

Warding off climate meltdown

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MD. ASADULLAH KHAN

NEW evidence confirms that global warming is now a reality and should be taken seriously. The report by the UN's Intergovernmental Panel on Climate Change (IPCC) concludes that man's actions have contributed substantially to the observed warming over the last 50 years.

Glaciers provide a way to find out if climate is changing. "Since they are typically formed as a response to cold climate, glaciers always reflect any change in climate," says Gergan, a glaciologist from the Wadia Institute of Himalayan Geology.

After making numerous trips to the Dokriani Bamak glacier, a 5 km long python of ice and mud that snakes through the upper reaches of Gahrwal, Himalayas, Joseph Gergan is convinced that global warming has set in.

Around the globe, human activity is heating up the planet and weather patterns have become more erratic. This summer may be the hottest ever in parts of India and Bangladesh.

The seas around India and Bangladesh have shown a rise of about 2.5 mm per year over the last few decades. Seas rising by millimeters and lands warming by fractions of degrees might not sound like much but, in the giant thermometer that is the earth, it is enough to change life forever.

These facts dovetail ominously well

with the theory that carbon dioxide released by burning fossil fuels is trapping excess energy from the sun. Carbon dioxide is produced when fossil fuels are used or when forests are cut or burned. Ice cap melting and agriculture release methane and nitrous oxide.

Industrial processes release chemicals known as halocarbons and other long-lived gases, some of which trap heat in the atmosphere. A study carried out by James Hansen of NASA Space Agency differentiated "natural forcing" from man-made actions and worked out the impact of each on temperature.

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At a research centre in Germany engineers at Daimler Chrysler have created a high performance car, which emits only water vapour. In Japan, scientists are perfecting paper-thin solar cells that could turn every house into its own electricity supplier. Cars like NECAR4 could help make that happen. This experimental vehicle, being jointly developed by Ford, Daimler Chrysler and Canada's Ballard Power systems, get its energy from hydrogen. Hydrogen, unlike fossil fuels, contains no carbon atoms and thus generates zero



Energy from the sky.

carbon dioxide.

Fuel cells invented in the early period of the Industrial Revolution were adopted by NASA for generating clean power in space vehicles in the 1960s. Only in the past decade have they been made small enough to fit in inside a car.

In an ideal situation, hydrogen may be produced with renewable electricity from

the sun or wind. But the electricity required to split water into hydrogen and oxygen is prohibitively expensive. So, the first large-scale plants will probably wrest hydrogen from old-fashioned fossil fuels.

That's good news for China, whose rapid industrialisation and huge domestic coal reserves threaten to pump cataclysmic amounts of carbon dioxide into the air

over the next century. While scaling fuel cells down to fit inside cars and trucks is challenging, scaling them up or linking them together to run power plants should be no problem at all.

There is still some unwanted effect in pulling hydrogen from fossil fuels because it leaves carbon dioxide behind. If the carbon dioxide is vented into the atmosphere, global warming will be as big a problem as ever, therefore, engineers are thinking of pumping it into the ground.

In Norway, Norsk Hydro is building a power plant that will be fueled with hydrogen drawn from natural gas. The carbon dioxide that is left over will be re-injected into an oil field on the continental shelf. Not only will this take the carbon dioxide out of circulation but will also pressurise the field and make the remaining oil easier to pump out. In Europe and the US, pumping carbon dioxide into underground aquifers has proved an effective way of keeping it out of the atmosphere.

Fossil fuels will remain an important source of energy for the foreseeable future, but they will eventually run out and the world will have to switch to what environmental visionaries have been dreaming about since the first Earth Day: endlessly renewable power from wind and sun.

Wind has the edge. It is fast catching up with oil and gas in cost efficiency with the help of experiments such as the one at Ames Research Centre. Colorado engineers expect to build a new generation of super-efficient wind turbines with blades well over 200 ft (60m) across. Efficiency does not help when the wind is not blowing; as such it would be necessary to store energy generated during gales for use when the air is still.

The best way to do that, says Robert Williams of Princeton University's Centre for Energy and Environmental Studies,

would be to use the excess to compress air and force it to subterranean aquifers, caves or salt domes. Then, when the wind dies the compressed air can be pulled out to help drive the turbines. This could help countries rich in wind resources to take advantage of a free, unlimited and nearly pollution-less source of electricity.

On the solar front, the environmentalist's dream can be realised if manufacturers can find a way to produce silicon-based photovoltaic cells more efficiently and reduce the cost.

Because a given solar cell is sensitive to just a few colours of the many that make up sunlight, researchers are working on multi-layered cells that will trap most of the colours of the rainbow.

Since the sun doesn't shine with equal power everywhere, even a building covered with solar cells will need another source of electricity. One possibility is a system that uses both solar cells and a two-way fuel cell. During daylight, when the solar cells are operating, excess electricity could be run through a fuel cell to produce hydrogen from water. At night, the fuel cell could use hydrogen to produce electricity again.

Ideally, every factory, building, home and vehicle would have its own clear, renewable power source, eliminating oil wells, coal mines, power plants and power lines -- and all the environmental disruption they cause. For now, the world has a more urgent mission: to stop the planet from overheating, and to do it in a hurry. Thanks to fuel-cell cars and more advanced wind turbines and solar cells that are close to fruition, the global warming challenge seems a little less daunting than it did a few years ago.

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Gentlemen, please leave your pockets behind!

Men take thousands of decisions every day within the household, work places and at the national level that do not reflect the feelings, conveniences, aspirations and needs of women of this country.

NASIM FIRDAUS

SMALL decisions by men can make a big difference in a woman's life. This is about decisions that affect women directly but are taken without consulting the very people it is directed towards. They can be decisions on small matters or matters big.

Because men are not women, even with the best of intentions, they cannot see things through the lens of a woman. The sooner this fact is recognised by those whose pen is mightier than the voices of the less fortunate 50% women of this country, the better. For then, and only then, will they hear a different set of voices and pay attention.

Men take thousands of decisions every day within the household, work places and at the national level that do not reflect

the feelings, conveniences, aspirations and needs of women of this country. Think of men who have no clue about cooking meals. The woman in the kitchen has to improvise every day to provide the best meal she can to her family with whatever groceries the "master of the house" has brought in that day.

Imagine if a man has the authority to decide what a woman can carry in her handbag! Imagine if he decides she can carry no handbag at all! Would you be surprised? Would you condemn, criticise or admonish him for enforcing such a decision on a woman? Perhaps you will call him an arrogant, insensitive and irrational person?

Will you then ask him not to carry his pockets with him? For he carries pockets -- lots of them -- wherever he goes. He has

pockets in his jacket, pockets hidden in the inside of his jacket, in his trousers -- back, front and on the sides -- and on his shirt! Would you want to know what he carries in his pockets?

He probably carries business cards and a handkerchief, pens, note pads, car keys, office keys, keys to his cabinet and perhaps the house key. For sure, he carries his eye-glasses and sometimes his sun glasses in his pockets too! These are harmless items so he gets to carry his pockets -- full of personal but important items as these -- along with him wherever he goes, even when he goes to see very important persons of the republic.

Would you now like to know what a woman carries in her handbag? Surprise, surprise! She carries the same stuff in her small little handbag. In addition, she probably carries her lipstick and a compact. She carries a purse or handbag as an integral part of her outfit for she has no pockets. Bangladeshi women wear saris, in case some people have missed it.

Can she carry a gun or a bomb in her handbag? Perhaps she can. So, can a man carry similar objects in one or several of his numerous pockets? Of

course, the likelihood of his carrying these items through the scanner as he walks past it when he goes to meet very important persons is as remote as a woman carrying her handbag in the same situation.

So, why is it that women are specifically asked not to bring in their handbags when they are invited to state parties, national day receptions, and meetings where there are VIPs? Don't they need their personal items as men do?

Has anybody ever given it a serious thought as to where will women put their business cards, pens and note pads? Or keys, if they leave their handbags behind in the car? Surely men wouldn't leave their keys in the car with the chauffeur, inviting him to rob them off while they are attending a state function? But then, men are never asked to leave their jackets or pockets behind!

It is high time to do away with discriminatory decisions; decisions that are taken through the stroke of a pen by mighty men, without consulting those who are affected by these decisions; decisions that impinge upon the fundamental rights of a person. Articles 27 and 28 of the Constitution ensure equality



Pockets for you but no bags for me!

and forbid discrimination on grounds of race, caste or sex. Article 28 (3) clearly states: "Women shall have equal rights with men in all spheres of state and public life."

Equal access is a fundamental right, and it is a duty of those who hold the authority to decide to respect this right.

No country in the world that believes in equal rights has such words written on invitation cards!

Thank you gentlemen. You can bring in your pockets!

Nasim Firdaus is a former Ambassador and Executive Director, Bangladesh Alliance for Women Leadership.

Arundhati 'Pakistani' and 'patriotic' right-wing goons

In the end, the anti-Pakistan slogans raised by one miscreant hogged the media limelight rather than those who filled the auditorium, heard the speakers respectfully and engaged in dialogue later. This is the nature of the media beast. Who is going to tame it?

BEENA SARWAR

SHOULDN'T Arundhati Roy come from Pakistan? sarcastically asked a Delhi freelance journalist, commenting on the Facebook posting about a panel discussion, "Does Media Jingoism Fan India Pakistan

Tensions?" The cynical remark stemmed from his annoyance, shared by many, at Roy's consistent exposure of India's 'warts'. The panel, organised by the recently formed Forum of Media Professionals (www.fmp.org.in), included four journalists from India besides the

celebrated writer and activist Arundhati Roy as well as four Pakistani journalists and The Hindu's Islamabad correspondent Nirupama Subramanian.

Delhi is far cleaner and greener since I was last there nearly five years ago, thanks to laws (that are actually implemented) banning diesel and making CNG compulsory. On a more intangible level, another kind of pollution remains, reminiscent of a phenomenon we face in Pakistan: right-wing jingoism fuelled by emotional appeals to religion and nationalism.

The jibe about Arundhati Roy, disguised under an urbane sarcasm, is just one aspect of bigoted nationalism. Going by that logic, those in Pakistan who fight for justice -- a struggle that necessitates exposing wrongdoings, or 'washing dirty linen in public' according to our critics -- should represent India. Another aspect of such thinking is evident in the comments back home when I show my documentary 'Mukhtiar Mai: The Struggle for Justice', in Pakistan: "Why don't you make such films about violence against women in India? Women there have these problems too."

I wonder at this competitiveness that makes us feel self-congratulatory when we can point out how much worse the other is in some way.

Thankfully, not everyone takes this myopic view. In Allahabad, at a crowded meeting of the Pakistan-India People's Forum for Peace and Democracy (PIPFPD), there was none of this one-upmanship or finger pointing. The audience immediately saw the commonalities of the issues raised in the films I showed, on Pakistan's flawed and discriminatory

Hudood Laws and Mukhtiar Mai. They understood that the phenomenon in Pakistan of Taliban 'punishing' women for alleged transgressions is not much different from those who rape, kill or lynch women and couples for the sake of 'honour' in India itself or indeed in traditional communities in Pakistan.

The difference is that most of these 'honour crimes' are committed by relatives of the women who 'transgress', as opposed to the Taliban who are taking it upon themselves to enact these punishments as part of the imposition of their own criminal justice system that flouts the writ of the state.

Another difference is that the family in Haryana who hanged their daughter and the man she eloped with (in their own home) will be charged, tried and probably punished. In Pakistan, the ostensibly Islamic Qisas and Diyat (retribution and blood money) laws imposed by a military dictator in the 1980s allow the murder victim's family members to 'forgive' the perpetrators who are often their own relatives.

As for the Taliban and their sympathisers, none have ever been charged for their criminal transgressions, ranging from blackening women's faces on billboards, to disrupting public events in that involve women (remember the Gujranwala marathon?), to blowing up schools, killing teachers and dragging women out of their homes and murdering them for alleged 'immorality'.

In the Allahabad meeting, the tone was set by senior advocate Ravi Kiran Jain in his introduction when he stressed on the need

for a stable government in Pakistan, and the desire to remove misunderstandings. His words reminded me of Nirupama Subramanian's appeal at the panel discussion in Delhi urging Indians to "be sensitive to Pakistan as a country that has problems and show moderation in we respond to these problems."

Many Indians already understand this, but we don't hear their voices in the media very often. For instance, Utpala, a women's rights activist during the discussion in Allahabad talked about the need for Indians and Pakistanis to be allowed to visit each other's countries. Her own visit to Pakistan many years ago, she said had expanded her 'angan' (literally, courtyard). She ended by asking, "How can we in India be happy until there is a pro-people, pro-women government in Pakistan?"

The Delhi panel was disrupted for a minute or so by one man at the back of the auditorium who stood up and shouted anti-Pakistan, pro-war slogans. The organisers threw him out. He turned out to be from the Sri Ram Sene, one of the faces of India's right-wing 'Sangh Parivar'. Three or four others were outside, whom the organisers had refused to allow entry as they were not signing their names in the register. The SRS, which does not otherwise have much presence in Delhi, later claimed it had sent 'thirty' men to disrupt the meeting.

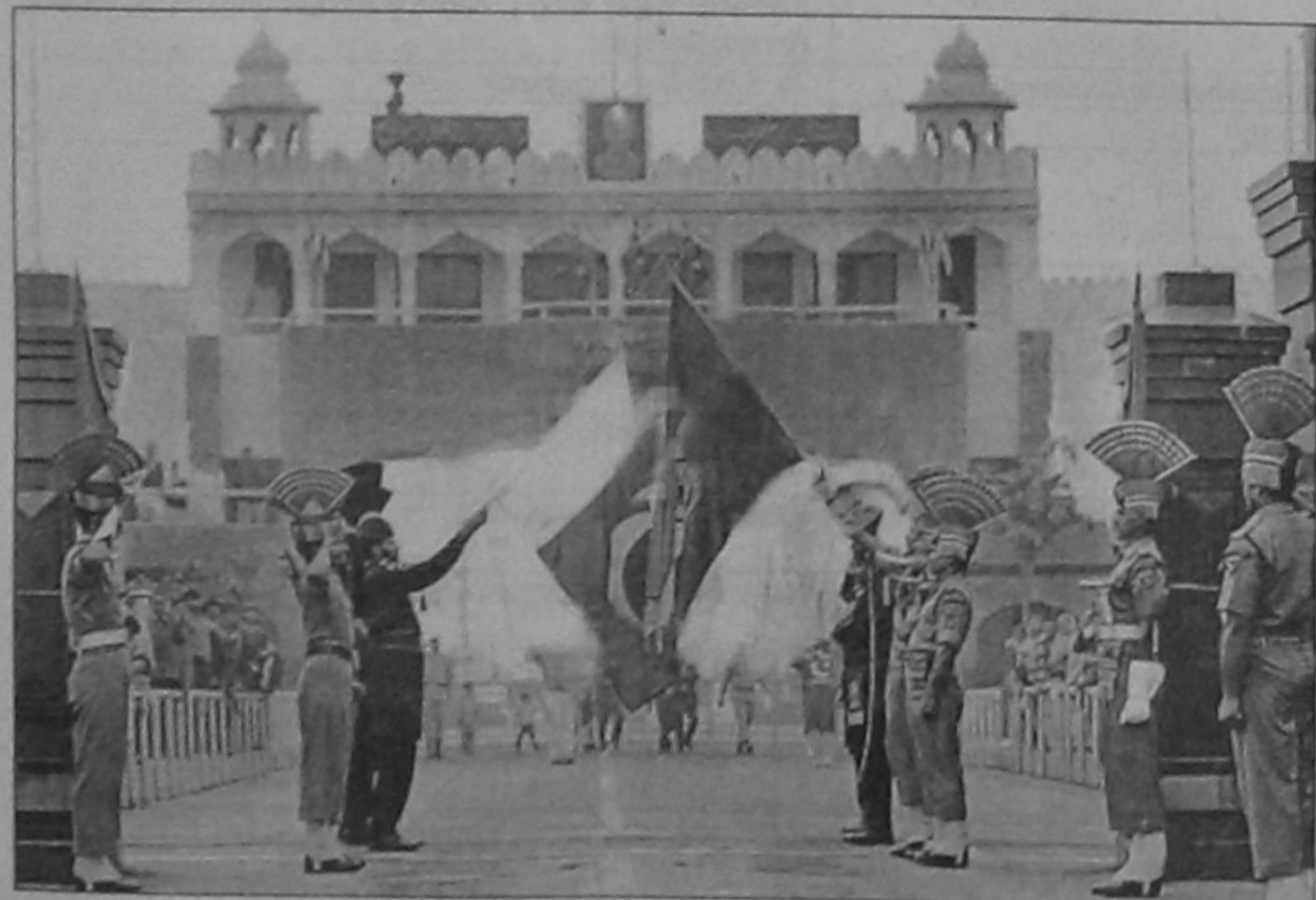
True to form, illustrating the very issues we had been discussing, most media hyped up the disruption, which then overshadowed the discussion itself. Pakistani journalists were 'roughed up', 'attacked', the meeting disrupted for '15-

20 minutes' and so on. The incident set off a chain reaction across the border, giving right-wing forces in Pakistan the opportunity to condemn the 'anti-Pakistan feelings in India'. A 'human rights' organisation held a demonstration against the 'attack'. Jamat-e-Islami's recently elected chief Munawwar Hasan promptly issued a statement saying that it should serve as an eye-opener to those who talk of friendship with India and they should refrain from visiting India.

For such people, obviously the anti-Pakistan slogans raised by one miscreant are paramount over the dozens of people in the IIC auditorium who listened respectfully to the discussion and engaged in a dialogue with the speakers later. The people in Allahabad and at the Delhi Press Club a few days later who came to hear a Pakistani journalist and express their support for a democratic order in Pakistan also don't count, even if some of them were prepared for a rough time, like Zafar Bakht in Allahabad who had lent his school's auditorium for the event. "After hearing of the Delhi incident, we rolled up our sleeves and were prepared," he said later.

In the end, the anti-Pakistan slogans raised by one miscreant hogged the media limelight rather than those who filled the auditorium, heard the speakers respectfully and engaged in dialogue later. This is the nature of the media beast. Who is going to tame it?

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Are their media keeping them apart?