Newspaper Analysis and Summary – 29th September 2015 SCIENCE AND TECHNOLOGY

NASA finds evidence of liquid water on Mars

Mars appears to have flowing streams of salty water, at least in the summer, scientists reported Monday in a finding that could have major implications for the possibility of life on the planet.

Scientists in 2008 confirmed the existence of frozen water on Mars. But the latest observations from an instrument aboard NASA's Mars Reconnaissance Orbiter support the long-time theory that salt water in liquid form flows down certain Martian slopes each summer, according to the researchers.

"Mars just got more interesting," NASA said via Twitter. The space agency called the results "a major science finding."

With Astrosat launch, ISRO scales new heights

few days after it celebrated the successful completion of a year around the red planet by its first inter-planetary mission -- the Mars Orbiter, the Indian Space Research Organisation (ISRO) on Monday launched its first dedicated multi-wavelength space observatory Astrosat into space, besides six satellites for Canada, Indonesia and the United States.

Though the national space agency has launched satellites for Indonesia and Canada earlier, this is the first time ISRO is launching satellites for the United States.

Though there have been scientific missions by ISRO in the past, this is the first time a space observatory is being launched into space. Though Astrosat may be similar to the NASA's Hubble Space Telescope, the former is about 10 times smaller and cannot be compared to the Hubble, which is versatile.

Besides US' NASA, space agencies of the European Union, Japan and Russia have launched similar facilities into the space.

Within 22 minutes of its liftoff from the Satish Dhawan Space Centre here at 10 am, ISRO's PSLV C-30 rocket successfully placed in orbit ASTROSAT. A few minutes later, Canada's NLS-14 nano satellite, Indonesia's LAPAN-A2 microsatellite and four identical LEMUR nano satellites for the U.S. were also put in orbit.

With the Monday's launch, ISRO has successfully crossed the half century-mark as for foreign satellites. ISRO has launched 51 satellites for foreign satellites so far.

"Today is one of the eventful days for us. Our PSLV has once again proved to be a workhorse," ISRO Chairman A.S. Kiran Kumar said from the Mission Control Room, soon after the rocket injected the satellites into the intended orbits.

The 1,513-kg cuboid-shaped satellite would be eventually fine-tuned into 650 km above the Earth's surface. The satellite can perform simultaneous multi-wavelength observations of various astronomical objects. The sun and star sensors, besides the gyroscopes, would provide orientation reference to the satellite, which has a mission life of five years.

Unravelling mysteries of the universe

Astrosat aims at understanding the high energy processes in binary star systems containing neutron stars and black holes, to estimate magnetic fields of neutron stars, to study star birth regions and high energy processes in star systems lying beyond the Milky Way galaxy.

The mission also intends to detect new briefly bright X-ray sources in the sky, to perform a limited deep field survey of the universe in the ultraviolet region.

While Canada's NLS-14 is a maritime monitoring nano satellite using the Automatic Identification System, Indonesia's LAPAN-A2 is aimed at benefiting Indonesian radio amateur communities for disaster mitigation and carrying out Earth surveillance. All the four

identical LEMUR satellites for the United States -- non-visual remote sensing satellites aims to focus on global maritime intelligence through vessel tracking.

The other institutions that participated in the gigantic task of Astrosat launch are Tata Institute of Fundamental Research, Indian Institute of Astrophysics, Inter-University Centre for Astronomy and Astrophysics and Raman Research Institute.

Supermoon may cause tidal flooding

The swells originating from the Southern Indian Ocean, having a period of over 15 seconds and wave height of 1 metre to 2 metres, will be compounding the tidal flooding in the coastal areas of southern India from September 28 to October 2.

A tidal flooding alert during Supermoon or King Tide, which is likely to occur during September 26 to October 2, issued by the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, was released by P. Rama Rao, Director of Center for Studies on Bay of Bengal, Andhra University, here.

The plausible regions vulnerable for inundation are the Kerala coast, Lakshadweep, Andaman and Nicobar Islands and some parts of Andhra Pradesh (Visakhapatnam) and West Bengal (Sunderbans).

"Storm surge was already reported from Sagar Nagar area in the city. Our Centre has a Memorandum of Understanding with the INCOIS and they have sent us the data," Prof. Rama Rao said on Monday. Heavy local river discharge would also compound the effects of tidal flooding and this was more likely from September 28 to 30.

This would be the maximum height (tide + swell) induced phenomena during the super moon period for the present year.

Tidal range

As the tidal range would be higher than normal spring tides, there could be flooding during high tide as well as retreat of water level during low tide (ebbing).

Supermoon is a perigean spring tide that occurs when the moon is either new or full and closest to the earth (perigee) causing increased tidal ranges or increased current speeds than those experienced during the normal spring tides.

23 foreign satellites lined up

A total of 23 satellites from nine countries are to be launched by ISRO in the next few years. ISRO's commercial arm Antrix Corporation Limited has already signed agreements with nine countries, including the European Union, Japan, Singapore and the U.S.

"The next immediate launch would be that of six satellites for Singapore. A PSLV rocket would carry one 410 kg-Earth observation satellite along with five co-passengers," Antrix Corporation Chairman and Managing Director V.S. Hegde said.

There are five satellites to be launched for the U.S. in the list, including SkySat-Gen2-1 micro satellite of Skybox Imaging Inc.

"Except for Oceania (Australia and New Zealand), we have launched satellites for all countries in all continents," he added.

MOM data

Data collected by ISRO's Mars Orbiter Mission (MOM) would be open to the scientific fraternity and they can express interest to use them, ISRO Chairman Kiran Kumar said. MOM takes two-and-a-half days to go around the Red planet and it takes four pictures during an orbit. "MOM has taken substantial number of pictures and we have prepared a Mars Atlas."

ISRO was looking for partnership for building and assembling launch vehicles in three to four years, its Chairman Kiran Kumar said.

Indigenously-made INS Kochi set to join the fleet tomorrow

The Indian Navy is all set to welcome INS Kochi, a second ship of the Kolkata-class Guided Missile Destroyer, in its contingent on September 30. Defence Minister Manohar Parrikar will commission this indigenously-designed ship here on Wednesday.

INS Kochi is second in the contract for three ships of Kolkata-class that was signed after the Delhi-class destroyers commissioned more than a decade ago. Last year, Prime Minister Narendra Modi commissioned INS Kolkata, the first of the three destroyers and the last ship, INS Chennai, is expected to join the naval forces later in 2016.

Weighing over 7500 tonnes, the ship is 164 metre-long and measures 17 metres at the beam. It is propelled by four gas turbines and designed to achieve speeds in excess of 30 knots.

It is not only superior to the earlier Delhi class but also equipped with state-of-the-art weapons and sensors. The weapons to her credit include advanced supersonic and long-range BrahMos surface-to- surface missile, the 76 mm Super Rapid Gun Mount (SRGM) and AK 630 Close In Weapon System (CIWS), which are manufactured indigenously and can take on air and surface targets.

One of the unique features of the ship is the high level of indigenisation.

Portable, rapid DNA test can detect Ebola

Scientists have developed a new blood test based on DNA sequencing that can be used to rapidly diagnose Ebola and other pathogens such as Chikungunya and hepatitis C virus.

Researchers at the University of California - San Francisco said that the test can be used even where lab space and medical infrastructure are scarce.

They detected the genetic fingerprints of Ebola in stored blood samples from two African patients who had acute hemorrhagic fever, completing the diagnosis within five hours of opening the samples - the DNA sequencing itself took just 10 minutes.

Most commercially available or research-based genetic diagnostic tests target specific pathogens.

The team has pioneered techniques that do not require suspected pathogens to be identified beforehand in order to detect their unique genetic fingerprints.

This unbiased approach of analysing all DNA in a clinical sample without knowing which species are present, which was used in the Ebola detection, is called "metagenomic" analysis.

To obtain such quick results the researchers developed new analysis and visualisation software and used it on a laptop computer to leverage an emerging DNA-sequencing technology known as nanopore sequencing.

In the same set of experiments, published in the journal Genome Medicine, the researchers were able to detect Chikungunya virus, from a Puerto Rican outbreak, just as quickly in a blood sample from a donor with no symptoms, but who eventually reported having fever and joint pains.

In another example of the technique's power, detection of hepatitis C virus in blood from an infected patient, present at a much lower concentration than the other viruses, took just 40 minutes from the start of sequencing.

"This point-of-care genomic technology will be particularly attractive in the developing world, where critical resources, including reliable electric power, laboratory space, and computational server capacity, are often severely limited," said Charles Chiu, associate professor of laboratory medicine at UCSF, who led the team.

Chiu's lab group was one of the first to pay USD 1,000 for access to an experimental DNA nanopore sequencer made by Oxford Nanopore Technologies, called the MinION.

The device is small enough to fit in the palm of the hand and is powered by a USB connection to a laptop.

Last year, using a similar metagenomic approach to pathogen detection, the researchers used

their software and another DNA-sequencing technology to analyse all DNA in a spinal fluid sample, leading to the diagnosis of an unusual but treatable bacterial cause of encephalitis in a critically ill Wisconsin boy whose health had been worsening for months.

That earlier analysis took two days. The detection of Ebola in the new study was more rapid because nanopore sequencing yields data immediately and in real time, unlike the technology used in the Wisconsin case, which takes much longer to provide data for analysis.

ASTROSAT, India's unique space observatory

The launch of Indian Space Research Organisation's (ISRO) ASTROSAT telescope today (September 28) will be a shot in the arm for astronomers, particularly those in India. This is the first time India is launching a space observatory.

But that is not the only reason why the ASTROSAT telescope is so special. Unlike most other telescopes, the five instruments (payloads) of ASTROSAT can observe a wider variety of wavelengths — from visible light to the ultraviolet and X-ray bands. Even in the X-ray band, it can study both low and high energy X-ray regions of the electromagnetic spectrum. Most other satellites are capable of observing only a narrow range of wavelength band.

"The capability to cover the full spectrum of wavelength simultaneously is the unique feature of ASTROSAT," said Dr. Mylswamy Annadurai, Director of ISRO Satellite Centre in Bengaluru.

"ASTROSAT is not the first of its kind but is the best so far. It is the best all rounder in the world. It is a one-stop shop for studying astronomical sources," said Dr. Varun Bhalerao, Post Doctoral Fellow at the Pune-based Inter-University Centre for Astronomy and Astrophysics (IUCAA).

"Astronomical sources change in all time scales. So if I were to take data in optical light one day and X-ray the next day from different telescopes, each day I will be seeing something different. So can't put the picture together. To understand all of that I must see the object in all different bands of light at the same time. The ASTROSAT telescope will allow me to do this. That is its uniqueness," said Dr. Bhalerao.

India does have ground-based telescopes (including the Giant Metrewave Radio Telescope near Pune and the Indian Astronomical Observatory in Ladakh). But like all other ground-based telescopes, these can only detect radio waves and infrared radiation as they penetrate the Earth's atmosphere. However, in the case of higher frequency radiations, the atmosphere tends to block most ultraviolet light and all X-rays and gamma-rays.

"The atmosphere blocks most UV light and all X-ray from the Sun. But for other stars which are very far away, the intensity of UV light and X-ray is not much and the atmosphere completely blocks all UV light and X-ray," Dr. Bhalerao said.

Hence, a space-based observatory like ASTROSAT will be of immense value to researchers based in India. "Ground-based telescopes and the space observatory will complement each other," Dr. Bhalerao said.

Till date, Indian astronomers had to rely on international resources for X-ray and ultraviolet data. "Without a space telescope of their own, Indian scientists have had to rely on ones operated by NASA and the European Space Agency (ESA) to study such radiation bands, which carry information about exotic neutron stars, newly born or exploding stars and the spiralling hot gases around black holes," notes *Nature*.

But that is all set to change. "For the first time, we will be getting data from our own Indian X-ray and ultraviolet telescope. That makes a lot of difference," Dr. Bhalerao said. "We need not have to go to NASA and other agencies. But we will continue to collaborate."

It is for the first time that a majority of instruments (payloads) of the ASTROSAT had come from outside ISRO. "The combined mass of the payloads is more than the mass of the satellite," said Dr. Annadurai. "At 850 kg, the payload mass is more than 60 per cent of the

mass of the satellite."

Generally, the payload mass is less than 10 per cent of the mass of the satellite, like in the case of Chandrayaan-1. It was less in the case of Mars Orbiter Mission Mangalyaan. "Because of the lower orbit, ASTROSAT can afford to have heavier payloads," Dr. Annadurai explained. Though designed to orbit at 650 km above the Earth for five years, there is great likelihood that like most other telescopes, ASTROSAT too would last much longer.

Scientific objectives

The scientific objectives of ASTROSAT mission are to (1) understand high energy processes in binary star systems containing neutron stars and black holes, (2) estimate magnetic fields of neutron stars, (3) study star birth regions and high energy processes in star systems lying beyond our galaxy, (4) detect new briefly bright X-ray sources in the sky and (5) perform a limited deep field survey of the Universe in the ultraviolet region.

Explaining how the magnetic field of neutron stars will be measured, Dr. Bhalerao said: "The frequency with which electrons spiral around a magnetic field depends on the strength of the magnetic field. Whatever frequency they are spiralling they scatter light at that frequency. So in the case of neutron stars, the frequency of electron spiralling matches high-energy X-ray light."

Dr. Bhalerao has been studying neutron stars using high-energy X-ray wavelengths with NASA's Nuclear Spectroscopic Array (NuSTAR) satellite at the California Institute of Technology in Pasadena. He was part of the team that built the NuSTAR satellite. "To understand what is happening on neutron star, must study in both low- and high-energy X-ray," Dr. Bhalerao said. "With NuSTAR, you need to pair up with other satellites that study lower energy X-ray. Each satellite has its own time allotment issue. Though the same process of time allotment will happen with ASTROSAT, we will get data from all energies from a single satellite."

According to ISRO, to fulfil these objectives the ASTROSAT carries the following five payloads.

- (1) The Ultraviolet Imaging Telescope (UVIT, capable of observing the sky in the Visible, Near Ultraviolet and Far Ultraviolet regions of the electromagnetic spectrum.
- (2) Large Area X-ray Proportional Counter (LAXPC, is designed for study the variations in the emission of X-rays from sources like X-ray binaries, Active Galactic Nuclei and other cosmic sources.
- (3) Soft X-ray Telescope (SXT) is designed for studying how the X-ray spectrum of 0.3-8 keV range coming from distant celestial bodies varies with time.
- (4) Cadmium Zinc Telluride Imager (CZTI), functioning in the X-ray region, extends the capability of the satellite to sense X-rays of high energy in 10-100 keV range.
- (5) Scanning Sky Monitor (SSM) is intended to scan the sky for long term monitoring of bright X-ray sources in binary stars, and for the detection and location of sources that become bright in X-rays for a short duration of time. According to Dr. Bhalerao, LAXPC is the best X-ray timing instrument so far. "Astronomical objects cannot be controlled. If you want to study something in a star, must catch it in its act. So it is important to monitor the sky," he said about the Scanning Sky Monitor.

"For some researchers, the satellite's X-ray detection capability will fill the gap left when NASA's Rossi X-ray Timing Explorer satellite died in 2012, after 16 years of operations," notes *Nature*. "ASTROSAT's X-ray detectors can also cope with very bright objects that would saturate those on other satellites such as NASA's Chandra X-ray Observatory or ESA's X-ray Multi-Mirror (XXM-Newton) mission."

ISRO launches ASTROSAT, first space observatory

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Though there have been scientific missions in the past by ISRO - Aryabhata, SROSS, Youthsat, IRS-P3, GSAT-2, Chandrayaan-1 and Mars Orbiter Mission, this is the first time ISRO is launching a space observatory into space. Though ASTROSAT may be similar to the NASA's Hubble Space Telescope, the former is about 10 times smaller and cannot be compared to the Hubble, which is versatile.

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A team headed by Prof. U.R. Rao finalised the five payloads, which were taken onboard the ASTROSAT – Ultraviolet Imaging Telescope, Large Area X-Ray Proportional Counter, Soft X-ray Telescope and Cadmium Zinc Telluride Imager.

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ENVIRONMENT

India Gate-Red Fort stretch to go car-free on October 22

One of the busiest stretches in the Capital will go car-free in line with the government's campaign to de-congest the city.

Delhi Transport Minister Gopal Rai on Monday announced the *Ab Bus karen Jan Parivahan – Swasthya Jeevan* initiative which, to begin with, will see the stretch from India Gate to Red Fort going car-free on October 22.

Mr. Rai said the government would ensure that various modes of public transport were available to avoid inconvenience to the people on the chosen day. The government also proposed a cycle rally on the car-free stretch similar to the one organised by the Gurgaon Police last week.

In an interview to *The Hindu* in May, Mr. Rai had stated that he viewed 'effecting a systemic change in the way Delhi commutes' as a challenge and an objective.

On Monday, the Minister said the government proposed to convert the campaign into a sustained effort for creating awareness about the benefits of using public transport, promoting car-pooling, encouraging the use of bicycles and adhering to lane driving.

According to a transport department source, keeping in mind the Capital's massive vehicular population and teeming number of floating vehicles, it has been decided to test the waters only on one stretch.

Gurgaon has declared every Tuesday car-free day.

"We plan to do so in phases and on different stretches because the aim is to project public transportation as a viable and hassle-free alternative. This will convince the public to switch over from private vehicles," said an official.

A meeting has been convened on October 1 where officials of the Transport Department, Delhi Transport Corporation, DIMTS, Delhi Traffic Police, Police (law & order), DMRC, DPCC, PWD, MCD, NDMC, ASI, ITDP and EMBARQ will participate. This would be followed by a meeting with MLAs and other organizations on October 9 to ensure their participation.

India seeks funds, technology to combat climate change

Prime Minister Narendra Modi, who met President Barack Obama on the sidelines of the U.N. General Assembly here on Monday, sought U.S. support to complete United Nations reforms within a fixed time-frame and cooperation for India's early membership of the Asia Pacific Economic Community, but climate change dominated their hour-long conversation.

"Much of our discussion today focused on the upcoming climate conference in Paris," Mr. Obama said, adding: "We agree that this is a critical issue for the world, and all of us have responsibilities. We are encouraged by the aggressive nature of Mr. Modi's commitment to clean energy."

"President and I share an uncompromising commitment on climate change, without affecting our ability to meet the development aspirations of humanity. We have set ambitious national agendas," Mr. Modi said, adding that both leaders looked forward to a "comprehensive and concrete outcome in Paris with a positive agenda," which will ensure "access to finance and technology for the developing world." The progress on meeting these objectives will be the crucial test for bilateral relations in the coming months. "What I said is, that I really believe that India's leadership at this conference will set the tone not just for today, but for decades to come," Mr Obama said.

Ministry of External Affairs spokesperson Vikas Swarup said Mr Modi brought up the "climate of negativism" that surrounds climate change negotiations and sought to turn the debate into a positive format that will nudge developing countries to adapt cleaner

development models by providing them access to technology and capital.

While Mr. Modi said the India-U.S. partnership was driven by economic ties, Mr. Obama said: "We also had a chance to talk about trade and investment," adding that Mr. Modi was hoping that Indian Americans would contribute to India's growth.

Mr. Obama had, during his India visit in January, declared his support for India's admission into APEC, and that will be a key, tangible milestone for bilateral ties. Mr. Modi and Mr. Obama reviewed progress on the issue and Mr. Modi said: "To further increase our strategic engagement in the region, I look forward to working with the U.S. for India's early membership of the Asian Pacific Economic Community."

Both countries were keen on emphasising India's APEC membership as part of the Joint Strategic Vision on Asia, Pacific and Indian Ocean Regions. Mr.Modi also underscored the importance of joint engagement with regional partners like Japan. "This will also strengthen our maritime security cooperation," he said. After the Obama-Modi bilateral meet in September 2014, both countries had decided to promote joint consultations with Japan to the ministerial level, and the first one will take place in New York next week.

Mr. Swarup termed the back-to-back meeting that Mr. Modi had with his British counterpart David Cameron and French President François Hollande as "power Monday," and said climate change was on the agenda of all three meetings.

Cooperation in combating terrorism, particularly, in concluding the pending Comprehensive Convention on International Terrorism, and India's long-pending demand for membership of four global export control regimes also figured in Mr Modi's conversation with Mr. Obama. Mr. Swarup said the "take-away from the meeting was the continuing and increasing personal chemistry between the leaders who address each other by first name." "So, we very much appreciate his friendship and his partnership," Mr. Obama said.

Support for India

Meanwhile, the U.S., Britain and France reaffirmed their support to India's permanent membership of the UN Security Council as text-based negotiations to expand the most powerful wing of the world body begins in November.

POLITY AND GOVERNANCE

Government spends Rs. 2.7 lakh a month per MP

India paid Rs.176 crore to its 543 Lok Sabha members in salaries and expenses over the last year, or just over Rs. 2.7 lakh a month per Member of Parliament (MP), new official data show.

MPs are entitled to Rs.50,000 per month as salary, Rs.45,000 as constituency allowance, Rs.15,000 as office expenses and Rs.30,000 for secretarial assistance. When Parliament is in session, they get a daily allowance of Rs.2,000. MPs are also reimbursed for 34 flight trips and unlimited rail and road travel for the year on official business.

The Lok Sabha Secretariat releases information on the amount claimed by and reimbursed every month to MPs on these expense heads.

MPs are also entitled to other perks, including free housing, limited free water, electricity, telephone facilities and medical treatment. This does not reflect in the expenses paid out every month by the Lok Sabha.

Travel expenses

Travel reimbursements and daily allowances, grouped together, account for the biggest chunk of public spending on MPs, or nearly half of all expenses, at Rs. 83 crore for the year, the data show. The differences in travel claims largely drive differences between MPs' expenses. The data shows that two MPs — the BJP's Bishnu Pada Ray from the Andaman & Nicobar Islands and the CPI(M)'s A. Sampath from Attingal, Kerala, — claimed over Rs.1 crore each between June 2014 and June 2015. Another 61 MPs claimed between Rs.50 lakh and Rs.1

crore over the year. The lowest amounts claimed were by Ministers whose expenses get covered by their respective ministries and no longer by Parliament once they become Ministers, a Lok Sabha Secretariat official explained.

"The expenses and claims of MPs are governed by an Act of Parliament. Our work involves a lot of travel, including for various committees in Delhi. I would hope that all MPs fulfil their duty to the fullest," Mr. Sampath said. MPs who claim the most in travel expenses are not necessarily the ones doing the most travel, but are the ones who do not have corporate friends with planes they can borrow or undisclosed money to spend on travel, an MP, who was among the high claimants but did not want to be quoted, said. MPs who hire trained researchers on their staff say that the office and secretarial allowance is far too low to run a competent office and must pay their staff from their own pockets. "Apart from phone and travel reimbursement, the only expense that is paid for is Rs.30,000 per month, which is barely enough for a receptionist," Biju Janata Dal MP Baijayant Panda, who has trained researchers on his staff, said.

SC rejects plea to ban animal sacrifices in festivals

Refusing to entertain a petition to ban animal sacrifices during religious festivals across all communities, the Supreme Court said on Monday that it could not, for the sake of societal balance and harmony, intervene in centuries-old customs of religious faith and tradition meant to appease the gods.

A public interest litigation petition filed by journalist Varaaki contended that "religion cannot be allowed to become a tool for perpetuating untold miseries on animals."

It contended that "faith, religion, customs and practices should not take precedence over lawful rights, human or animal." This being true for all religious communities, whether it be "Durga pooja, the slaughter of lambs for Easter, turkeys for Thanksgiving or goats for Bakrid," the petition said.

"The balance and harmony of all faiths, this court is bound to it. This, your petition, makes generalised statements on a very, very sensitive matter. We have to close our eyes [as it pertains] to centuries and centuries-old traditions," Chief Justice of India H.L. Dattu responded to the submissions made in the petition by senior advocate Raju Ramachandran and advocate Sriram Parakkat.

The Chief Justice then pointed to Section 28 of the Prevention of Cruelty to Animals Act and observed that it was not an offence to kill an animal in a manner required by the religion of any community.

"Nothing in this Section prevents a person from killing animals as part of his tradition," the Bench, also comprising Justice Amitava Roy, observed. Mr. Ramachandran, making his point that this petition was not regarding any particular community, narrated scenes of animal sacrifices where animals were slaughtered amid "frenzied paranoia."

Africa-India summit venue far from ready

Despite prominently displaying Prime Minister Narendra Modi's slogans on cleanliness, the Indira Gandhi Sports Complex here is not yet clean enough to host the Africa-India summit beginning on October 26.

Though diplomats refused to acknowledge the messy condition of the venue, indeed an alarming situation prevails in "K.D. Jadhav Wrestling Stadium" of the sports complex where workers are battling gigantic puddles of water, broken ceiling patches, water pipes, bird nests, and animal excreta deposited over a period of time.

A few labourers who have recently begun to renovate the stadium are mostly limited to the ground floor leaving the upper floors to be cleaned during the brief period ahead. Apart from stray dog menace, workers say frequent sighting of snakes is another matter which requires

them to remain alert. However, this aspect seems to be taken care of by a good number of mongooses that are seen darting across the arena on a good day.

According to workers, a major nuisance for the heads of states and the army of diplomats, unless preventive measures are installed, will be the presence of a few aggressive kites and pigeons which have turned the high roofs of the gymnastics and wrestling wings into their nesting habitat.

While sportspersons might choose to ignore bird droppings from the high ceiling, even a few such white splotches on expensive diplomatic tuxedo suits might play spoilsport. Ministry sources said anti-bird measures would be put in place but till date no effort seems to have been made.

Workers are also worried about breeding of mosquitoes, which needs to be controlled, given the dengue scare currently gripping Delhi.

Fumigation and fogging are under way but mosquitoes continue to thrive.

A high official from the Ministry of External Affairs told *The Hindu* on condition of "no attribution" that the Ministry of External Affairs would explore the possibility of doing away with rather undiplomatic names like "K.D. Jadhav Wrestling Stadium" and signs like "Gymnastics" and "Commonwealth Games 2010."

While the choice of the Indira Gandhi Sports Complex for the event was prompted by the desire to host all the 54 four member-states of the African Union under one roof, the level of preparation remains a cause for concern. The official said 35 African countries have confirmed their participation.

Natwar sounds note of caution

Former External Affairs Minister K. Natwar Singh sounded a note of caution for the preparatory team of the summit under Additional Secretary Syed Akbaruddin: "For the 7th NAM summit of 1983, Indira Gandhi ordered us to redo the entire Vigyan Bhavan. We had to complete the renovation in three months and the Prime Minister herself repeatedly came to check the progress of work. Hosting so many heads of states is not easy and we had to ensure that Iranian leaders did not sit next to the Iraqis as their two countries were at war with each other, and several such irritants can play the role of spoiler also."

The disarray at the venue should act as a wake-up call for the Modi government which plans to bedazzle the African leadership just four days after Vijaya Dasami.

Pictorial warnings on tobacco products to get bigger

Pictorial health warning on packages of tobacco products will become bigger from April 1 next year.

A notification to this effect was issued on Monday by the Health Ministry, saying that all tobacco products would carry warnings covering 85 per cent of the package area from April 1 next year, up from 40 per cent at present.

This came a day before a hearing on this matter is scheduled to take place in the Rajasthan High Court.

"The Health Ministry has issued the notification. As per the notification, 85 per cent pictorial warning has to be there and it will come into effect from April 1, 2016," a senior Union Health Ministry official told PTI.

The Rajasthan High Court had on September 9 ordered the Centre to ensure that larger pictorial warnings are carried on all tobacco products by September 29.

He said that the Ministry will seek six months as the producers of the products need to make adjustments to their products.

SC dismisses PIL on digital locker

The Supreme Court on Monday rejected a petition against the Centre's decision to link digital locker facility with the Aadhaar card of citizens.

A Bench led by Chief Justice H.L. Dattu told Sudhir Yadav, an RTI activist from Gurgaon, that the court cannot entertain a writ petition if the guidelines issued by it are not followed.

"If guidelines are not followed, file a contempt petition not a writ petition," Chief Justice Dattu told Mr. Yadav, who appeared in person.

The petition was filed shortly after the Centre launched the digital locker facility, urging the court to quash the order making Aadhaar mandatory for availing the dedicated personal storage service.

As part of an initiative under the Digital India programme, Prime Minister Narendra Modi had on July 1 launched the digital locker facility – linked to Aadhaar cards – to help citizens digitally store their important documents like PAN card, passport, mark sheets and degree certificates.

It is aimed to help people by eliminating the use of physical documents and in sharing verified electronic documents across government agencies.

Mr. Yadav had contended that the government's insistence on Aadhaar cards was in violation of the Supreme Court's previous order as well as fundamental right to equality guaranteed under the Constitution.

The petition argued that the government's order would go against the direction issued by the apex court on September 23, 2013.

Acting on a set of petitions, including the one filed by former judge Justice K. S. Puttaswamy, the apex court had ordered: "No person should suffer for not getting the Aadhaar card in spite of the fact that some authority had issued a circular making it mandatory and when any person applies to get the Aadhaar card voluntarily, it may be checked whether that person is entitled for it under the law and it should not be given to any illegal immigrant."

India an easy country to settle in for expats: Survey

India is seen as an easy country to settle in for expatriates, according to a HSBC survey. The survey shows that more than 62 per cent of expats in the country feel at home within the first year as compared to the global average of just 48 per cent.

One of the major reasons for this, the survey points out, is the support expats receive from their employers.

"Nearly a third (30 per cent) of expats receive education or day care allowances for their children from their employer. Just under a third (32%) receive family support allowances for cultural or language coaching. In both cases, this level of support for expats is higher in India than any other country surveyed," it pointed out.

As per the survey, India features among the top 10 destinations for expats in terms of 'family aspects of living' in the adopted country and 58 per cent of them believe the country is getting better as a place to live and work. One of the biggest challenges for expats in India is integrating into the Indian culture, with almost a quarter (24 per cent) finding it difficult to do so, compared with the global average of 18 per cent.

In the HSBC 'Expat Explorer 2015' survey, India ranked 10th on the family league table, which ranks each country using a score that summarises the expats' views concerning the family aspects of living in the adopted country.

"The close-knit family culture in India is very dominant and expats find that countries with such strong family values bring them closer to their own families," HSBC India Head of Retail Banking and Wealth Management S. Ramakrishnan said.

Mr. Ramakrishnan further said that "in addition to providing a good environment for

children to grow up in, a fulfilling work life and rich culture are some of the other reasons why 58 per cent of expats believe that India is getting better as a place to live and work."

Meanwhile, Singapore emerged as the best place overall for expats to enjoy an excellent quality of life, financial wellbeing and improved career prospects. New Zealand was ranked as second best, followed by Sweden and Bahrain in the third and fourth place respectively. Others in the top 10 include Germany (5th), Canada (6th), Australia (7th), Taiwan (8th), UAE

Others in the top 10 include Germany (5th), Canada (6th), Australia (7th), Taiwan (8th), UAE (9th) and Switzerland (10th). India ranked 17th on the country league table considering all parameters like economics, experiences and family.

We can't step in against post-poll alliances: SC

The Supreme Court on Monday expressed its inability to "step in" and act against two political parties which chose to forge a post-poll alliance to gain power, much against their campaign promises to voters.

"Which law says that a promise made by a political party is a promise enforceable by law?" Justice Amitava Roy asked.

The Bench led by Chief Justice of India H.L. Dattu and Justice Roy was hearing a public interest litigation petition seeking the Supreme Court to declare post-poll alliances unconstitutional on the grounds that voters had no inkling about it when they cast their votes. "Can this court pass such orders if two political parties join together after elections? Is it for

this court to thwart them?" Chief Justice Dattu asked advocate Mithilesh Kumar Pandey, who filed the petition against the Election Commission of India.

"Even if we step in, the parties will say they have become friends and have founded an alliance post elections, or they can say that the alliance was formed to save the exchequer the expense of another election," Chief Justice Dattu observed, dismissing the plea.

The plea, earlier rejected by the Delhi High Court, had challenged the "validity of post-poll alliances among political parties" on the grounds that the same was a "breach of the promises made by them during the campaigns."

INTERNATIONAL RELATIONS

U.S., India sign \$3-bn defence deal

A few hours before Prime Minister Narendra Modi and President Barack Obama met in New York, the two sides signed final agreements for the purchase of two of the most advanced American helicopters in a deal worth about \$3 billion.

Ministry of Defence spokesperson Sitanshu Kar announced on his official Twitter handle: "Contract for purchase of 15 Chinook and 22 Apache helicopters signed." Just an hour after the official announcement, Mr. Modi and Mr. Obama met in New York with a warm hug.

According to officials, the deal value is worth about \$3 billion (Rs 19,800 crore) and would be completed in four years. The agreements were signed in the headquarters of the Ministry of Defence in South Block.

For the Chinook helicopters, the agreement was signed between representatives of MoD and Boeing. For Apache, there were two separate contracts —one between MoD and Boeing representatives and the other between the governments to cover parts of the deal under the Foreign Military Sales programme.

Like the agreement signing on Monday, the deal itself was approved by the Cabinet Committee on Security just moments before Mr. Modi left on his visit of Ireland and the U.S. last Tuesday. The deal had been on the backburner for the past five years.

The contracts mark yet another significant step in rapidly expanding military ties between the two sides that would be discomforting to China, while drawing the contours of a broader coalition emerging in the region. Unlike the previous UPA government, which was reluctant

to be seen to be doing U.S. bidding in the region, the Modi government has been receptive to U.S. deals and joint exercises. In a first, the latest Malabar exercise between the U.S. and India has been expanded to include Japan.

The latest deal would ensure that the U.S. remains the one of India's biggest military suppliers for some years to come. The U.S. has signed over \$10 billion worth of defence deals with India in the past decade or so. This inclu-des P-8I maritime surveillance planes, C-130J Super Hercules and C-17 Globemaster-III transport aircraft.

India, Pak. say 1,100 killed in Haj disaster

Saudi Arabia has given foreign diplomats some 1,100 photographs of the dead from last week's Haj crush and stampede, Indian and Pakistani authorities said, an indication of a significantly higher death toll than previously offered by the kingdom.

Saudi officials could not be immediately reached for comment on Monday night about the discrepancy in the toll of the disaster in Mina. The Saudi Health Ministry's latest figures, released on Saturday, put the toll at 769 people killed and 934 injured.

Tariq Fazal Chaudhry, a lawmaker in Pakistan's governing PML-N political party who is leading his country's response to the disaster, said Saudi officials gave diplomats "1,100 photos" of the dead from Mina. Chaudhry told journalists during a news conference broadcast nationwide on Monday night that the photos could be viewed at Saudi embassies and missions abroad.

"This is the official figure of martyrs from Saudi officials, given for the identification process," Chaudhry said.

"Saudi authorities have released photos of 1,090 pilgrims who have died in stampede," Sushma Swaraj, India's External Affairs Minister, wrote on Twitter on Sunday.

Indian diplomats and government officials declined to immediately discuss or elaborate on Swaraj's tweet. It wasn't immediately clear if other foreign embassies in Saudi Arabia had been given similar photographs.

Saudi authorities have said that the disaster began when two large waves of pilgrims converged on a narrow road last on Thursday during the final days of the annual hajj in Mina near the holy city of Mecca.

Maldives President escapes boat blast

An explosion ripped through a speed boat carrying Maldives President Abdulla Yameen on Monday, injuring his wife and two others but leaving him unhurt.

It remains unclear what caused the explosion, which came at a time of heightened political tensions after the controversial jailing of Yameen's predecessor Mohamed Nasheed.

Unconfirmed reports suggested the blast, which occurred as the tightly-guarded vessel docked in the capital island Male, came from the engine room below deck.

"The First Lady Fathimath Ibrahim, a senior protocol officer and a bodyguard of the President were hurt and taken to hospital," said Mohamed Hussain Shareef, minister at the President's Office.

"The President was unhurt and he escorted the first lady to hospital where she is under observation following a minor injury," he told AFP.

The Maldives has launched an investigation into the incident and is seeking help from the United States and Australia to determine what happened.

Reporters had gathered at the presidential jetty to receive Yameen, who had landed a few minutes earlier at the nearby Hulhule airport after a visit to Saudi Arabia for the Haj pilgrimage.

State television footage showed the President being escorted off the boat.

Modi's Facebook HQ visit brings net neutrality into focus

Ever since Mark Zuckerberg changed his Facebook profile picture to a tricolour shade in support of the Modi-government's Digital India initiative, the social network's users in the country have been split down the middle on the issue, with many saying the gesture indirectly promotes Internet.org, which allegedly violates net neutrality. While several changed their pictures, including PM Modi, many others didn't. This has restarted the debate on net neutrality an whether or not platforms such as Facebook's internet.org should be allowed -- an issue that the Modi-government appointed expert panel has also looked into. The telecom regulator TRAI is expected to submit a report on net neutrality in a couple of months.

Internet.org, recently rebranded as Free Basics by Facebook, aims to bring Internet services to areas that are still not connected in partnership with tech giants like Samsung and Qualcomm. However, it has been widely criticised for violating net neutrality principles and favouring Facebook's own services over its rivals.

In India, which has the largest Facebook user base outside the U.S., Facebook partnered with Reliance Communications to provide free access to select websites. In the wake of the controversy over the initiative, a lot of these websites such as Cleartrip, Times Group, Flipkart and Ndtv opted out of Internet.org to voice their support for net neutrality.

Questions are also being raised on why Facebook did not take up the issue of net neutrality during its 45-minute townhall Q&A with Prime Minister Narendra Modi, despite a lot of users posting questions on the subject on Mr. Zuckerberg's home page.

Mr. Zuckerberg's post on the townhall featured comments and questions on net neutrality. Facebook had received over 40,000 comments from users for the event.

This has again put the spotlight on Facebook's stand on net neutrality – basically, the principle that service providers should treat all data on the Internet equally and not discriminate against, or charge differently, any website or service.

"Until April 2015, Internet.org users could have free access for only a few websites, and Facebook's role as gatekeeper in determining what websites were in that list was seen as violating net neutrality. In early May 2015, due to severe criticism, Facebook announced that the platform would be opened to websites that met its criteria," stated the report by a Telecom Ministry panel on the subject on net neutrality.

The government, after a public uproar over the subject, had formed an expert panel to look into the subject.

The panel in its 111-page report opposed the platform stating, "content and application providers cannot be permitted to act as gatekeepers and use network operations to extract value, even if it is for an ostensible public purpose."

Facebook for its part said Internet.org acted as a "gateway, as opposed to gatekeeper, to Internet access by breaking down the cost, infrastructure and social barriers that exist today."

BUSINESS/ECONOMY

Team Modi vows to make business easy for start-ups

Prime Minister Narendra Modi's team has reached out to Indian start-ups in the Silicon Valley while trying to convince them that their long-standing demands over ease of doing business will be met.

The start-ups, on the other hand, want a quick implementation of the proposals.

Industry sources tell *The Hindu* that at a meeting with top Indian entrepreneurs and investors in the Silicon Valley, Amitabh Kant, Secretary, Department of Industrial Policy and Promotion, spoke about proposals that could make it easy for start-ups to do business in India.

His proposals, they said, were about tax write-offs, relaxation of rules for venture capital flow

and also rules that make it easy for start-ups to shut down.

Zuckerberg for balance between access and Internet neutrality

"The debate on net neutrality has been incredible in India" and finding the right balance between provisions on net neutrality and enhancing access to the hitherto Internet-unconnected in India will have a great impact on the rest of the world as well, Mark Zuckerberg, CEO and founder of Facebook, told select journalists, at the Facebook headquarters in Menlo Park, California. Mr. Zuckerberg said his company's mission was to connect the world.

While there was a perception that his company, due to its success, is "big," the mentality of his colleagues was that of a small company, constantly seeking to live up to its mission, he said.

After it drew about 1.5 billion people the online social networking service was now seeking to enhance connectivity and reaching out to those not connected.

It is in this regard that Facebook was promoting its internet.org platform, whose access application has been rebranded as "free and basic services," besides working on other technologies to provide bandwidth access and tuning products for places with lower bandwidth.

India, having the largest number of people not connected to the Internet, had seen a strong debate on net neutrality, and Facebook had learnt from it, modifying its internet.org business model, he and his colleagues said. Other changes included opening up the free basics platform to developers, changing its privacy policy and providing a security methodology.

Asked about other business models (such as Jana), which provided data access within strict definitions of net neutrality, internet.org head Chris Daniels argued that their model of giving access to free and basic services fitted with net neutrality provisions.

Inflammatory content

Asked about his view on kneejerk reactions by governments, like the shutting down of the Internet when faced with social media content issues, he said his company was working with law enforcement and investing a lot in regulating inflammatory content on Facebook, but more needed to be done.

Join India's growth journey, Modi appeals to diaspora

Prime Minister Narendra Modi reaffirmed his bond with an 18,000-strong audience of the Indian American community in Silicon Valley on Sunday evening and made a pitch for India's economic development from the dividends of the "brain deposit" that they represented.

Speaking in Hindi to a packed SAP Centre Arena at the heart of the Valley, Mr. Modi announced that "Air India's direct flight from Delhi to San Francisco will fly three times a week" from December 2, bringing India ever closer to the vibrant tech ecosystem here.

While he assured the diaspora that India today had emerged as the "fastest growing major economy," he noted that the two main challenges facing the world were terrorism and global warming.

Even as the Prime Minister received a rousing welcome within the arena, a wall of protesters lined up outside the SAP Centre waving placards that questioned Mr. Modi's human rights record in the context of the 2002 anti-Muslim riots in Gujarat.

Possibly answering critics in the U.S. who had earlier questioned his record of achievements after one year in office, the Prime Minister asked the crowd: "Today, after 16 months, I want a certificate from you saying if I've fulfilled my duties or not. Are there any allegations of corruption against me?"

In what appeared to be a dig at the Gandhi family he added: "The daughter took \$500m, son-

in-law took \$1bn. Aren't you sick and tired of corruption? Is there any allegation against me?"

Without naming Pakistan, Mr. Modi also hit out at terror threats faced by India. "Terrorism is terrorism. There is no good terrorism and bad terrorism." When even the UN United Nations had still been unable to define terrorism, how could India tackle it?

The reception for Mr. Modi here was organised by the Indo-American Community of the West Coast and was attended by 13 members of the Congress, including Democratic Leader Nancy Pelosi.

Boost R & D to drive manufacturing growth: Study

India needs to invest more in research & development (R & D) and promote entrepreneurship to achieve transformative gains and boost job creation in the country, according to a joint study "Make in India – The next leap" by Assocham and Thought Arbitrage Research Institute.

"Technology drove manufacturing growth globally and will continue to do so. India's performance in developing new and improved technologies has been dismal. While technological handicap can be addressed through FDI in the short run, India needs to find resources to invest in R & D and new technologies for long term growth," it said.

The study stated that India's innovation suffered due to poor investments in R & D. The country spends less than one-fifth of what China or some of the leading multinational companies do. "India spends 0.8 per cent of GDP on R & D, which is the lowest among BRICS (Brazil, Russia, India, China and South Africa) and other countries," it added.

Stating that private sector investments in R & D is also inadequate to achieve any business gains, the report pointed out that only a handful of big corporates in India take R & D investments seriously. Global firms such as Samsung spend more than India's entire R & D investments.

Indian business has preferred to buy technology from the global markets rather than invested in creating home-grown technology. While this approach has the advantage of quick uptake of production, the downside is that the purchased technology is usually not the latest cutting edge, but on the verge of becoming obsolete, the study said.

Promote Entrepreneurship

"Promoting entrepreneurship and competitiveness of micro, small and medium enterprises will also be a major differentiator in Make in India as it would help absorb both educated and uneducated workforce in a productive way," said Ravindra Sannareddy, chairman – southern region council, Assocham.

The study also draws attention to the complaints over poor infrastructure, tax issues and skill gaps, among others and has asserted that Make in India is not just a policy choice any more, but an absolute necessity that can't be postponed.

EDITORIALS

Putin's grand strategy for West Asia

Syria is not a new theatre for Russia. It has long been a pillar of Moscow's West Asia policy. The only Russian naval base outside the former Soviet Union is in Syria's Tartus. And Russia has been a strong supporter of President Bashar Al-Assad in the Syrian civil war. It resisted every Western move at the United Nations Security Council (UNSC) to pass a resolution seeking Mr. Assad's removal. Also, its aggressive diplomacy was instrumental in thwarting U.S. air strikes on Syria in 2013 amid allegations that government forces used chemical weapons against civilians.

Over the years, Moscow kept supplying military and financial aid to Damascus. But despite

these deep ties with the regime, Russia had tactfully stayed away from joining combat in the past four years. Even when Iran and Hizbollah sent troops to Syria, Russia limited its role to outside support for the regime. Not any more.

The Russian involvement in the civil war assumed greater proportions earlier this month when reports emerged that Moscow was sending troops to Syria. U.S. officials said on September 14 that Russia had sent seven T-90 tanks and artillery to the coastal Syrian city of Latakia.

Three days later, the Washington-based Institute for the Study of War, citing satellite imagery from AllSource Analysis, confirmed the arrival of Russian battle tanks, armoured personnel carriers and helicopters at the Latakia airbase, indicating that Russian troops are deployed in Syria. Though Moscow has not confirmed its military presence, authorities have made no secret that Russia is ramping up its role in Syria. Foreign Minister Sergei Lavrov has acknowledged that new military supplies are being sent in, accompanied by Russian "experts".

From an ally to a combat partner

While the exact details of the Russian military presence are yet to emerge, a change in Moscow's Syria strategy is already evident. Mr. Putin wants to move Russia from being an outside supporter to a combat partner of the Syrian government. To be sure, this is a risky move. It has come at a time when Russia is battling a severe economic crisis at home. It hasn't fought a major war outside its traditional sphere of influence since its withdrawal from Afghanistan.

Needless to say, the 10-year-long Afghan war was a disaster, and the chances for the Russian troops to get swamped in the complex Syrian civil war are high. Still, what made Mr. Putin change the Russian strategy? And what's Russia's actual game plan?

Two recent developments in the battlefield could have influenced the thinking in the Kremlin. First, there's a growing concern in Moscow as well as in Tehran about the recent setbacks suffered by the Assad regime. The government is facing acute manpower shortage as its troops are overstretched in the prolonged war.

Also, the key focus of the regime is to defend its strongholds — the long stretch from the South along the Lebanese border and the Mediterranean coast to the outskirts of the Idlib province in the northwest. Hizbollah has positioned itself on the Lebanese border region, while Iran has deployed its troops and proxies in key city centres such as Damascus, Homs and Hama. It is in the outskirts of the regime-held territory where Mr. Assad's troops are under pressure, a clear indication of their waning strength.

In May, in a major setback to the regime, the Islamic State (IS) terror group seized the ancient city of Palmyra from government troops. Besides its archaeological significance, Palmyra is a strategically important place from where IS could march on to both Homs and Damascus in two directions (The distance between Palmyra and Damascus is around 250 km, while that between the ancient city and Homs is hardly around 160 km). In the same month, a rebel coalition, largely supported by Gulf countries and Turkey, captured the Idlib province, breathing down the neck of the regime's costal territories. These two defeats revived the discussion about a rapid collapse of the Assad regime.

It was in a similar scenario in 2013 that the Hizbollah announced that it would join the Syrian war. The rebels had captured Qusayr, a strategically important town on the Lebanese border, and were making further advances. On May 25, 2013, Hizbollah leader Hassan Nasrallah proclaimed that the "Syrian war is our war". The Hizbollah intervention was crucial in retaking Qusayr and re-establishing the regime's hold over the Lebanese border region. The Russians may be thinking that Mr. Assad is facing another Qusayr moment.

Second, Moscow is wary of the Turkish-Saudi Arabian game plan for Syria. These countries' major concern is not the IS, but the Assad regime itself. Since the outbreak of the civil war,

they have been training and bankrolling anti-Assad rebels. The rebels' Idlib advances would not have been possible without greater support from outside powers. Besides, Turkey has recently allowed the U.S. warplanes to use its Incirlik and Diyarbakir airbases for the latter's attacks on IS positions, and both nations — Turkey and the U.S. — have also agreed to create a 60-mile-long 'safe zone' strip, free of IS and the regime troops, along the Turkish border.

This could be part of a larger regime change game plane. Incirlik is just 15 minutes flying time from the Syrian border. From the air base, the U.S. war planes and drones could easily patrol the Syrian skies. In the name of fighting the IS, the U.S. could establish a *de facto* nofly zone across northeastern Syria which would neutralise the regime's air power advantage vis-à-vis both the rebels and the jihadists.

Further, the 'safe zone' proposal also offers a peek into the Turkish game plan. If Turkey and the U.S. successfully create a "safe zone" in the border area, the model could be repeated elsewhere in Syria. Instead of finding a national political solution to the Syrian crisis, many more "safe zones" within rebel control would be created. Brookings Institution's Michael E. O'Hanlon, a former national security analyst at the Congressional Budget Office, strongly advises the West to follow this "ink-spot campaign", which he calls the "deconstruction of Syria".

The Russian assessment is that if Mr. Assad falls, the balance of power in West Asian geopolitics would turn in favour of countries hostile to Moscow's interests. Besides, Mr. Assad's removal would weaken the Iran-Hizbollah network, which is another pillar of Russia's West Asia policy. More important, Moscow perceives the rise of Islamist militancy in the region as a "national security threat" and considers Mr. Assad a bulwark in the fight against the IS and Jabhat al-Nusra, the al-Qaeda affiliate in Syria.

So, from the Russian point of view, the survival of the Assad regime is key to its interests. Russia has interfered in West Asia in the past to defend its interests. During the Israeli-Egyptian War of Attrition in the 1969-70, the Soviet Union sent troops to defend Egypt. Operation Kavkaz was aimed at preventing a regime change in Egypt and to save the Russian interests on the Egyptian soil — the intervention was a success in meeting the objectives.

Protecting the Tartus naval base

In the case of Syria, Russia has short, medium and long-term goals. The immediate objective is to prevent a rapid collapse of the Assad regime after its weakening on the warfront. Russia might be calculating that once its forces start joining the war, it would strengthen the Syrian government troops in terms of military capabilities and raise their morale substantially. And even if the regime collapses, the Russian goal would be to protect the Tartus naval base.

It is worth noting that Russian artillery and tanks have landed in Latakia, which is just 85 km away from Tartus. In case of an eventual collapse of the regime, Russia would not hesitate to move troops to protect the naval base.

In the medium term, Russia wants to build an international coalition, with a U.N. mandate, to fight terrorism in Syria. There is already a multilateral coalition led by the U.S., bombing locations controlled by the IS in Syria and Iraq. But these bombings, started in August 2014, have hardly weakened the jihadist group.

The Russian idea is to stitch together a coalition of ground troops to fight both the IS and the al-Nusra front. President Putin floated the idea on September 15 in Dushanbe, Tajikistan, while speaking at a regional event. For this proposal to gain traction, Russia would need the West's support. Mr. Putin knows that the U.S. is facing a strategic dilemma over Syria, and Europe, swamped in a refugee crisis, is scrambling for practical solutions to the Syrian conflict.

If a common ground is reached between Russia and the West over Syria, Mr. Putin can also re-channelise the resultant goodwill to settle the Ukraine crisis without its vital interests compromised. It is a bet, but the contemporary history of Russian foreign policy tells us that

Mr. Putin is a man who makes big geopolitical bets.

In the long run, Syria offers Russia an opportunity to re-establish itself as a regional player in West Asia. Reclaiming the lost glory of Soviet Union is of high priority to Mr. Putin. He has recently stepped up ties with Egypt's military dictator Abdel Fattah el-Sisi. West Asia offers a potential market for Russian products and weapons as well as a political theatre for Moscow to expand its influence.

It is far from clear whether Russia would be able to meet its goals or would face another Afghanistan-like situation in Syria. What is certain is that Mr. Putin has opened a new phase in the Syrian civil war. If in the first four years, President Assad had to fight his enemies — supported by regional heavyweights — with limited resources, he now has the direct backing of a big global power.

However, unless Russia couples its military move with an international diplomatic initiative to dial down the regional support for rebels and jihadists, the Moscow plan could backfire. Because otherwise, to offset the Russian support for Mr. Assad, Turkey, Saudi Arabia and their Western backers could step up support for anti-Assad groups, leading to a major escalation of the conflict. The outcome would be worse than that of the Afghan civil war.

Benign gatekeeper not the solution

It's hard not to appreciate Facebook founder Mark Zuckerberg's dogged pursuit of acceptance for his idea —internet.org, which is about providing a taste of the Internet to those who have no access to it, despite the heat it has generated in countries such as India.

The social network giant, which, as Prime Minister Narendra Modi rightly pointed out, would be the third-most populous in the world if it were a country, last week announced a few changes to internet.org, including a new identity, Free Basics. The changes come just a few months after a huge uproar in India over internet.org being antithetical to the idea of Net neutrality, which is that nobody plays the gatekeeper to the Internet.

Earlier this year, Facebook tied up with Anil Ambani's Reliance Communications to launch the service in India. The start was surprisingly quiet, given that only a few months earlier India's netizens had risen quite vocally against India's No. 1 telecom carrier Bharti Airtel's decision to charge consumers extra for use of apps such as Skype to make free calls over the Internet. The awareness about Net neutrality, the principle that all data must be treated equally, caught on.

Before long, internet.org found itself caught in the wrong end of the Net neutrality debate. Amid massive public outrage, Mr. Zuckerberg defended the idea. This, even as numerous petitions against it were signed and partners such as NDTV and Cleartrip decided to opt out of the internet.org platform.

Fast forward to now. The service is available in 19 countries. In February, India became the sixth country to have internet.org. That points to quite a fast scale up.

Indian market crucial

The changes to internet.org, significantly, came barely days before Mr. Modi met with Mr. Zuckerberg. India currently represents Facebook's second-biggest user base in the world even as it still has a large population of Internet have-nots. It is clear that Facebook needs the blessings of India's policymakers. It is also clear that the social network has worked to make the idea more politically palatable.

This is how: the brand name change, for instance, is much more than just cosmetic, as internet.org's likeness with the real Internet was considered to be hugely misleading. Already, as a *Quartz* story in February this year, citing a study, showed, many Facebook users in Indonesia had no idea they were using the Internet. The story said, "This is more than a matter of semantics. The expectations and behaviours of the next billion people to come online will have profound effects on how the Internet evolves." So, the name change does

matter, even if Facebook won't explicitly say so.

Also, to be fair, Free Basics is more open than its earlier avatar, with Facebook some months back opening up its platform for outside developers. The service started just as a collection of some pre-selected websites that got chosen through an obscure process. Encryption of information flowing through the platform is the other initial loophole that has been plugged.

All of that, however, can't erase the fundamental problem with such a service, which is that it allows Facebook to be a gatekeeper to the Internet where none existed earlier.

There's surely a case to be made for Free Basics in a country such as India, where universal access to the Internet is still a long way away. As Mr. Zuckerberg likes to say, more than a billion Indians don't have access to the Net.

And it is absolutely true that the have-nots "can't enjoy the same opportunities many of us take for granted." There is also some merit in the thinking that people who can afford Internet cannot sit in judgement about the quality of Internet that is made available for those who cannot afford it.

Free options

But even if one were to acknowledge that Free Basics has a role, in the best interests of Internet's openness it has to be argued that such a role can only be a stopgap. Even today, it can be argued that Free Basics is a suboptimal solution to the problem of lack of Internet access.

There are alternatives that manage to offer free data to users without donning the role of a gatekeeper. One such alternative goes by the name Jana. The Boston-based start-up's pitch is that it has figured out a way to offer Internet access to billions of people in the emerging world without it playing gatekeeper. And its pitch appears more convincing.

Jana rewards its smart phone users in two ways, as an article about it in *The Hindu* some months back pointed out. It reimburses users the cost of downloading its clients' app. It also gives them free data, with which they can access any content online.

It's also extremely difficult to believe it is just altruism that is making companies such as Facebook look to solve the problem of connectivity. The business models of Internet companies, Facebook included, is directly linked to the number of people that can be brought under Internet access. More the merrier!

Whether Free Basics will pass the Net neutrality test of India's administrators is anybody's guess. Even if it does, there are enough reasons to believe it must have an expiry date if the government is serious about providing universal Internet access.

It's an 'A' for Mr. Zuckerberg's determination to see internet.org succeed. As far as the government is concerned, it must now work towards delivering the real deal (cheap, easy and universal access) in the years to come, so that the likes of Free Basics can become redundant fast.

Mr. Modi in Silicon Valley

Right through his whirlwind tour of the U.S. West Coast, the first by an Indian Prime Minister since 1982, it seemed Narendra Modi could hardly put a foot wrong. The meeting with all the Silicon Valley technology companies that matter set the stage nicely for him to play the charming salesman representing a resurgent India in a digital age. This may be a narrative that critics, many of them back home, don't want to buy. But whatever the political orientation, it would have been hard to miss the buzz generated when the elected head of the world's largest democracy met the who's who of new-age businesses, including Google's Sundar Pichai, Microsoft's Satya Nadella, and Apple's Tim Cook. Mr. Modi also participated in another highly anticipated event — a town hall meeting with Facebook founder Mark Zuckerberg. It's remarkable that the only other leader who had participated in a town hall with Mr. Zuckerberg is President Barack Obama. There is little doubt that Mr. Modi is a

master at creating a larger-than-life feel around his events. Amplifying that feel was the fact that a large number of Indians call Silicon Valley, the hub of technology innovation in the world, their home. Indians came in huge numbers to cheer Mr. Modi wherever he went. The Prime Minister, a skilled orator and one who has more than a feel for the digital world and its mores, obliged them gladly.

But what does all this translate to? To equate Mr. Modi's efforts in Silicon Valley just to the initiatives promised by the big technology firms during this trip, as some have done, would be to miss the larger point. For the record, Google plans to enable Wi-Fi in 500 railway stations, Microsoft wants to make available low-cost broadband in five lakh villages, and chip manufacturer Qualcomm is launching a \$150 million start-up fund in India. These efforts would involve tiny sums given their scale. But again, the point isn't that. The point is to hard-sell India as an attractive investment destination, a country with skilled manpower, and a nation on the move. Mr. Modi looked more than convincing with that marketing message. Of course, it helped tremendously that India has one of the highest growth rates today in the world amid a sea of troubled economies. Also, the success of India's diaspora is a selling point in itself. All this means that the big corporates of the world can ill afford to ignore India. But the question now is whether investors are seeing enough positive changes on the ground. Having successfully made the India pitch, Mr. Modi's challenge will be to don a different hat and deliver on those promises.

Wages for the parliamentarians

The idea of creating an Emoluments Commission to recommend salaries and allowances for Members of Parliament has not come a day too soon. The pay and reimbursements drawn by lawmakers may not be unusually high in India by global standards, but two points have been agitating the people in recent times: the power enjoyed by legislators to fix their own salaries and the loss suffered by the exchequer as day after day is lost to parliamentary logiam, resulting in MPs drawing daily allowances through whole sessions during which no business is transacted. In this backdrop, the proposal of the Ministry of Parliamentary Affairs to establish an independent, three-member commission to fix the pay and allowances of parliamentarians is a sign that the government and the elected members themselves are sensitive to growing concern about the public expenditure incurred in their name. The proposal is on the agenda of the All-India Whips' Conference to be held in Visakhapatnam, and may form the basis for future legislation to de-link members of the legislature from the process of fixing their emoluments. Members of Parliament currently draw a monthly salary of Rs. 50,000, a constituency allowance of Rs. 45,000 and a sumptuary allowance of Rs. 15,000. They may also hire secretarial assistance for Rs. 30,000. They are entitled to daily allowances and travel concessions besides other perquisites. The present levels of pay and allowances, however, have not been revised since 2010.

If an independent body is created for the purpose, India will be following the example of the United Kingdom, where an Independent Parliamentary Standards Authority has been created by law to oversee and regulate 'business costs' or the expenditure incurred by lawmakers in their parliamentary functions, and fix their pay and pension. Such a mechanism may help put an end to criticism, and sometimes public outcry, over legislators rewarding themselves with pay hikes and additional allowances from time to time. In a country where public life is associated in the popular imagination with unbridled greed, and parliamentary representation is seen as a means to amass wealth, it will be tempting to wonder why lawmakers need a salary at all, or, looking at legislative work often coming to a standstill, to question the present pay structure or the need for regular revision. However, payment for legislative work is an important element in attracting public-spirited citizens to participative democracy. As a general principle, pay ought not to be the primary attraction for elective office, nor the

privileges and perquisites that come with it. At the same time, it cannot be so low as to be a disincentive to the public for entering the legislature. An independent pay panel for parliamentarians is surely a welcome proposal.

In thrall to the past

Nepalese people gather to celebrate the adoption of the country's new constitution, outside the constituent assembly hall in Kathmandu, Nepal, Sunday, Sept. 20, 2015. (Source: AP photo)

The constitutional crisis in Nepal does not portend well. The unfolding politics and violence in the Madhesh region signal an increasing breakdown of trust. All constitutions that endure are imperfect, full of ambiguities and compromises. Constitutions work if there is a minimal sense that constitutional debate is indeed the path to progress and an institutional mechanism that can meaningfully adopt the political concerns of those groups that are feeling marginalised. In Nepal, both conditions seem to be weakening. As significant an achievement as the constitution might be, the fact that many groups — women, Janjatis and Madheshis — are feeling betrayed by it is not a healthy beginning. It is simplistic to define the ensuing rift as between the entrenched elites in the valley and groups like Madheshis. Political and intellectual currents suggest that their mutual suspicion will only deepen. It is not clear that Nepal has a political party that can successfully manage these differences.

Defenders of the constitution point, rightly, to the fact that it was passed by 82 per cent of the vote. But this exacerbates the crisis of trust, rather than resolve it. It suggests that the Madheshi leadership is not effective in making its presence felt in Kathmandu; even when it does, it does not seem to carry the authority of its constituents. The sense that Madheshis feel betrayed by a process that was, in some senses, reasonable makes the problem worse, not better. This might diminish faith in representative politics.

The underlying debate is now characterised by charges of bad faith. These are always harder to assuage. Ideally, progressive constitutions in South Asia should dissociate citizenship from identity. This ideal is always hard to achieve. Given entrenched hierarchies of power, there is a fear among marginalised groups that throwing a veil of anonymity over identity is merely a ruse for perpetuating the status quo. But this ideal becomes even harder to achieve when there is a suspicion of double standards. In drawing the federal boundaries, the charge is that they have been effectively gerrymandered to give Brahman-Chhetris effective federal representation but have sidelined Madheshis. There is the larger issue of whether proportionate representation by ethnic identity is necessarily a progressive principle. It usually entrenches, rather than overcomes, the tyranny of compulsory identities. But the dropping of the proportionate representation provision will negatively affect Madheshis and, taken together with the federalism provision, has fuelled suspicion. While it is true that the constitution can still be amended, getting amendments passed on anything pertaining to state boundaries (there is no clear mechanism for changing them) or federalism is going to be near impossible.

Lack of trust now mars how the constitution is being read. For instance, it has enabling provisions for affirmative action in jobs; the fact that this issue is being deferred is fuelling discontent. The deferment of a delimitation mechanism for representation could be seen as a compromise that postpones a controversial issue to a separate process. Or it could be seen as a ruse to deny marginalised groups their due. This question cannot be settled by the text, it is a question of political judgement.

There are many progressive elements in the constitution: on LGBT rights and, arguably, quotas for women. But, alas, progressivism in South Asia always comes divided. The most potent source of regression is at the intersection of religion, nationalism and sexuality that mars constitutionalism in South Asia. While the constitution is "secular", its conception of

secularism is problematic. It defines secularism as "protection of religion and culture being practised since ancient times and religious and cultural freedom". This clause is an oxymoron. There is a deep contradiction between the first and second half of this definition, and one can only imagine what courts will do with it. It also makes the mistake of aligning secularism with identity rather than freedom. It is an alignment reinforced by a broadly phrased prohibition on "converting" someone. It gives such wide latitude to "culture being practised since ancient times" that you wonder how counterfeit freedom will be.

This is not a progressive constitution in so far as it reeks of the language of descent. The core of a modern democracy is not where people come from, but where they are going. The obsession with descent marks a distinction between rights of citizens who are naturalised and rights of citizens by descent. The former are excluded from an extraordinary range of high offices, effectively making them second-class citizens. But most egregiously, it treats women as second-class citizens — they cannot confer citizenship to their children independently of men; in case they marry foreigners, their children will be barred from high office. But in a curious way, such a provision, along with the culture clause, exemplifies the subconscious bane of South Asia: the theme of descent makes its prodigal return. The constitution inaugurates the new; but it protects too much of the old.

But it is also in these provisions that the psycho-analytic entanglement between Nepal and India comes through. Nepal rightly insists on its autonomy. It is something India should respect. But it has also deeply internalised India. Rather than asserting its autonomy, it has let the ghost of India rule: it will short-change its own women to keep notions of purity of descent alive. The imagined Indian dominance frames this regulation of gender. India, for its part, cannot take the moral high ground on progressivism: its political culture, too, is marked by a suspicion of women's autonomy. The same language of religious protection and "ghar wapsi" is becoming the common sense of its discourse.

India can be accused of mishandling the situation — not having a process that engaged with intelligence and discreteness with events in Nepal in the first instance, and then coming across as heavy-handed. This dialectic has been repeated before. But overt Indian intervention will probably make it harder for Kathmandu's elites to compromise. But you also suspect that, like so much politics in South Asia, the bogey of the foreign is a ruse not to confront our own pasts. The situation in Nepal is precarious, not because there are disagreements of principle; any society will have them. But because unresolved fears, self-fulfilling suspicions and a thrall of the past still cast too much of a shadow on a moment that should inaugurate a new dawn. It will require political trust and generosity to deal with these issues, something that is in short supply in Nepal, and in South Asia more generally.

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The passengers are restless

The seatbelt sign has been on for more than a year. In his budget speech, Finance Minister Arun Jaitley had asked the crew to shut the doors and said the Indian economy was poised for takeoff. The recent meltdown in China evoked similar responses. "India can replace China as the next engine of global growth," Jaitley said. The message is being repeated by Prime Minister Narendra Modi in the US.

Yet, numerous economic indicators have not reflected this sentiment — from the subdued quarterly GDP growth to declining non-farm credit, from softening rural demand to declining exports. On the same day as Modi was marketing the Digital India initiative in Silicon Valley, it was reported that in September alone, some Rs 6,000 crore was pulled out of capital markets by foreign investors. There is a gap between rhetoric and reality. Something is amiss and people are beginning to ask: What is the true picture of our economy today?

With one-fourth of the Modi government's tenure over, and the results of "Modinomics", as opposed to "UPAnomics", beginning to show in economic output, the time has come to evaluate the prospects for takeoff. We can start by looking closely at the RBI's Annual Report 2015 and the Central Statistics Office's quarterly GDP data report.

As per the CSO report, GDP growth moderated to 7 per cent in the first quarter of 2015-16, down from 7.3 per cent in 2014-15, which is only slightly higher than the 6.9 per cent clocked by the UPA in the turnaround year, 2013-14. The CSO reports stagnancy in private consumption growth, a decline in investment as measured by gross fixed capital formation, and a decline in government final consumption expenditure (from 12.1 per cent of the GDP to 11.4 per cent). Growth rates were down for the crucial agriculture and manufacturing sectors. The RBI's Annual Report 2015 points to the urgent need to grapple with important structural constraints and banking asset quality concerns in order to sustain the growth process. The RBI is understandably concerned about the elevated banking sector risk due to the alarming level of NPAs and the related decline in non-food credit offtake.

Both reports points to two worrisome trends. First, the slowing down of growth in domestic consumption. Second, the declining level of investment in the GDP (for a second consecutive year). Consumption and investment, followed by net exports, are the most important drivers of an economy's GDP. With exports also falling, all the important drivers of growth are weak.

The Indian economy has been known for its domestic consumption-led economic growth model, as distinct from China's investment- and export-led model. Even in 2014, 69 per cent of output was driven by consumption (57 per cent household consumption, 12 per cent government) and only 24.4 per cent of the GDP was accounted for by investments and exports. In the same year, 50.8 per cent of Chinese GDP was driven by consumption, (36.8 per cent household, 14 per cent government), and a massive 48.8 per cent was investments plus exports. The low level of household consumption in China is seen as one of the major reasons for its slowdown, while India has remained insulated from the recent global recession partly because of strong domestic consumption.

Most theorists preach a balance between consumption and investment, and that is what the UPA seemed to have achieved when it hit the golden patch of 9 per cent-plus GDP growth in 2006-09. On balance, the UPA surely focused more on spurring domestic consumption by encouraging rural demand and expanding government expenditures. The MGNREGA, increases in MSPs for farmers, the farm loan waiver, food security act, slashing of interest rates for farm credit and across-the-board hikes in social-sector expenditures defined this approach. What is becoming clear now is that the NDA government is seeking to build a different narrative. It is tilting the balance in favour of investment, as opposed to consumption. On the one hand, there have been greater allocations for roads and railways, and a 5 per cent corporate tax cut to spur private investment, and on the other, reduced allocations for social/ rural sectors, meagre MSP increases for farmers, delays in implementing the food security act, etc. On the surface of it, this doesn't seem like a flawed economic strategy; after all, we do need enhanced investment rates in sectors such as infrastructure to leap forward. But as the economic results of such an approach are unfolding, it is becoming clear that while the focus on spurring investment rates may be correct, taking domestic consumption growth for granted is proving counterproductive.

The NDA's approach threatens to kill the goose that laid the golden eggs: domestic consumption growth. As the CSO report points out, private consumption growth is stagnating. Rural income growth has been stuck in the mid to low single-digits in 2015, far below the 20 per cent-plus clocked in 2011. Similarly, the latest data from the Labour Bureau shows that rural wages have registered an average annual growth of 3.8 per cent this year, the lowest since July 2005. All this is hitting India where it hurts most: Weak rural demand. For

instance, sales figures for motorcycles and tractors are depressed.

In spite of the government wanting to follow the Chinese investment- and export-led growth model, investments and exports are not picking up. The timing of the government's strategy is to be blamed. Asset quality concerns and the related risk aversion of banks, the impending rate hike by the US Federal Reserve and the "wait and watch" investment strategies of institutions, the global outflow from emerging markets and low domestic demand are some of the factors that are responsible for this. Low global demand levels are also keeping exports down.

Simply put, the reason the "takeoff" rhetoric is not translating into reality is because the government's rightwing economic plan has left less in the hands of people who are, as a result, not spending enough. And the investments, which the NDA was hoping would compensate for this, are yet to firm up.

Let me clarify. I do, in fact, partially agree that there is an opportunity for the Indian economy to takeoff. But we need the right policy mix in place. The crash in crude and commodity prices has brought a windfall that a finance minister can only dream of. The Chinese slowdown puts India in the reckoning for global investment. Our own fundamentals have improved gradually over the last few years, anchored by fiscal consolidation and the easing of inflation. But the government has to seize the opportunity it has and deliver.

Raja-Mandala: Picking up the tab for peace

US Secretary of State John Kerry (R) and Minister of Commerce and Industry Nirmala Sitharaman (L) listen to External Affairs Minister Sushma Swaraj (C) at the US-India Strategic & Commercial Dialogue plenary session at the State Department in Washington on September 22, 2015. (Source: Reuters)

A little noticed agreement unveiled last week by India and the United States marks a long overdue revision of New Delhi's approach to international peacekeeping operations. At the second round of the India-US strategic and commercial dialogue in Washington, External Affairs Minister Sushma Swaraj and US Secretary of State John Kerry announced that India and the US will jointly train troops of six African nations for peacekeeping duties.

It has indeed taken a long while for India and the US, two big champions of international peacekeeping, to start working together. Better late than never. The United Nations peace operations, which have expanded so rapidly since the end of the Cold War, now face immense challenges.

Prime Minister Narendra Modi is joining a host of other world leaders to discuss ways and means of making UN peace operations more effective at a meeting convened by President Barack Obama this week in New York. America has long picked up much of the tab for UN peace

operations. This year, out of the \$8.2 billion budgeted for these operations, Washington will pay nearly 30 per cent. Cumulatively, India is the biggest troop contributor for these operations. Over the decades, India has sent nearly 1,80,000 peacekeepers to 44 missions.

Delhi and Washington have often talked of working together on peacekeeping. While India's armed forces and the foreign office recognised the utility of working with America and others on international peace operations, there was little enthusiasm in the defence ministry. As a result, India's expansive contribution to international peacekeeping seemed to have only one objective — to reinforce India's campaign for a permanent seat at the UN Security Council.

But over the last few years, many developing countries, especially India's neighbours, began to contribute in a big way to UN operations. Bangladesh now has the top spot with 9,432 troops deployed in UN peace operations. India stands third with a contribution of 7,794 men and women. Pakistan is close behind India, with about 7,533 soldiers. Nepal, with 5,346 peacekeepers, is among the top 10 contributors.

Meanwhile, China has begun to steal a political march over India in the international discourse on peace operations. Ending its traditional wariness about international peacekeeping, China has moved quickly into the list of top 10 troop contributing countries in recent years. Although the number of Chinese troops currently deployed is modest at 3,079, China has put peacekeeping at the centre of its defence diplomacy and made it a priority military mission for the People's Liberation Army. These precisely have been the missing elements of India's approach.

As peacekeeping became a routine activity for India, Delhi was increasingly preoccupied with process-related issues at the UN — the construction and implementation of the mandates for peacekeeping. India's recent focus has been on gaining a say in the UN decision-making on peace operations that have become increasingly complex.

India is unlikely to advance by organising a trade union of troop contributing countries at the UN General Assembly. Instead, it should expand its strategic cooperation with the US, France, Japan, Australia and other partners to reshape the norms and mechanics of international peace operations. At the same time, India should also seek partnerships with its South Asian neighbours. While the Pakistan army might be reluctant, the security forces of Bangladesh and Nepal may be more open to collaboration with India on peacekeeping, disaster management and humanitarian relief operations.

The first step is to start sharing their expansive experiences in peace operations. Second, South Asian military and civilian policymakers on peacekeeping should be meeting in Delhi, Dhaka and Kathmandu and not just in New York.

At the UN last week, India reaffirmed its commitment to international peace operations. But Delhi must look beyond mere troop contribution to other critical activities, such as training, logistics and operational support. The latest agreement between India and the US on training African troops provides a good basis for this. Military cooperation with the major powers and neighbours is also important for another reason — not all peace operations today are run from the UN. India needs to develop military coalitions that can respond to crisis situations in the Indian Ocean and beyond on short order.

In the end, reforming UN peace operations is only a small part of the answer to the larger questions that India must ask itself about the use of military force. Way back in the 1950s, our first PM, Jawaharlal Nehru, recognised that our armed forces had duties beyond borders in discharging India's responsibilities as a good global citizen.

As the world today looks up to India as a net security provider, Delhi needs to recast its peacekeeping strategy by modernising its decision-making structures, expanding domestic defence capabilities, and strengthening its military diplomacy.

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Leave it to the generals

The committee of experts headed by former Home Secretary Dhirendra Singh, appointed to suggest amendments to the Defence Procurement Procedure 2013, submitted its report on July 23. It tried sneakily to legitimate the authority of the armed services to configure defence policy.

How is it that, with the advent of the Narendra Modi government, there has been so little substantive change in India's foreign and military policies? The short answer is that political leaders don't decide either the direction or content of policies; it is the "permanent secretariat", comprising senior civil servants, diplomats, and the military brass, that configures policies according to its bureaucratic lights. That's because the elected political leaders have little interest in these areas and no clear ideas or, as in the case of Modi, believe in an "empowered" bureaucracy to conduct the business of state. Hence, the implementers of

policy in the Indian system by default end up shaping policy and its contents. This is particularly conspicuous in the national security sphere.

Deciding which country (China or Pakistan, for instance) constitutes the main threat is a manifestly political decision, as is the sort of war the armed services should prepare to fight — "limited aims, short duration" conflicts or "total war for victory" — which, in turn, will determine whether it is a "war of manoeuvre" that will be prosecuted or "war of annihilation". This will require the military only to orient itself to the designated threat and alight on the appropriate plans to achieve the politically desired strategic aim. But this policymaking role has been expropriated by the armed services. It is an arrangement that is now sought to be formalised. Surprisingly, there's no fuss about it.

The committee of experts headed by former Home Secretary Dhirendra Singh, appointed to suggest amendments to the Defence Procurement Procedure 2013, submitted its report on July 23. It tried sneakily to legitimate the authority of the armed services to configure defence policy. The intention to remove the political leadership from the defence policy loop is stated upfront.

In the first paragraph of its lead chapter, the report asserts "that whereas primacy has to be accorded to policymakers in strategic planning... the balance of advantage needs to shift to the armed forces in the matter of the choice of the characteristics of defence systems and equipment based on user preference and tactical and operational doctrines". It doesn't explain why this should be so. Further, "strategic planning" is dismissed as a mere accounting of "domestic compulsions (including resource allocations) and international relations", and the "political executive" is turfed out of the business of defining and grading threats and imposing the parameters of war by subsuming these seminal tasks under the rubric, curiously, of military "modernisation".

"Modernisation", the report claims, "is not merely induction of new types of equipment, but a mix of strategy and security perceptions and optimum use of hardware to achieve stated national objectives" before affirming plainly that "Services should lead the initiative for modernisation". This is hugely muddled thinking, considering that the process of perceiving threats and alighting on strategy is based on national vision. With no vision document from the government to guide the defence forces and this entire policy field ceded by the political masters to the military as its professional domain, it is little wonder that the entire policy domain has been reduced to making hardware choices.

In the event, the government is supposed to merely meet the military's needs already decided by the armed services. The report advises against disaggregated buys of equipment as financial resources may allow, recommending instead the purchase of armaments as a "total package" for full theatre-level warfighting capability, whether or not the country can afford it. In this respect, the document mentions not China, the principal challenge but, implicitly, the perennial punching bag, Pakistan, a "threat" that justifies the most capital-intensive, least-likely-to-be-used fighting assets: the massive armoured and mechanised forces constituting a powerful bureaucratic vested interest.

Such "total" packaging of acquisitions may not dent the Pakistan army in war, but the wrong military emphasis is guaranteed to leave the country vulnerable to China, and financially sink India. After rejecting the lead chapter of the report, only such parts of it ought to be accepted as relate to improving the defence procurement process and system — an ongoing national disaster.

Way of the Valley

Prime Minister Narendra Modi's visit to Silicon Valley, technology capital of the world, home to the likes of Apple and Google, has been widely deemed a resounding success. CEOs of some of the most innovative companies anywhere rolled out the red carpet in welcome, promising new investment in Digital India, the government's ambitious plan to connect each citizen to the internet and harness its potential to improve public services. Google confirmed plans to launch free WiFi in 500 railway stations across India; Microsoft pledged its help in bringing low-cost broadband to villages; and Qualcomm promised to invest \$150 million in Indian startups. Modi engaged the tech community, many of whom are Indian or of Indian origin, with humour and anecdote. Of course, his reputation as an enthusiastically tech-savvy, social media-enabled PM had preceded him.

At the townhall-style discussion at Facebook HQ, India's PM spoke disarmingly of how social media was "like a guide" and an "easy textbook" for him, filling in for a "lack of education" and broadening his perspective. He acknowledged, too, its potential to radically transform the compact between governments and citizens — with Twitter and Facebook, with all their limits, acting as instant barometers of the public mood. He spoke of the ways in which social media can inject informality in starchy, protocol-obsessed diplomatic relations, describing how a "happy birthday" message for the Chinese prime minister went viral recently.

But the heartwarming tableau at Silicon Valley seemed at odds with the increasing parochialism and narrow-mindedness on display back home, be it the meat-ban contagion or ministerial talk of "cleansing" cultural areas that have been "Westernised". Clearly, Modi admires the entrepreneurial spirit and vivacity of Silicon Valley — as he put it, California is "one of the last places in the world to see the sun set. But it is here that new ideas see the first light of day". But if Silicon Valley exemplifies the virtues of creative disruption, it does so because it tolerates — no, celebrates — diversity and difference. The new ideas Modi praised so effusively are made possible in an environment that nurtures defiance and dissent and individuality. Insubordination is encouraged, not muzzled, and the blunt instrument of an internet block is not used as the knee-jerk retort to every perceived security risk. Modi may not be responsible for this strain of illiberalism that seems emboldened in his regime, but he has failed to forcefully distance himself from it, or to subdue it. Also, given his flair for technology, the prime minister must know that the internet respects few territorial boundaries — what happens on, say, Facebook in India, does not stay in India.