink. There is a crucial role for all the States, since their decisions will have a lock-in effect.

Arrest the exodus

Gujarat must rethink the proposal to limit jobs for migrant workers

Following the horrific rape of a toddler, allegedly by a migrant worker, in Sabarkantha district on September 28, there has been an exodus out of northern Gujarat of Hindi-speaking migrant workers. There have been incidents of "revenge attacks" on them. But while the anger among residents on account of the incident might have been the trigger, there could be much more at play. As in other States, Gujarat is seeing increasing discontent over the lack of adequate jobs for young people. This is reflected in multiple surveys, including a recent Ipsos-Gates Foundation survey which found that Indians were most worried about unemployment (48%), among the countries covered. The CMIE's unemployment rate monthly time series shows that 4.6% of those surveyed and actively looking for work in Gujarat were not employed in September 2018. This is less than the national average (6.8%), but there has been a relative increase in this number since the previous year in Gujarat. Disquiet over lack of job opportunities has bubbled up in the demand for limiting jobs for migrants and in resentment against 'outsiders'. The Gujarat government, under pressure from the Opposition, has promised to make it mandatory for manufacturing and service sector companies to hire 80% of their workforce from the State's domiciles and to reserve 25% of hires for residents from the location.

Based on data since 2011, the Economic Survey in 2016-17 pointed out that Gujarat is among the States, including Tamil Nadu, Maharashtra and West Bengal, with the highest net in-migration of workers. The study also found that States that were relatively better developed than the rest of the country were also host to more migrants. It stands to reason that migrants have played a vital role in greasing the wheels of growth in States like Gujarat by providing cheap labour in the many small and medium enterprises in the manufacturing and construction sectors. The fact that industry and commerce associations in Gujarat have complained about the flight of migrants, with the festival season looming, reflects the importance of migrant labour in Gujarat. The State must follow a more holistic policy of creating incentives for firms leading to greater employment, instead of merely dictating higher recruitment of locals. Gujarat is no exception. Nativist arguments against migrants have been too easily used by political forces in various States, from more developed ones such as Maharashtra to smaller States such as Meghalaya, to address resentment over the paucity of jobs. This neither serves the interest of the State concerned, considering the economic role of migrant labour, nor addresses the issue of ensuring job-oriented growth. Apart from steps to arrest the violence against the migrants and stop the exodus, the Gujarat government must commit itself to a facilitating role for job-creation.

Salvaging a strategic partnership

The India-Russia dialogue should not get inextricably entangled in the India-U.S. dialogue



P.S. RAGHAVAN

At their meeting in Goa at the India-Russia annual summit, in October 2016, Prime Minister Narendra Modi quoted a Russian proverb to Russian President Vladimir Putin: "An old friend is better than two new ones." It was a reassurance that India's growing proximity to the U.S. would not affect India-Russia relations. As Mr. Putin came calling two years on, the shadow of America again loomed over the summit, in New Delhi. This time, it was closer, larger and more menacing.

Assertion of autonomy

The question that dominated the meet was whether or not the deal for the Russian air defence missile system, the S-400, would go through. The U.S. has been publicly warning for months that this purchase could attract provisions under the Countering America's Adversaries Through Sanctions Act (CAATSA), which authorises the U.S. government to impose sanctions on entities for "significant" defence transactions with Russia. The state-of-the-art S-400 deal, at a little over \$5 billion, would naturally qualify as "significant". The sanctioned entity would be cut off from all business in the U.S. and with U.S. companies.

Just before Mr. Modi left for his informal meeting with Mr. Putin in Sochi in May this year, a U.S. official warned in a media conference that the S-400 acquisition would



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attract CAATSA. The same message was conveyed in India by a visiting Congressional delegation in end-May. The India-U.S. 2+2 meeting (of Foreign and Defence Ministers) in September did not resolve this issue. Shortly thereafter, two weeks before Mr. Putin arrived in India, the U.S. State Department announced sanctions on a Chinese company that had imported the S-400 over eight months earlier, asserting that it was a signal to others engaged with the Russian defence sector.

The contract for the S-400 was signed at the Delhi summit in a low-key manner. Neither leader mentioned it in his press statement and it was not signed in their presence. The one sentence announcement was in paragraph 45 of a rambling 68-paragraph Joint Statement. Mr. Modi did not mention defence cooperation in his press statement, though it has been the centrepiece of India-Russia relations over decades. There was no mention also of other defence projects under discussion; their consideration may have been deferred to the meeting of the India-Russian Inter-Governmental Commission on Military-Technical Cooperation, in December.

Though understated, it was a clear assertion of autonomy of Indian decision-making on Russia. Other signals conveyed the same message. Mr. Modi invited his Rus-

sian guest to a tête-à-tête over dinner, which lasted over three hours. They displayed the warm chemistry that was evident in their Sochi meeting. Mr. Modi's press statement paid fulsome tribute to Mr. Putin's personal contribution to the "unique" India-Russia relations, said India attached "top priority" to these relations, which would scale new heights. Such utterances would normally be considered usual summit hyperbole, but spoken in this context of external scrutiny, they are significant.

Outlook on neighbourhood

There is a general perception that Indian and Russian perspectives today differ on key issues in India's neighbourhood — Pakistan, Afghanistan and China — and on India's strategic linkages with the U.S., including on the Indo-Pacific. These issues would certainly have figured in the various meetings. In the public domain, we have only Mr. Modi's bland assertion that there were detailed discussions on "all international issues of mutual interest", specifically citing "common interests" on terrorism, Afghanistan and the Indo-Pacific. On Pakistan, one might note the nuance that the Joint Statement mentions cross-border terrorism, which some earlier Joint Statements did not. On Afghanistan, India expressed support for the "Moscow format", in which Russia

involves regional countries and major powers in an effort to draw the Taliban into negotiations with the Afghan leadership. The U.S. has boycotted this initiative, but has initiated its own dialogue with the Taliban. A U.S. Special Representative for Afghanistan is now touring Afghanistan, Pakistan, the United Arab Emirates, Qatar, and Saudi Arabia to generate help in bringing the Taliban to the negotiating table. India is not on his itinerary.

The Joint Statement has the usual laundry list of priority areas of cooperation, including infrastructure, engineering, natural resources, space and technology. It expresses the commitment to raise trade and investment to a level more commensurate with the potential. There has been some recent action in this direction, with Commerce and Industry Minister Suresh Prabhu leading business delegations to major Russian economic forums. Mr. Modi and Mr. Putin also addressed a well-attended business summit in Delhi.

Business despite sanctions

There are obvious opportunities for cooperation between Russia, which is natural resources-rich, and India, which is resource-hungry. Whether they are exploited would depend on how well India's economic ministries, banks and business community understand the ground realities of doing business with Russia. Even before CAATSA, there was confusion in India about sanctions against Russia. The U.S. and European sanctions between 2014 and 2016 are sector- and currency-specific. They affect entities operating in Europe and the U.S., and transactions in euro or dollar currencies. They are not applicable to other

geographies or currencies. This remains the case, even post-CAATSA, for all sectors other than defence and energy. Therefore, with proper structuring of business deals, trade and investment exchanges with Russia are possible, and without losing business with Europe and America. This explains how the economic engagement of major European countries with Russia has actually grown in 2017 and 2018, despite the sanctions. European and American corporate lawyers with expertise on sanctions have enabled this. Indian business needs to tap into this expertise.

The threat to India-Russia defence cooperation extends well beyond the suspense over the S-400 deal. Every potential India-Russia defence deal could be subjected to a determination on applicability of sanctions. Actually imposing sanctions would hurt U.S. defence sales to India, defeating one of the principal objectives of the legislation. The effort would likely be to achieve desired results with the threat of sanctions.

Given the political dynamics in the U.S. today, a systemic solution to this problem is not evident. However, it has to be on the India-U.S. dialogue agenda. The India-U.S. strategic partnership is based on a strong mutuality of interests, but it was not intended to have the exclusivity of an alliance. India should not have to choose between one strategic partnership and another. The India-Russia dialogue should not get inextricably entangled in the India-U.S. dialogue.

P.S. Raghavan, a former diplomat, is Convenor of the National Security Advisory Board. The views expressed are personal

Another warning on warming

The new IPCC report makes it clear that the path forward offers no simple or easy solutions



SUJATHA BYRAVAN

The Intergovernmental Panel on Climate Change (IPCC) has just released a special report on global warming of 1.5°C over pre-industrial temperatures. Produced speedily, it provides details on how the global response to climate change needs to be strengthened within the broader context of sustainable development and continuing efforts to eradicate poverty. The impacts of 1.5°C of warming and the possible development pathways by which the world could get there are its main focus.

It was in 2015, at the Paris climate conference, that the global community made a pact to pursue efforts to limit warming to within 1.5°C — half a degree below the previous target of 2°C. With the increase in extreme events and the very survival of small islands at stake, the lower limit was greeted then with surprise and enthusiasm.

For most people, the difference between 1.5°C and 2°C may seem trivial when daily temperatures fluctuate much more widely. However, the reference here is to global

average temperatures. Different regions of the earth will warm at different rates. For instance, the Arctic is already experiencing warming that is many times higher than the global average.

If nations do not mount a strenuous response against climate change, average global temperatures, which have already crossed 1°C, are likely to cross the 1.5°C mark around 2040. The window of opportunity to take action is very small and closing fast.

Ripple effects

Half a degree of warming makes a world of difference to many species whose chance of survival is significantly reduced at the higher temperature. At 1.5°C warming, ocean acidification will be reduced (compared to 2°C warming), with better prospects for marine ecosystems. There will likely be less intense and frequent hurricanes, not as intense droughts and heat waves with smaller effects on crops, and the reduced likelihood of an ice-free Arctic in summers.

Studies conservatively estimate sea levels to rise on average by about 50 cm by 2100 in a 2°C warmer world, 10 cm more than for 1.5°C warming. But beyond 2100, the overall assurance of much higher sea level rise is greater in a 2°C world. The risks to food security, health, fresh water, human security, livelihoods and economic growth are already on the

rise and will be worse in a 2°C world. The number of people exposed to the complex and compounded risks from warming will also increase and the poorest — mostly in Asia and Africa — will suffer the worst impacts. Adaptation, or the changes required to withstand the temperature rise, will also be lower at the lower temperature limit.

The danger of crossing tipping points, or thresholds beyond which the earth's systems are no longer able to stabilise, becomes higher with more warming. Such tipping points include melting of Greenland ice, collapse of Antarctic glaciers (which would lead to several metres of sea level rise), destruction of Amazon forests, melting of all the permafrost and so on.

Pathways and polices

The IPCC report identifies two main strategies. The first stabilises global temperature around the 1.5°C mark with limited overshoot and the second permits temperatures to exceed 1.5°C temporarily before coming back down. The consequences of the temporary overshoot would cause worse impacts than the first approach. To limit warming to around 1.5°C with no or limited overshoot, global net carbon dioxide (CO₂) emissions need to decline by about 45% from 2010 levels by 2030 and reach net zero around mid-century. In com-



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parison, to limit warming to just below 2°C, the reductions needed are about 20% by 2030 and reach net zero around 2075.

There are several mitigation pathways illustrated to achieve these reductions and all of them incorporate different levels of CO₂ removal. Emissions need to peak early within the next decade or so, and then drop. These different methods will themselves involve various risks, costs and trade-offs. But there are also many synergies between achieving mitigation targets and fulfilling Sustainable Development Goals. To stay below 1.5°C, the transitions required by energy systems and human societies, in land use, transport, and infrastructure, would have to be rapid and on an unprecedented scale with deep emission reductions.

How is the remaining carbon budget, that is the room available in the atmosphere to safely contain more CO₂, going to be shared among different countries? This is a difficult question to address, gi-

ven the contentious nature of the negotiations. It has been reported, for instance, that the U.S. has been obstructionist in the deliberations in Incheon, South Korea, at the recent meeting to determine the final text of the report. The U.S. also reiterated its intent to pull out of the Paris Agreement.

Contributions from the U.S. and other rich countries to the Green Climate Fund and other funding mechanisms for the purpose of mitigation and adaptation are vital even to reach the goals of the Nationally Determined Contributions (NDCs) — commitments that each country made prior to the Paris conference. Even if all the NDCs are implemented, the world is expected to warm by over 3°C.

Disputes over the implementation of the Paris Agreement at numerous meetings depict the deep divides among rich countries, emerging economies and least developed countries. This special report poses options for the global community of nations, which they will have to contend with in Poland — the next Conference of the Parties. Each will have to decide whether to play politics on a global scale for one's own interests or to collaborate to protect the world and its ecosystems as a whole. The path forward offers no simple or easy solutions.

Sujatha Byravan is a scientist who studies science, technology and policy

LETTERS TO THE EDITOR

Letters emailed to letters@thehindu.co.in must carry the full postal address and the full name or the name with initials.

Westphalian moment

In the article, "Indian democracy's Westphalian moment" ((Editorial page, October 9), the writer says, "Without the regional parties, the Indian National Congress cannot take on the BJP." The question that arises is, why has such an unendurable state of affairs come about for the Congress?

If the grand old party is to regain its lost mojo, it must rectify those blunders which have led to it being crushed. The pre-poll alliance the Congress is planning is one of sheer opportunism and expedience.

MURARI MOHAN,
Kolkata

■ Taking into account the extreme ideological gap between the Congress and regional parties, a pre-poll alliance is far-fetched. Even while forging pre-poll alliances, wherever possible,

the viable option would be to have an electoral understanding instead. The Congress can no longer just rely on a vague 'secularist' call as the BJP has succeeded in trumping its 'halo effect'. The Congress needs to come up with a vision on its economic, social and political policies so as to win over the section of the electorate now disappointed with the NDA regime.

SWAROOP PAUL M.,
Hyderabad

■ The problem with the Congress party is also the same reason that affected the Holy Roman Empire — and the example the writer has chosen. Look at the NDA, which is a well-knit, well-disciplined alliance. It has never faced any serious defections, and, at the same time, provides an opportunity for regional aspirations. This can be exemplified by how politics has changed in the Northeast

— earlier a cradle of separatism, terrorism and non-politicism. When trying to whitewash the glorious past of the Congress, one should not forget the black days of democracy under its reign, the looting of public wealth, and its decline with it now being at the mercy of regional parties.

ARJUN AJAYAKUMAR,
Thiruvananthapuram

■ How can one use terms such as "majoritarianism" for the BJP and "democracy" only for the Congress? What equates only the Congress party to democracy? *The Hindu* should stop being a platform for anti-government articles.

DESHMUKH P.P.,
Osmanabad, Maharashtra

Sabarimala verdict

A point about the virtual revolt by devotees of Ayyappa that is taking place in many parts of Kerala opposing the recent verdict

by the Supreme Court that now permits all women to undertake a pilgrimage to the hallowed shrine. The revolt is not needed at all if women by themselves decide to abide by centuries-old traditions. There is no compulsion to make the pilgrimage. Is there any stronger law than one's own conscience?

V. GIRIJALAKSHMI,
Coimbatore

True empowerment

Terms and phrases such as "lame person", "handicapped person", "disabled person" and "crippled child" are now a thing of the past (OpEd page, "Time to avoid phrases that mock disabilities", October 9). More employment opportunities and helping the differently-abled in public spaces will be the real contributions by society and the government.

S. ARJUN PRASANNA,
Bengaluru

■ As if the multiple challenges faced by India's physically disabled people were not enough, they are constantly exposed to inappropriate semantics that use metaphors laced with derisive undertones. Most pernicious is the indiscriminate and insensitive use of the word "cancer" to denote anything that is in a state of decay. It can be argued that most people who use phrases that mock the disabled have no intention of disrespecting or hurting feelings. While this may be true, an empathetic, inclusive, and mature society cannot hide behind custom and usage to justify undesirable practices. True, we cannot create a language police but we can reduce the use of disabled-unfriendly expressions in English as well as vernacular languages by creating more awareness in society.

V.N. MUKUNDARAJAN,
Thiruvananthapuram

■ Surely it would not be difficult for teachers, parents and journalists alike to learn to think differently, and thereafter encourage children, students and readers to revisit and revise language usage. We need to be sensitive about, and conscious, of all kinds of abilities.

R. SWARNALATHA,
Chennai

Gir lions

Are the Gir lions facing extinction from viruses due to a compromised immune system? Large-scale conservation strategies have always been carried out with extreme caution to prevent inbreeding that could also make an animal more susceptible to infections in the wild. In the case of Gir, there needs to be adequate research.

ADITHYA SARMA,
Groningen, The Netherlands

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