# Cost of climate change in India

## World Bank report estimates how changes in temperature and monsoon patterns will affect GDP and living standards in India and region. What are the findings, and what can policymakers make of them?

**SOWMIYA ASHOK**
NEW DELHI, JUNE 28

A WORLD Bank report has found that rising temperatures and changing monsoon rainfall patterns from climate change could cost India 2.8% of GDP, and depress the living standards of nearly half the country's population by 2050. The report, 'South Asia's Hotspots: The Impact of Temperature and Precipitation Changes on Living Standards', has been authored by World Bank lead economist Muthukumara Mani, along with economists Sushenjit Bandyopadhyay, Shun Chonabayashi and Anil Markandya and research scientist Thomas Mosier.

**What does the report look at?**

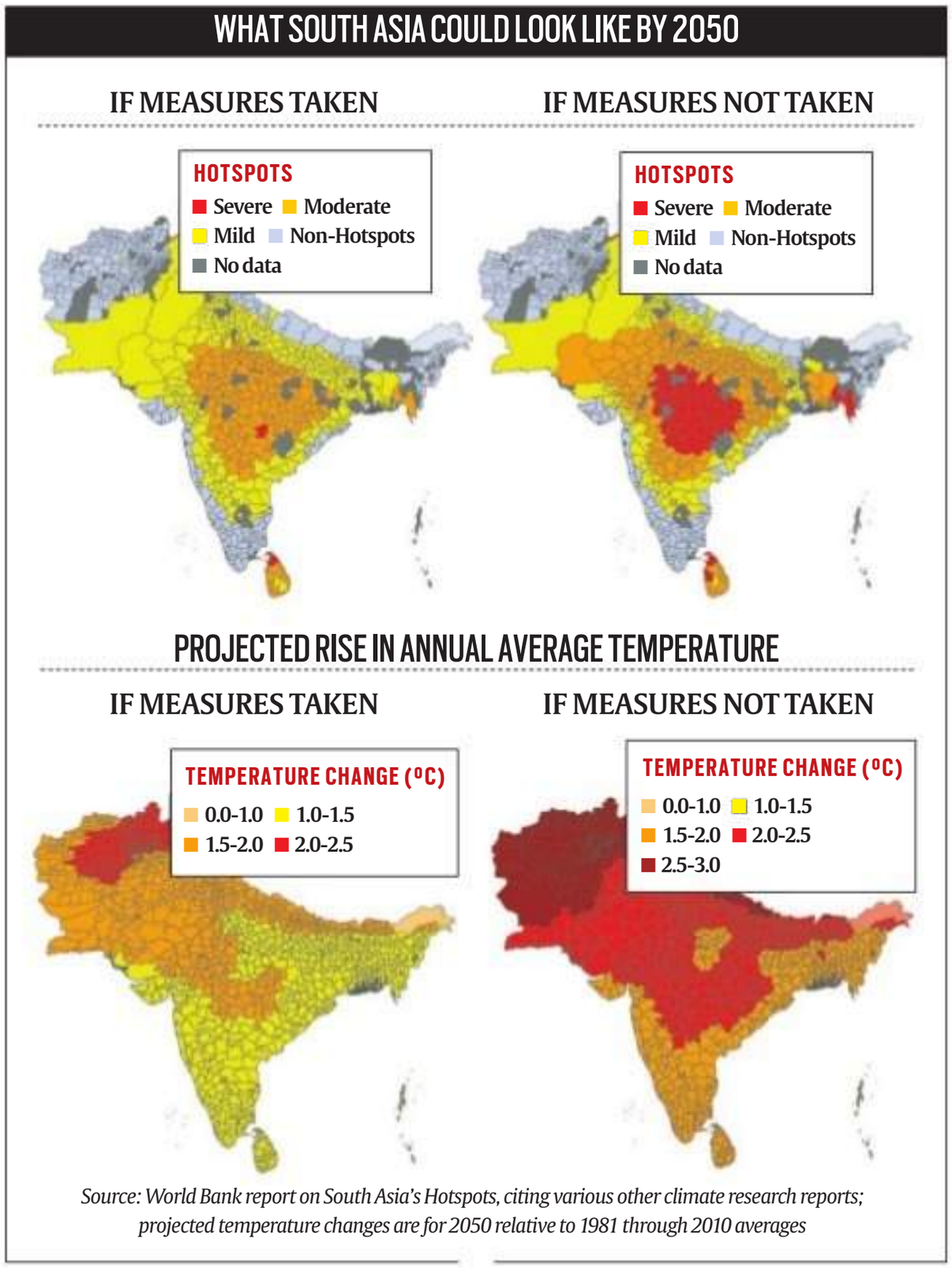
It looks at six countries in South Asia and how projected changes in temperature and precipitation will affect living standards in these countries. Using annual household consumption as a proxy for living standards, the report identifies "hotspots" — districts where these changes will have a notable effect on living standards.

**What has it found?**

For the region, it has found that India, Bangladesh, Pakistan and Sri Lanka will be adversely affected by these changes, while Afghanistan and Nepal will benefit as they are relatively cold. Based on the rise in average temperatures over the past six decades and the projected rise, the report predicts more warming inland and less warming in coastal areas beyond 2050.

For India, it has projected that living conditions in Chhattisgarh and Madhya Pradesh will decline by more than 9%, followed by Rajasthan, Uttar Pradesh and Maharashtra. Of the top 10 most affected hotspot districts, 7 (Chandrapur, Bhandara, Gondiya, Wardha, Nagpur, Raj Nandgaon, Durg) are in Vidarbha, and the remaining 3 in Chhattisgarh and MP.

"Approximately 600 million people in India today live in locations that would become moderate or severe hotspots by 2050 under the carbon-intensive scenario," the report states. For the overall region, it states: "Almost half of South Asia's population now lives in areas that are projected to become moderate to severe hotspots under the carbon-intensive scenario."




*Source: World Bank report on South Asia's Hotspots, citing various other climate research reports; projected temperature changes are for 2050 relative to 1981 through 2010 averages*

**What is carbon-intensive?**

The report looks at two scenarios: climate-sensitive and carbon-intensive. Climate-sensitive represents a future "in which some collective action is taken to limit greenhouse gas emissions and global annual average temperatures increase 2.4°C by 2100 relative to pre-industrial levels." "A situation in which the Paris Agreement is implemented," says lead author Mani.

Carbon-intensive, on the other hand, represents a future in which no actions are taken to reduce emissions and global annual average temperatures increase 4.3°C by 2100 relative to pre-industrial levels.

**How will such scenarios play out in India?**

If no measures are taken, average temperatures in India are predicted to increase by 1.5-3°C by 2050. If preventive measures are taken along the lines of the Paris Agreement, India's average annual temperatures are expected to rise by 1-2°C by 2050, the World Bank report states.

**How does it arrive at these findings?**

"It overlays climate data with extensive household level data," says Mani, to explain how "changes in average weather will affect living standards". To predict changes in average weather at local level, it uses weather data from global climate models. For living standards, it uses annual household consumption expenditure as a proxy, with household characteristics from country-specific household survey as control variables. All this involves a few limitations: the report does not look at aspects beyond those factors captured by GDP calculations, while the data on climate action, extrapolated from the Paris Agreement, does not capture micro-level issues in great depth.

**How helpful are the findings?**

They give an insight into which places will become potential hotspots in 2050. "For instance, Cox's Bazaar in Bangladesh, which has been in the news for the influx of Rohingya refugees... It is not just a climate hotspot but also a melting social hotspot... In India, the Vidarbha region, which has been in the news for agricultural prices, is something that comes out...," Mani says. The report states the information will be useful for designing a social welfare programme at the national level, and for determining which investments would be most needed in each community, "accounting for local socioeconomic characteristics and climate-related risks".

# Bound together by GST

## One year on, GST regime has advanced cooperative federalism, helped unify India economically

SUSHIL KUMAR MODI

BEFORE THE ONSET of the GST, the indirect tax scene in India was fairly chaotic; it was "one nation, many taxes". The pre-GST indirect tax scenario mimicked the political scenario just after Independence before the consolidation of the Indian Union by Sardar Patel. This diversity in tax practices across the country was perhaps the biggest stumbling block in the economic unification of India.

A common and uniform indirect tax code across the country with 37 different tax jurisdictions, 16 different tax levies and 15 kinds of cesses/surcharges under eight different constitutional entries called for a grand unification across legal frameworks, IT systems and tax administration systems.

The first big milestone was the amendment of the Constitution. The next big task was the preparation of a draft law and designing of the rules of business. Another challenging task was to create the appropriate IT infrastructure and network for integrating and bringing all the states on to a common platform and creating probably the biggest tax administration system in the world.

Inevitably, teething troubles began to emerge just one month into the introduction of the GST. The unifying features of the GST system and the unique features of the Indian GST led to some initial hiccups and difficulties in the implementation of, and compliance with, the new system in India. The GST Council rose to the occasion, met frequently and for long hours, to resolve the issues.

As a result of the endeavours of the Council, the GST is well and truly on the path of stabilisation. What is remarkable is that all decisions, ranging from those relating to relatively small issues like enlarging the scope of composition to complex decisions involving the shared jurisdiction of Central and state tax authorities, were taken with consensus; voting has never been resorted to in the Council. This is as much a reflection on the level of maturity of the states as the acumen of the Union finance minister.

Meanwhile, the agenda for further rationalisation and simplification marches on. At the structural level are issues like inclusion of petroleum in GST and extending GST net to real estate. I see neither of these happening in a hurry. Petroleum revenue is the only stable source of revenue for the states and the Centre in this transition period and it would be difficult to get the states on board in this initial period. Besides, merely getting them into the GST would probably not ease the burden on their prices, for the states and Centre too would surely add a top-up levy for revenue purposes and for discouraging consumption of these demerit goods.

Even in the midst of this momentous transition, the revenue scene is encouraging. A total of Rs 7.41 lakh crore (monthly average of Rs 92,581 crore) was collected during the first eight months (till March 2018) under the GST. On this basis, the annualised collection works out to Rs 11.11 lakh crore which represent a CAGR slightly in excess of 14 per cent over the total collection from subsumed taxes in 2015-16. While the states have been guaranteed a 14 per cent year-on-year growth, the Centre, unfortunately, has no such comfort.

It should be borne in mind that this healthy growth has been achieved despite the absence of a mechanism to validate credit claims and there being no e-way bills to monitor the movement of goods; even though the e-way bill system introduced in April 2018 is in an experimental stage, the revenue for the last month has exceeded Rs 94,000 crore. We can expect substantial revenue gains once a mechanism to auto-verify credit claims is introduced and the fledgling e-way bill system stabilises.

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Real estate, too, is a relatively secure and stable source of revenue left with the states in the immediate post-GST era and the states would be wary of the possible fallout of extending GST to the sector, even though I feel that tracking of the value chain in real estate would not only clean up the sector but would also introduce much needed transparency in real estate deals.

At the procedural level, the need of the hour is to devise a simplified return and an equally simplified return filing process. The process should be such as to elicit the minimum required information in a routine manner while inflicting minimum or no pain; the well-known adage of the bee collecting honey while inflicting minimum pain to the flowers is no less relevant here.

Another major challenge would be to devise a mechanism for early settlement of the IGST being collected. The settlements are delayed primarily because of the deferment of the GSTR-2 statements and we have to find a way to elicit the information required for expediting settlement in the absence of the said statement.

In this context, it must be borne in mind that consuming states like Bihar were expected to be the biggest beneficiaries of the destination-based GST; instead, they are grappling with shortfalls and one of the biggest reasons for this is the accumulation of a huge balance on the IGST account. Early, regular and timely settlement of the IGST will not only help provide to the states what is due to them in a timely manner, it will also ease the fiscal burden on the Centre.

The GST has helped us transition from "one nation, many taxes" to "one nation, one tax". It has been a wonderful lesson in cooperative federalism, one which is in the process of transforming India into a common market by bringing about economic integration in an already integrated polity.

*The writer is deputy chief minister of Bihar*

# THE MORE THINGS CHANGE

## *Economic priorities set in Planning Commission in 1970s-80s continue*

YOGINDER K ALAGH

JAIRAM RAMESH'S *INTERTWINED Lives: P N Haksar and Indira Gandhi* is an important book. It is a record of the events of the 1970s and 1980s, much like the books by Frank Moraes, Abdul Kalam Azad and Nehru's letters were sources of the history of the decades before Independence.

Haksar's stint in the Planning Commission, for instance, holds fascinating accounts of events in the Seventies. His letter to Moraji Desai when he insisted on resigning (even though Desai wanted him to stay on), "because that would amount to defection", had an interesting section in it. Haksar, according to Ramesh, wrote that the problems for the next phase he was leaving included "more disaggregated agricultural planning, a sharper focus on 100 most backward districts of the country, emphasis on better utilisation of land and water resources and above all, overriding priority to employment planning particularly small towns and rural areas."

On page 375, the author adds that "Many of these themes were to become essential features of development policy in years to come". Everything changes, nothing does. These were the priorities in later decades. We have abolished planning but these still dominate slogans of intentions. When the Niti Aayog brings out its Seven-Year Plan, they will all be there again.

How did these priorities emerge? Ramesh gives credit to Haksar in bringing to the Planning Commission younger economists, "Yoginder Alagh, Vijay Kelkar and Nitin Desai".

So we wrote to every collector in India and set up an information base. We found out what the actual yield was with and without inputs from farm data and used that to plan for inputs. The country responded. We stopped concessional imports. But we wanted more and that's what Haksar was telling Morarji bhai. That's what the better use of land and water was all about. Complete irrigation projects. Use your groundwater well. Not in terms of slogans but actual projects and funds for them.

In fact, all three were brought in by D P Dhar, but he passed away soon after and it is true that Haksar would call them his Three Musketeers, both at home and with international guests and at events abroad. How did these priorities emerge? Vijay and Nitin were to join the government but I was always clear that I would, after some experience, go back to my teaching and research lair in Ahmedabad. When I joined the Planning Commission, heading its powerful Perspective Planning Division, I had to pay a courtesy call to the chairman, Indira Gandhi.

It was getting dark early in the evening on that cold December night in Delhi and she looked at me and remarked that I was young. I was then holding the job the iconic Pitamber Pant did and he was her friend. She was an epitome of quiet authority and I thought, time to go back. But she was very graceful and said: "Sit down, you have all the skills needed for your job. Your main job will be to plan for self-reliance in food. We are humiliated every time we have to ask for grain. You understand what I am saying?" I muttered, "yes, ma'am. I have not worked on Agriculture but I will do my best."

That's how it started. I found out that the Planning Commission was setting targets for food without any detailed data. So we wrote to every collector in India and set up an information base. We found out what the actual yield was with and without inputs from farm data and used that to plan for inputs. The country responded. We stopped concessional imports.

But we wanted more and that's what Haksar was telling Morarji *bhai*. That's what the better use of land and water was all about. Complete irrigation projects. Use your groundwater well. Not in terms of slogans but actual projects and funds for them. So also for seeds and inputs. The "hundred districts" came from that information base. Indira Gandhi was to announce from the Red Fort in August 1975 that the Planning Commission says that in a hundred districts, agriculture is going down. For some reason, the hundred districts remain in our historical consciousness. Later, a hundred districts were declared backward.

Once we did all this, the NSSO had started collecting person-day employment statistics and we built models around that and showed that small farms and small towns could be the turning point in generating jobs. We published all this. Jeffrey Sachs was to project the Indian strategy then as the one Sahelian Africa is to follow and the World Bank was to develop its one dollar a day poverty line from the Indian Nutrition Calorie Line and our Basic Needs plans. Rajiv Gandhi was meant to push the reforms but he carried the mantle and all this was woven into his panchayats and agro-climatic plans. After him, they denounce it in the press but repeat in their councils and policy Plans. Nudge nudge, wink wink.

*The writer, a former Union minister, is an economist*

# Why UGC must be scrapped

## It has not kept pace with higher education's new challenges

ourtake

The Union ministry of human resource development (MHRD) on Wednesday released a draft Act to replace the University Grants Commission (UGC) with a new regulator for the critical higher education sector. The regulator — Higher Education Commission of India — will focus on the quality of institutions. The job of financial grant distribution, earlier with the commission, will now come under the ministry's purview. This decision of transferring financial powers to the MHRD has upset some. On Thursday, the Delhi University Teachers' Association said it will lead to increased direct interference by the State. While the apprehension could be true, presupposing such an action would be incorrect.

The plan to scrap the UGC has been in the works for several years now, necessitated by the fact that India's higher education landscape has changed phenomenally from the time the UGC was set up in 1956. At the time, there were only 20 universities and 500 colleges with 0.21 million students. Today, there are nearly 28 million students in 726 universities and 38,000 colleges. This growth should be enough reason for the overhaul, so that the UGC can respond effectively to the new ground realities and challenges, and also ensure that citizens are skilled enough to respond to the new market requirements. It has also been seen that several states have allowed the setting up of private universities, but many of them don't stick to standards laid down for higher education. The UGC, according to the government, failed to keep an eye on these issues because its entire function is geared towards the disbursal of grants rather than regulation.

Over the years, several panels have also talked about the need for a new regulator. It's good that the new regulator's singular focus will be on quality. It must be staffed with progressive thinkers who are able to chart out a path that is in keeping with our new realities. The body should be strict in terms of regulation of institutions that do not adhere to established standards. The ministry's job is to back with funding the ideas and recommendations of the new body.

# Aim higher

## Replacing UGC is just the starting point

The government's proposal to replace the University Grants Commission (UGC) with a Higher Education Commission indicates a realistic appraisal of the grossly inadequate regulatory structure for higher education that has resulted in a visible deterioration in standards. This draft legislation appears to be part of a stated overarching strategy towards greater autonomy in institutes of higher learning, including the premier Indian Institutes of Technology and Indian Institutes of Management. It is also of a piece with the proposal in March this year to grant some sort of conditional autonomy to 52 universities and eight colleges. The broad thrust of the Higher Education Commission legislation is to separate governance from funding. The proposed commission, the outlines of the Act suggest, will focus on academic issues, such as course curricula, faculty standards and outcomes, leaving "monetary matters" to the ministry of human resource development.

On paper, this sounds sensible, since the fund-granting process of the UGC and the technical education regulator — All India Council for Technical Education (AICTE) — has been plagued with allegations of corruption and inefficiency. In reality, the setting up of a higher education commission raises many questions. Setting minimum standards such as faculty qualifications and infrastructure will be only one part of the commission's mandate. Course curricula are the bigger responsibility and it is here that concerns arise about the independence of the commission as a regulator of higher education standards. How genuine will this be? Though institutional autonomy may be written into the legislation, experience with other sector regulators does not strengthen confidence on this score. The risk of political interference is, and remains, the biggest challenge. The propensity for such interference remains high since the financial dispensation will, under the new scheme, be directly under government control. The experience with the IITs and IIMs is a good pointer in this regard.

Over the past two years, both sets of institutions have been granted a greater degree of autonomy in terms of board appointments, fee structures and admissions. But such autonomy went only so far; in January, the government proposed a new law establishing a Council of Institutes headed by the HRD minister. The remit of this council was broad-ranging as it was ominous: it would review the performance of the IIMs, recommend scholarships for backward castes and such other functions referred to it by the Centre. The thinking behind this move, which has been vociferously opposed by the IIM governing bodies, is to make the IIMs "centres of excellence" that will award degrees instead of diplomas. Since the mainstream IIMs have an established global reputation, it is difficult to understand how the establishment of this "council" will help. The fact is that the creation of a higher education commission offers a tremendous opportunity for the government to take a giant leap towards fixing a broken system at a time when the quality of human capital is increasingly determining the success of nations. The United States of America is perceived as a declining power today but it owes its persisting global dominance to a robust and extraordinarily independent higher education system that has spawned an ecosystem of innovation and higher research that authoritarian regimes such as China, which is pouring funds into education, struggle to emulate. On this one parameter, India will do better to look West rather than East.

# Deferment of Indo-US 2+2

## Turbulence in ties or inconvenient scheduling?

IT was a strange way to announce the postponement of the first-ever simultaneous meeting of the Indian and American defence and external affairs ministers. US Secretary of State Mike Pompeo broke the news to Foreign Minister Sushma Swaraj after UN Permanent Representative (UNPR) Nikki Haley touched down in New Delhi to soothe feathers ruffled by a burgeoning trade dispute and attempts to circumscribe New Delhi's freedom to buy oil and weapons from Iran and Russia, respectively. The first postponement in April was understandable — Trump had recently fired his Secretary of State and his replacement was going through confirmation hearings before the US Congress. The latest deferment lends itself to many interpretations and — since Pompeo did not elaborate — to negative inferences about the state of play of US-India relations.

Nothing much could be deduced from the public statements by Nikki Haley who largely made boiler plate announcements that no one can find fault with. The 2+2 format, borrowed from the Japanese diplomatic blue book, is supposed to speed up strategic and security partnerships. But in actual practice the focus is narrower: all the 2+2 formats currently in vogue are aimed at containing China or Russia or both. And PM Modi crossed a Rubicon by parleying with Presidents of both these countries in settings that lend themselves to elaborate deal making and clearing of the air.

The US would have rightly sensed that India will be hard placed to accommodate its security and defence requirements after it asked India for a complete ban on Iranian oil by November 4 and threatened its contracts for Russian military hardware. Both directives are anathema to India because of its long-standing policy of not putting all its energy and military eggs in a single basket. Trade disputes and Indian immigration woes are the other irritants. In this stalemate, both sides need sustained, creative and energetic diplomacy that gives India the freedom to pick its partners. The nature of Indo-US ties does not lend itself to permanent estrangement. But the moot question is whether a distracted and depleted US diplomacy is up to the task.

# The deepening disconnect

## Postponement of the 2+2 dialogue has come amid growing India-U.S. estrangement in South Asia

SUHASINI HAIDAR

If there were any doubts about a 'disconnect' between New Delhi and Washington in the past few months, the U.S.'s decision to put off the first '2+2' dialogue with India should put them to rest. The 2+2, as the enhanced engagement between the Ministers of Foreign Affairs and Defence is called, was an outcome of Prime Minister Narendra Modi and U.S. President Donald Trump's first meeting last June in Washington. Exactly a year later, it is still to take off.

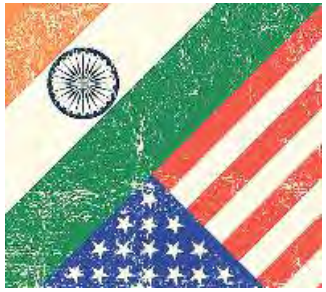
### Differing on many fronts

If the optics are bad, the messaging is worse. Since January, the U.S.'s Countering America's Adversaries through Sanctions Act against those conducting business with Russia and Iran, as well as its decision to walk out of the Iran nuclear deal have come right up against India's interests. India has, in turn, tightened its engagement with Russia, China and Iran, with Prime Minister Modi advocating a course of "strategic autonomy". On bilateral trade, hardly a week goes by without the U.S. and India firing one salvo or another. And on their strategic relationship, upgraded to a 'major defence partnership' only recently, the two governments have failed to make progress on signing foundational agreements, which in turn has held up talks on defence procurement and technology transfers. Simply put, seldom in the past two decades since India and the U.S. rebooted ties have the two sides differed so publicly on so many fronts at the same time.

Unfortunately, one of the areas they had made good progress on, the U.S.'s South Asia policy, also appears to be in trouble. According to the policy announced about ten months ago, India was to be central to the U.S.'s efforts in Afghanistan while Pakistan would be 'put on notice' for its support to terror groups, including those that target India. The year began with Mr. Trump's tweet lashing out at Pakistan, followed by suspension of U.S. military aid. The U.S. also sought to "greylist" Pakistan at the Financial Action Task Force on terror financing. However, there are enough indications that Mr. Trump's South Asia policy is veering towards the U.S.'s Af-Pak policy of the past with the U.S. engaging Pakistan to help with Afghanistan, and India consigned a more supplementary role.

### Coordinated contacts

The first indicator of this shift is the increase in U.S.-Pakistan engagement, in conjunction with a rapid improvement in Pakistan-Afghanistan ties. In March, the then Pakistan Prime Minister, Shahid Abbasi, met U.S. Vice President Mike Pence in Washington, and a few weeks later Afghan President Ashraf Ghani and Mr. Abbasi finalised the seven-point Afghanistan-Pakistan Action Plan for Peace and Solidarity. In June, Mr. Pence spoke with caretaker Prime Minister Nasirul Mulk. Next, U.S. Secretary of State Mike Pompeo spoke with Pakistan Army Chief Qamar Javed Bajwa, who then travelled to Kabul just ahead of the surprise



GETTY IMAGES/ ISTOCK

Eid ceasefire between Afghan forces and the Taliban. During his visit to Kabul, General Bajwa also met the U.S. Commander for the Resolute Support Mission, General John Nicholson.

None of these appear to be coincidental, and together point to coordinated contacts between Washington, Kabul and Islamabad-Rawalpindi. Admitting as much in Washington, Mr. Trump's point person for the region, Lisa Curtis, said that the U.S. had formally requested Pakistan to help facilitate the three-day Eid ceasefire. Concurrently, the U.S. administration's language on Pakistan with Afghanistan has softened, and Ms. Curtis said this month that the U.S. sought to "understand Pakistan's own core security concerns and ensure that its (Pakistan's) interests are taken into account in any peace process."

While the U.S. State Department has called for Pakistan to act against all groups operating in its territory, including the Lashkar-e-Taiba (LeT) and Jaish-e-Mohammed (JeM), its own military actions have left many in Delhi bemused. To begin with, while the U.S. has carried out a number of drone strikes since Mr. Trump announced his new policy, the large bulk of them are on Afghan, not Pakistani, territory. According to the U.S.-based Bureau of Investigative Journalism, which tracks all reported strikes, American forces carried out more than 100 air and drone strikes in Afghanistan in 2017, and more than 40 till date in 2018. The corresponding figures for strikes in Pakistan are five and one, respectively.

### To Pakistan's advantage

What's more, among the most prominent "kills" were leaders of groups that Pakistan had called on the U.S. to target, most prominent of them being Tehreek-e-Taliban Pakistan chief Mullah Fazlullah. His killing in June is believed to be a direct trade-off for Pakistan's assistance in bringing Afghan Taliban leaders to agree to the ceasefire, the first time they have done so. In an article in *The New York Times* on Wednesday, Mr. Ghani expressed his gratitude for the ceasefire, and the ensuing, albeit short-lived, peace that saw ordinary Afghans and Taliban fighters greeting each other. Extending another offer for talks, he wrote: "I will sit and negotiate with the Taliban's leader, Mawlawi Haibatullah Akhundzada, anywhere he wants."

While the killing of terrorists anywhere as well as the cessation of hostilities must be welcomed by India, the contrast in terms of action it has demanded cannot be ignored. LeT chief Hafiz Saeed, the mastermind of the Mumbai 26/11 attacks, is now addressing political rallies in Lahore for parliamentary elections in which his son and son-in-law are candidates, and JeM chief Masood Azhar lives undisturbed in his Bahawalpur home. Last month, he issued threats against India during the Kashmir cease-ops.

### The Chabahar factor

Finally, there are India's regional concerns that stem from Mr. Trump's Iran policy, which has spurred new sanctions against all countries and companies doing business in Iran and imposed a November 4 deadline to reduce oil imports from Iran to "zero". Regardless of India's determination to go ahead with its dealings with Iran, the impact of American restrictions will be felt in Chabahar Port, once billed as India's gateway to Afghanistan, and a key component of its role in the U.S.'s South Asia policy. During the previous U.S. administration's sanctions regime, India was able to get a 'carve out' for its port project and the railway line to Afghanistan through Zahedan. But there is no indication that the Trump administration will offer any such exemptions. Besides, as India is made perforce to yield to the U.S. on cutting oil imports, the Iranian regime is likely to look with disfavour at India's engagement in Chabahar as well.

Clearly, none of these predicaments is new, and India has pulled the situation to its advantage in the past. The difference this time is that the India-U.S. dialogue is not as robust as before, while India's planned engagements with Russia Iran and China in the next few months may render bilateral ties yet more difficult. Rescheduling the 2+2 at the earliest opportunity, in the face of the high stakes involved for both New Delhi and Washington, is crucial.

*suhasini.h@thehindu.co.in*

ACT ONE

# Reducing plastic pollution

## A look at the 2016 Rules to treat and recycle plastic waste

JACOB KOSHY

The Plastic Waste Management Rules of 2016 are the sharpest prongs in India's legal arsenal against plastic. The most significant aspect of the Rules is that they strengthen the concept of 'extended producers responsibility' whereby plastics manufacturers and retail establishments that use plastic are legally bound to introduce a system of collecting back plastic waste. As an environmentally friendly alternative to plastic does not exist yet, and plastic is too ubiquitous and useful, the country has to move towards a regime where plastic waste is treated and recycled rather than engage in rhetoric about banning the product. The Rules lay down the procedure to do that.

The Rules direct that a plastic waste management fee be collected through pre-registration of the producers, importers of plastic carry bags/multilayered packaging and vendors selling the same, for establishing a waste management system.

Producers, importers and brand owners who introduce plastic carry bags, multilayered plastic sachets, pouches or packaging in the market within a period of six months from the date of publication of these Rules need to establish a system for collecting back the plastic waste generated due to their products.

The Rules envisage promoting the use of plastic waste for road construction, or energy recovery, or waste to oil, etc., and think up ways of gainfully utilising waste and addressing waste disposal.

The Rules also mandate an increase in the thickness of carry bags and plastic sheets from 40 to 50 micron. This would likely increase the cost of plastic bags and restrict vendors from giving away bags for free, thereby reducing waste.

Local bodies and gram panchayats are responsible for implementing and coordinating a waste management system. Retailers or street vendors who sell or provide commodities in plastic carry bags, or multilayered packaging, or plastic sheets or covers made of plastic sheets which are not manufactured, labelled or marked in accordance with these Rules will be fined, the Rules say.

The 2016 Rules laid out that carry bags be explicitly priced but this was deleted via an amendment earlier this year. This amendment also provides for a centralised registration system. The Rules also lay down that any mechanism for registration should be automated and should take into account ease of doing business for producers, recyclers and manufacturers.

The centralised registration system will be evolved by the Central Pollution Control Board for the registration of the producer/importer/brand owner.

# Target incomes, not prices

## Income support must be provided to at least the most vulnerable farmers

PUJA MEHRA

Our farm policy is so bad, the proverb 'you reap what you sow' isn't true any longer. A bumper crop is no different from a drought, for it too depresses farm incomes.

Good rains, excessive sowing and the bumper harvest last year produced gluts in the market that sent the prices of many crops, and therefore farm incomes, crashing. None of the economic tools available for protecting farm incomes – the price support scheme, the price stabilisation fund and the market intervention scheme – was employed to the best advantage. Quick and precise adjustments to the export and import rules could have arrested the price fall by diverting the excess supplies to overseas markets. But the changes required were not carried out in time. Instead, inflows of imports were allowed to go on, which worsened the price situation.

### The MSP issue

This year's Budget promised that the Minimum Support Prices (MSPs) would be at least 150% of production costs, a longstanding demand of farmers and recommendation of experts. Even if the market prices fall below the MSP, as they did for major kharif crops in 2017, the government will procure the produce on MSP. And if it does not procure, it will provide a mechanism to ensure payments, equal to the gap between the MSP and the market price, would reach farmers.

The intention of assuring 50% profit margin over the cost of production is to make farming remunerative. On the formula for calculating production costs for plugging into the MSP formula, farmer groups and the government are not as yet on the same page. But howsoever production costs are calculated, simply announcing higher MSPs will not raise farmer incomes. The system is not geared for scaling up procurement.

For several crops last year, the quantities procured were small portions of the total produce. Although MSPs are announced for more than 20 crops, noteworthy procurement is conducted for three: paddy, wheat and sugarcane (procurement by sugar mills, not the government, given cane must be crushed within a few hours of being cut, or it dries, impacting sugar recovery drastically).

Further, procurement frequently takes places at prices below the MSP, as is happening this year, according to reports. Finally, small and vulnerable farmers usually do not get paid MSPs at all, as they sell their produce to aggregators, not directly in mandis.

K. BHAGYA PRAKASH

In these circumstances, and given an imminent general election, the government is likely to take recourse to payments compensating for the difference between market prices and the MSP to appear farmer-friendly. In principle, it is only right and fair that the government pay reparations to farmers. The gluts, depressed market prices and mounting farmer losses are a direct consequence of the malfunction in agri-pricing policies.

But price differential payments, no matter what mechanism is used for calculating and distributing them, would be yet another example of economic policies that get drafted purely on political appeal, without full grasp of the underlying economic principle, and backfire badly.

### Demand-supply mismatch

A set of estimates of the price differential payments likely this year, premised on realistic assumptions, from agriculture economists led by Ashok Gulati projects that the MSP of paddy for the 2018-19 kharif season will have to be raised 11-14%, cotton 19-28%, and jowar 42-44%, if the MSP pricing formula of 1.5 times the cost is employed.

A rational response of farmers looking at this menu of MSPs would be to sow more jowar in the next season. The promise of profits is greatest for jowar. The policy will unwittingly lead to increased jowar production. There's no reason the demand for jowar would also rise. A demand-supply mismatch would be inevitable which would send the market prices for jowar way below the announced MSP, calling for significantly expanded jowar procurement at MSP.

The trouble is, pricing policies distort market prices and send the wrong signal to farmers on what to produce and how much. Our inept policy system fails to correct such situations, which then spiral out of control. But if the problem is volatile incomes, the solution must target incomes, not prices. Income support payments, paid on a per hectare basis through direct transfers, offer an administratively neater, economically far less distortionary and politically more attractive solution.

### The Telangana example

Telangana has announced such payments for farmers at the rate of ₹10,000/ha (₹4,000/acre) per season. The cost projections for scaling up this model to the national level, excluding the procurement of sugarcane, wheat and paddy, and non-MSP crops, are roughly as much as the estimated bill for the price differential payments. For total gross cropped area of 1,978 lakh ha, income support payments would add up to ₹1.97 lakh crore, which is equal to about a fifth of the total gross non-performing assets of the banking system in March this year. At ₹5,000/ha, the tab for income support would be about ₹98,500 crore.

The impression was that the farmers' long march to Mumbai a few months back forced urban India to reassess its position on the severity of the agrarian distress. But advantaged Indians have begun questioning the logic of fiscal support for farmers on the grounds that it is unfair to make the majority pay to keep afloat a high-cost, low productivity, income-tax exempt sector that contributes just 17-18% of the country's GDP. They forget that the agriculture sector engages more than 50% of the total workforce, and that agri-prices, and therefore farm incomes, are not free-market driven. They are kept artificially low, through use of pricing policy instruments, so that inflation does not erode the rest of the population's purchasing power.

The current farm crisis is purely because of policy failure. Fiscal space must be found for providing income support this year to the most vulnerable farmers at least. Over the longer term, there is no alternative to deep reforms.

*Puja Mehra is a Delhi-based journalist*

# Coaches and numbers

A new report about gangs stealing coaches from Ranchi is simply inaccurate. However, with multiple marshalling yards in Delhi, coaches could have got misplaced

## INFRA DIG

BIBEK DEBROY

Indian Railway (IR) coaches will look better, inside and outside. Thirty thousand ICF (Integral Coach Factory) coaches will be coloured beige and brown, the first being the Delhi-Pathankot Express (22429). No one pays much attention to the exterior, the livery, of rolling stock – locomotives, wagons and coaches. Understandably, passenger comfort is about the inside, not the outside. Many years ago, all coaches used to be dull maroon, the colour of rust. One still sees them here and there, on trains less than special. Then IR switched from vacuum brakes to air brakes, the latter being superior. ICF coaches with air brakes started to have blue livery. But note, ICF coaches are also less than special. Special trains are those with LHB coaches. So far as the livery of passenger coaches is concerned, there are three grades; (a) dull maroon/rust; (b) blue; and (c) special trains. Special trains, and this extends beyond Rajdhani/Shatabdi, have had many kinds of livery, deviating from the maroon/rust or blue hue. This makes them colourful and not subject to standardisation. There is no reason why that colour shouldn't include advertisements, outside and inside bogies. This is a means for increasing non-fare revenue. Indeed, the policy permits this. However, media rights are easier to sell if they are offered for the entire rake and not just individual coaches. Often, because of shortages, rakes are formed by jumbling coaches together, especially on less than special trains. They aren't fixed rakes and media rights are harder to sell then.

A maroon/rust coach is older than a blue coach. One can glean something about age from numbering of a coach too. But because numbering isn't standardised, this isn't precise. This may be a reason why people don't pay as much attention to numbering of coaches as they do to numbering of locomotives. Or perhaps people are simply more interested in locomotives. Depending on vintage, a coach will have four, five or six digits in its number. I suspect most will have at least five digits now. With a couple of caveats, the first two digits should indicate the year when the coach was built. The caveats are — it may not represent the year of manufacture, but may indicate the year it was transferred to the zone that owns the coach; it may not represent year of manufacture, but the year when the coach was rebuilt, if that happened. For instance, a coach from New Delhi-Dehradun Shatabdi Express is numbered 04901. In all probability, that coach was manufactured in 2004. What about 901? IR people will correct me. I think this indicates this was the 901st coach (of this type) received by the zone (in this case Northern Railway).

A bizarre news report appeared a few days ago. According to this, coaches from trains between New Delhi and Ranchi (Rajdhani, Sampark Kranti) have gone missing from the yard. Thieves can steal smaller items. How can thieves steal entire coaches without IR knowing it? What was RPF (Railway Protection Force) doing? The rake for 12826 Jharkhand Sampark Kranti Express is owned by South Eastern Railway (SER). The rake for 20839 Ranchi-New Delhi Rajdhani Express is also owned by SER. 12826 has ICF coaches and is not a fixed rake. 20839 has LHB coaches. But I suspect even this is not a fixed rake. It isn't one of the major Rajdhanis, where rakes are usually fixed. SER has four divisions, one of which is the Ranchi Division. (The others are Adra, Chakradharpur and Kharagpur). Since these coaches were not headed towards Santragachi for maintenance (that is SER's maintenance yard), they must have been with Ranchi Division, waiting to be fixed to 12826 or 20839. More specifically, out of Ranchi Division's major yards in Muri, Ranchi and Hatia, they must have been in the Ranchi yard itself. To rephrase the question, how can gangs steal coaches from a yard within Ranchi? This bizarre news report was simply inaccurate. No coaches had been stolen or lost. These are trains between New Delhi and Ranchi, SER at one end and Northern Railway (NR) at the other. Instead of being parked in SER's yards, the missing coaches were parked in NR's yards.

There are reverse trains too. For instance, there is the 20840 New Delhi-Ranchi Rajdhani, a rake owned by NR. Coaches from 20839 had been hooked on to 20840, intentionally or unintentionally. 12825/12826, from Ranchi to Anand Vihar and in the reverse direction, might have been a slightly different case. Both rakes are owned by SER and there is no question of NR appropriating coaches. With multiple marshalling yards in Delhi, coaches could have got misplaced. Nevertheless, there is a broader point that should still be made. That news about gangs stealing coaches from Ranchi appeared in a variety of places. I am not aware of this having been contradicted by IR — from Delhi, SER or Ranchi division — at least not formally and properly. Therefore, in popular perception, that bit of fake news registers an impression. PR and media management has never been IR's strong suit, though it has improved. For instance, the four-year-document-brought out by the Railways is excellent. The cover has Mahatma Gandhi descending from a train and the number of the coach is a four-digit 3985 (this is a painting by Shyam Sundar Acharya). The most famous image of Gandhiji descending from a train in India (not South Africa) is probably Motihari. Is that 3985 numbering correct? I have no idea.

ILLUSTRATION BY BINAY SINHA

*The author is chairman, Economic Advisory Council to the Prime Minister. Views are personal*

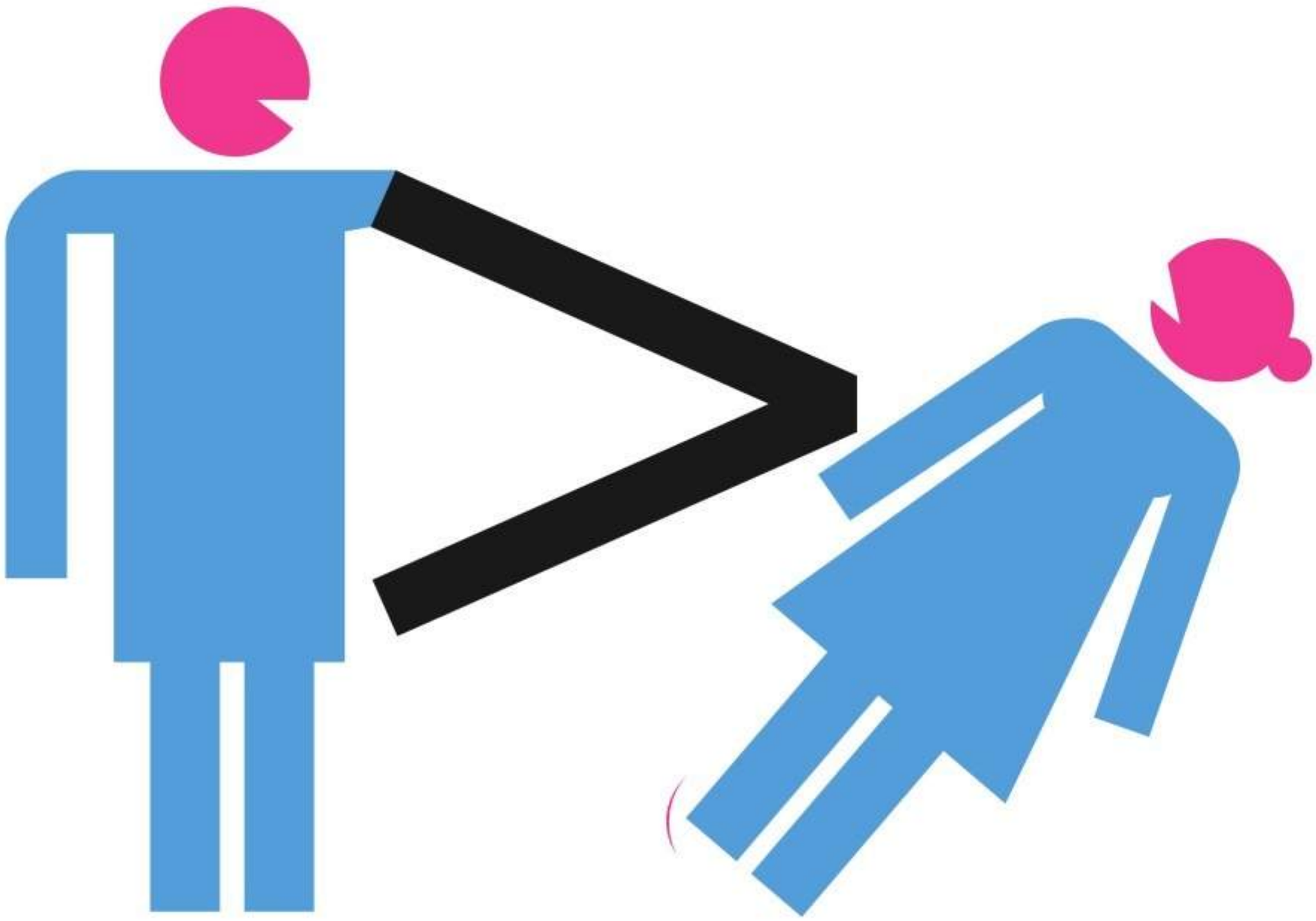
# Expenditure worries

## The fiscal road ahead could get bumpy

The first quarter of the current financial year is almost over, and the fiscal signs are not propitious. In the Union Budget for 2018-19, the government postponed the path of fiscal consolidation. The previous year's fiscal deficit target had been breached; this year's target was set at 3.3 per cent, as opposed to the 3 per cent recommended by the fiscal consolidation path. There are now very real reasons to worry about even this number. It is true that collections from indirect taxes following the introduction of the goods and services tax (GST) last year appear to have stabilised, providing some comfort on the revenue front, even though disinvestment receipts might be weakened by the failure to sell Air India. However, there are worries about the expenditure side that need to be addressed, and will certainly play on the mind of the Monetary Policy Committee of the Reserve Bank of India going forward.

Less than a year away from the next general election, populist pressures must be taken into consideration. In recent years, low crude oil prices have benefitted the government's finances in two ways. On the one hand, it has ensured that fuel and fertiliser subsidies do not play a spoiler in the Budget the way that they did during the second term of the United Progressive Alliance. At the same time, lower oil prices have also allowed the government to steadily raise taxes and cesses on petroleum products, which came in handy for bumping up revenue collection. As a consequence of rising global demand for oil and production cutbacks by oil producing countries, prices at the pump in India are now as high or higher than they were under the UPA. This has been used as a political point by the Opposition, putting pressure on the government to reduce such taxes, and, in turn, adversely affecting revenue collection.

Meanwhile, fertiliser subsidies will increase. Alleviating rural distress is a major political priority but, according to credit rating agency ICRA, an increase of a single dollar in the cost of natural gas raises the cost of production of urea by ₹1,800-2,000 per metric tonne (MT), while for every one rupee depreciation against US dollar, the same rises by ₹240 per MT at a constant gas price. The rupee is at historical lows against the dollar at the moment. It is likely that this will increase the subsidy bill by ₹90 billion. Arrears are also building up. Food subsidies and the cost of procurement of grain from farmers is also increasing. For wheat alone the minimum support price this season is ₹1,735 a quintal, ₹110 more than last year; already, wheat procurement this season is 14 per cent higher than last year and it may increase further. Concerned by farmer anger in states such as Uttar Pradesh and Maharashtra, the government has also announced special packages for sugar that it estimates will cost an additional ₹70 billion. This does not even take into account additional spending on new programmes such as the Ayushman Bharat health insurance scheme or a rise in off-balance sheet contingent liabilities — such as, for example, LIC being asked to pick up a stake in the struggling IDBI Bank. Altogether, the fiscal road ahead could get bumpy. Greater clarity and caution from the finance ministry is needed.



C R Sasikumar

# Where women are without fear

A new survey says India is the most dangerous country for women. It should be an occasion, not for defensiveness and denial, but for serious reflection and the joining of forces for women's equality

ZAKIA SOMAN

A RECENT SURVEY by Thomson Reuters Foundation found that India is the most dangerous country for women. In this poll, India ranks below Afghanistan, Syria, Somalia and Saudi Arabia on the six issues surveyed. These were healthcare, access to economic resources and discrimination, customary practices, sexual violence, non-sexual violence and human trafficking. The government has rejected the findings. In reality, these are issues that every woman has faced directly or indirectly. Despite all the talk about development and superpower dreams, we continue to deny our girls and women their share at home, in the community, in society and in public life.

We must accept that we are a patriarchal society with intrinsic structures of discrimination against girls and women. Over the centuries, we have evolved elaborate systems governing all spheres of life which discriminate on account of gender. Despite social reform movements and legal provisions, patriarchy rules the roost in our society and polity. The journey of a female is marked by discrimination from birth to death. Besides, patriarchal mindsets and norms are blatantly coming to the fore with the rise of the political right.

Discrimination against girls begins even before birth. The Census of 2011 highlights the sex ratio at 940 with states like Haryana at a shocking 877 girls to 1000 boys. The PCPNDT law has made little impact on the preference for a male child in our society and girls continue to be killed in the womb. Although primary education enrolment figures have improved, dropout of girl children remains an issue. Male privilege norms ensure that families prefer to spend on boys' education rather than on girls.

There is a high incidence of under-age girls being pushed into marriage owing to poverty, lack of income avenues and sometimes conservative mindsets. A large number of girls are caught up in the vicious cycle of no education, early marriage, early motherhood, domestic violence, drudgery of family and low paying work. The experience can be far worse for girls from Dalit, minority, tribal or poor backgrounds.

The state mechanism has failed to check the rising incidence of sexual violence in society. Our capital city has come to acquire a reputation on rape. There are regular instances of politically connected persons indulging in sexual violence which is condoned by the ruling class. The hypocrisy of the political class is evident in the way the women's reservation bill has been kept pending for decades.

In recent years, there have been instances where elected representatives and religious leaders have openly espoused patriarchal and misogynist views. An elected representative in UP exhorted Hindu women to give birth to more number of children to counter the Muslim population growth. Another Hindutva leader in that state suggested that Muslim women can overcome the issue of triple talaq by becoming Hindu. Such utterances undermine the Muslim women's movement for justice and strengthen the conservatives in the community.

There is a clear view in the present cabinet against a law on marital rape. This can be owing to the political ideology that considers marriage a sacred bond or "janam janam ka bandhan". The close relationship with religious figures being cultivated by different state institutions cannot be good for women's equality. The harassment of inter-faith couples must stop forthwith and society must respect the choices of women.

There is a clear view in the present cabinet against a law on marital rape. This can be owing to the political ideology that considers marriage a sacred bond or "janam janam ka bandhan". The close relationship with religious figures being cultivated by different state institutions cannot be good for women's equality. The harassment of inter-faith couples must stop forthwith and society must respect the choices of women.

Our cities have become increasingly unsafe for women despite the Smart Cities campaign. Unsafe buses and trains have made the dream of education for girls that much more distant. Sexual violence during communal riots and violence against Dalit women goes largely unpunished. Various surveys suggest that work participation of women has gone down during the last decade in India. This is besides the discrimination in wages for women as well as sexual harassment at the workplace. Most employers are not aware of the law prohibiting harassment of women at workplaces. Women across economic backgrounds do not have autonomy over how to spend their earnings. Apart from these, there are issues like trafficking of girls, criminalisation of sexual minorities, denial of women's share in property.

There are many issues that we face as a country such as poverty, jobs, education, caste, diversity, health, housing etc. Any discussion on how to fight patriarchy has to account for the fact that the perpetrator is often within. She or he can be inside the home, inside the family, within the religion, within cultural practices, within ourselves. The struggle for women's equality is made more difficult by the fact that women are not a political block. The few women who make it to influential positions against all odds get outweighed by the omnipresent and dominant patriarchal forces.

The present survey should be an occasion for serious reflection and the joining of voices for women's equality. There is a need to go beyond the country rankings and focus on how to build a society where women are equal citizens. It is a task that demands sustained action at multiple levels, governmental as well as civil society.

*The writer is a women's rights activist and one of the founding members of Bharatiya Muslim Mahila Andolan*