Upcoming events across India

**EID-UL-FITR**

Eid-ul-Fitr marks the end of Ramadan, the Islamic holy month of fasting. People visit their friends and family, and bustling street markets to feast on lip-smacking cuisine.

**WHERE:** Across India

**JUNE 5, 2019**

**SHIMLA SUMMER FESTIVAL**

From witnessing some great musical and cultural performances and relishing delicious street food to shopping for local handicrafts and trendy clothes, the event makes for a cooling experience, away from the summer heat of the plains.

**WHERE:** Shimla, Himachal Pradesh

**TO JUNE 7, 2019**

**GANGA DUSSEHRA**

This festival is celebrated to mark the descent of River Ganga on earth, as mentioned in Hindu legends. Ghats or the river banks, are packed with devotees who congregate alongside the river to take a dip in its holy water.

**WHERE:** Varanasi, Haridwar and Rishikesh

**JUNE 12, 2019**
Puri Rath Yatra

A huge procession accompanies the idols of Lord Jagannatha and His siblings carried on towering chariots called rathas, which make for a truly spectacular sight.

WHERE: Puri, Odisha

Yuru Kabgyat

The two-day festival features sacred masked dance performances and other rituals amidst a picture-perfect backdrop of snow-capped hills. Watching the monks play musical instruments like drums and cymbals to celebrate is an exciting experience.

WHERE: Lamayuru monastery, Ladakh, Jammu and Kashmir

Champakulam Boat Race

This popular race is the oldest snake boat race of Kerala. A grand procession is carried out before the race begins. It features exotic water floats, boats decorated with colourful parasols, and performing artists.

WHERE: Champakulam, Kerala

Beh Deinkham

The three-day long festival witnesses a grand procession of chariots and ceremonial tree trunks to a sacred pool of water. An exciting football match is also held among the locals.

WHERE: Jowai, Jaintia Hills, Meghalaya
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With India making massive strides towards becoming a digitally empowered nation, we would, with this edition of India Perspectives, like to introduce the new digital version and our new domain, www.indiaperspectives.gov.in The website will serve as an archive of all the previous editions and will bring all your favourite stories, just a click away.

The website will provide a platform for various Indian missions overseas to publish useful information and content related to their respective regions. The video section of the website will feature the latest videos of important events and media briefings related to the developments in India’s foreign policy. Visitors will also be able to connect with the social media handles of the Ministry of External Affairs through the website.

In this brand new and e-version, we begin by revisiting some of the biggest additions to our foreign policy with bureaucrats who served with the missions abroad and look at the potential of BIMSTEC. We also take a trip down memory lane and travel back to Wuhan in China as we summarise the relations between India and China since the informal summit in April 2018.

India’s global image has changed dramatically over the last decade and we travel to IIT Madras to catch up with some of the brightest minds who have been a part of the drive to make the country better. We also look at how various online streaming platforms have emerged as the new entertainment destinations and the genre’s exponentially growing audience. We also revel in the success of the two premier, scientific institutions in the country, the ISRO and the DRDO. ISRO successfully launched the EMISAT into an orbit around the earth along with 28 international customer satellites as its payload, whereas, the DRDO, with the near perfect deployment of a special rocket, entered the group of select countries that have anti-satellite and ballistic defence systems.

With the Rabi harvest, we travel to different parts in India in our photo feature section and experience the thrill of multiple harvest festivals which are very different from each other and yet so similar. We then head to the coastal states of Karnataka, Goa and Kerala with seasoned travellers in search of wellness ideas that provide relaxation for the mind, body and soul.

Finally, we travel back to the national capital and walk amongst the lanes of the Lodhi Colony, one of the first amongst many public art districts that have been identified across India.

We invite you to experience the new and improved version of India Perspectives and hope that you enjoy browsing through it.

Raveesh Kumar

FOREWORD
THE BIMSTEC Potential

BIMSTEC has emerged as a new engine for regional cooperation. Former Indian ambassador Anil Wadhwa looks at why 2019 is a crucial year for the organisation
The Bay of Bengal Initiative for Multi Sectoral Technical and Economic Cooperation (BIMSTEC) is an organisation which brings together Bangladesh, India, Sri Lanka, Thailand, Myanmar, Bhutan and Nepal. The aim of this regional organisation is to bridge the gap between South and Southeast Asia, and to enhance the potential of the member countries by mitigating the effects of globalisation by utilising regional resources and geographical advantages. BIMSTEC has been actively promoting regional cooperation since the last two decades, in fact, a permanent secretariat for the organisation has been functional in Dhaka since August 2014. BIMSTEC is increasingly being seen as an alternative to SAARC which has so far functioned on the basis of the Bangkok declaration of 1997, outcomes of the four summits, and a Leaders Retreat in 2016. This makes 2019 a crucial year for the organisation. The fourth summit held in August 2018 has taken some important decisions which include setting up of a Permanent Working Committee to provide direction during the intra summit periods, and preparing the Rules of Procedure. The secretariat has received attention, and has been promised more finances and human resources, as well as elevation of its role as the coordinator, monitor and implementor of the activities of the organisation. Member states will also consider a proposal from Thailand to focus on five primary areas of connectivity, trade and investment, people-to-people contacts, security, and science and technology in order to benefit the organisation.

While an MOU on grid interconnection above:

Above: Prime Minister Narendra Modi delivering his speech at the fourth BIMSTEC summit held in Kathmandu, Nepal in August 2018

BIMSTEC opens up new avenues for cooperation amongst its members, who belong to both South Asia and South East Asia
BIMSTEC is a sector-driven organisation and by 2008, it had added 15 sectors as focus areas of cooperation.

has been signed at the last summit, the organisation has been discussing a free trade agreement for the past 14 years, and has yet to set up a BIMSTEC Energy Centre despite agreement being reached in 2009. The Motor Vehicles Agreement and the Coastal Shipping Agreement are still being considered, both of which are important for connectivity. The organisation has done well in strengthening security cooperation – the annual meetings of national security advisers and army chiefs are held, and in future, the home ministers will also start meeting. A revitalisation of business and economic forums and meetings of universities, cultural organisations, media and parliamentarians are on the cards.

The littoral areas of the Bay of Bengal, who are members of the organisation, have large exclusive economic zones and comparatively weak naval capabilities for their protection. It is in this area that countries like India can take the lead in increasing maritime domain awareness by strengthening capabilities wherever desired through the navy and coast guard, and setting up of Regional Information Sharing Centres (ISCs) in line with the Information Sharing Centre in Singapore. Cooperation needs to be strengthened to counter terrorism, violent extremism and radicalisation, and cooperation needs to be deepened to deal with traditional and non-traditional security threats in a comprehensive manner.
WE NOT ONLY HAVE DIPLOMATIC RELATIONS WITH ALL BIMSTEC COUNTRIES BUT ARE STRONGLY CONNECTED BY CIVILISATION, HISTORY, ART, LANGUAGE, CUISINE AND SHARED CULTURE

Narendra Modi
Prime Minister of India
The BIMSTEC transport, infrastructure and logistics Study (BTILS), conducted in the mid 2000s and funded by Asian Development Bank, identified 160 projects to boost connectivity, of which 65 were prioritised. The Trilateral Highway, the Kaladan Multimodal project, and the Bangladesh Bhutan India and Nepal Motor Vehicles Agreement are the flagships. All these are close to realisation although last mile challenges remain. In order to boost trade, tourism and investment, and for energy synchronisation and cooperation, BIMSTEC countries must concentrate on building connectivity in all forms and dimensions — physical connectivity through land, sea and air, digital connectivity and people-to-people connectivity. Strengthening the Buddhist connection, connecting through border community zones, cultural art forms and cinema need to be encouraged. The presence of marine resources like fish present regional opportunities in the joint development of a blue economy, and fostering mountain economy, especially in countries like Bhutan.

In order to emerge as a vibrant regional organisation, member states will need to introduce trade facilitation steps, harmonise their national technical
A revitalisation of BIMSTEC business and economic forums and meetings of universities, cultural organisations, media and parliamentarians are on the cards means, strengthen regional value chains by linking South and Southeast Asia and setting up industrial parks for investments by countries of the region. Sea borne trade and coastal shipping between the countries of the organisation has to be made viable, Northeast India developed and connected with the rest of the region, multimodal transport models made more prevalent, and coastal and border economic zones developed. India must complete the physical connectivity projects it has undertaken in the region – like the Trilateral highway connecting India to Thailand via Myanmar, and the Kaladan Multimodal project connecting states of Northeast India with Myanmar at the earliest. Members of the organisation must push for cross border energy trade, a BIMSTEC energy grid and regional renewable energy cooperation, given the hydropower potential of the region and the presence of gas and petroleum in countries like Myanmar and Bangladesh. As PM Narendra Modi said in Kathmandu, regional integration in South Asia would go ahead “through SAARC or outside it, amongst all of us or some of us” – BIMSTEC opens up new avenues for cooperation amongst its members. India, as a major contributor to the organisation, will need to pay more attention to its reinvigoration, helping it overcome its lack of political thrust, ensuring availability of financial resources and involvement of business and civil society in the functioning of this organisation which has emerged as a new engine for regional cooperation.

Anil Wadhwa was Secretary (East) in the Ministry of External Affairs between 2014-16. He served as India’s ambassador to Italy, Thailand, Oman, Poland and Lithuania and San Marino and served in various capacities in Indian missions in Hong Kong, Beijing, and the Permanent Mission of India in Geneva. He also worked in the Organization for the Prohibition of Chemical Weapons in The Hague, and led the Indian delegation at BIMSTEC meetings in Bangkok between 2012-14.
A year has passed since the India-China Informal Summit between PM Narendra Modi and President Xi Jinping took place at Wuhan. Former Indian Ambassador to China Gautam Bambawale talks about how the relationship between the two countries has returned to an even keel after the summit.
India and China have contributed the concept of “informal summits” to global diplomatic practice. The seminal Wuhan Informal Summit held between Prime Minister Narendra Modi and President Xi Jinping in April 2018, is a perfect example of this. The summit showed that leadership interaction between two countries could be entirely at the informal level without necessitating any of the bells and whistles that international protocol demands. Such informal meetings have, in the recent past, been a small part of a larger formal visit by a state leader. However, the meeting in Wuhan, was one of the first which was entirely informal in its setting, in approach and in its implementation. The reason the two countries agreed to such an “Informal Leaders Meeting” was to give ample time and space to the leaders to talk to each other on topics which they decided themselves. There was some coordination on the broad subjects to be covered beforehand, but the leaders were free to decide how long to dwell on any one subject or in what direction a particular conversation was to be taken. While this can even be true of more formal meetings with a set agenda, it is the hallmark of an informal meeting. Hence, India and China, which gave the world the Panchsheel or five principles of peaceful coexistence in understanding the other side’s point of view, its dreams, its goals and objectives, and its strategies.
WE SHOULD OPPOSE PROTECTIONISM AND UNILATERALISM, UPHOLD THE CORE VALUES AND BASIC PRINCIPLES OF THE WORLD TRADE ORGANISATION (WTO)

Xi Jinping
President of China

Above: PM Modi and President Jinping visit Hubei Museum in Wuhan, China
Below: PM Modi and President Jinping take a walk together along the East Lake, in Wuhan, China

“I STRONGLY AGREE WITH THE IMPORTANCE OF PEACE AND STABILITY IN THE WORLD, I FULLY AGREE THAT INDIA AND CHINA CAN PLAY A VERY BIG POSITIVE ROLE FOR PEACE, STABILITY AND PROSPERITY IN THE WORLD

Narendra Modi
Prime Minister of India
The return of the India–China relationship to its previous equilibrium is indeed a major contribution of President Jinping and PM Modi.

The Wuhan Informal Summit between the Indian Prime Minister and Chinese President was also strong on what is described by some as “strategic communication”. It was an exercise in understanding the other side’s point of view, its dreams, its goals and objectives, its assessments and its strategies. Starting with each country’s civilisational ethic, norms and traditions which shape the reality of today, the two leaders also spoke to one another of the hopes, ambitions and desires of their people. This translated into mutual understanding of the other’s policies, both domestic as well as foreign, the nature of geo-economics and geo-politics, how the two can work together in larger multilateral forums as well as an acknowledgement of the areas where the two sides have differences of opinion and positions. Such a clear, frank and direct exchange of views would perhaps not have been possible in more formal settings where leaders normally speak from prepared texts. Informal settings are more amenable to producing candid views and sharing of confidences. So, president Xi and PM Modi have been trailblazers in setting new diplomatic precedents and norms.

That the India–China Wuhan Informal Summit has been successful in returning the bilateral relationship to an even keel has become increasingly obvious over the past year. Therein lies its significance as well as
The Wuhan Informal Summit between the Indian Prime Minister and Chinese President was also strong on strategic communication. The return of the India–China relationship to its previous equilibrium is indeed a major contribution of President Xi and PM Modi.

What have been the results following the Wuhan Informal Summit? First, ministerial meetings have resumed between the two countries with India’s External Affairs and Defence Ministers Sushma Swaraj and Nirmala Sitharaman, having visited China and in return China’s Defence Minister Wei Fenghe, Public Security Minister Zhao Kezhi and Foreign Minister Wang Yi having been to India in 2018. While our ministers went to China mainly to attend meetings of the Shanghai Corporation Organisation (SCO), both had an important bilateral segment to their visits. In fact, the Wuhan Summit was formally announced to public opinion by EAM Sushma Swaraj and Chinese FM Wang Yi at their interaction with the media following their bilateral interaction in Beijing. Defence Minister Nirmala Sitharaman too had a very important bilateral meeting with her counterpart Chinese minister which led to a thaw in defence and military cooperation between our countries. The visit to India of China’s Public Security Minister and interaction with Home Minister Rajnath Singh has led to new grounds for...
cooperation as was seen recently with the visit of two Indian Navy ships to Qingdao this April to participate in China’s International Fleet Review.

Third, India’s trade deficit with China has narrowed even while trade has continued its expansion. However, more needs to be done especially in the export of Indian pharma products and software to China. If we are able to sell these items to China, only then will there be a basic change in the deficit picture. To tackle the trade imbalance, India must focus on getting more Chinese tourists to India as well as on ensuring that Chinese firms invest in greenfield ventures in our country. Fourth, given the directives from the informal summit at Wuhan, it is important that the India – China boundary has been relatively quiet this summer as a result of the understanding between PM Modi and President Xi. This has enabled India to focus on its own internal priority of a general election. Fifth, the fact that India and China have joined hands in training Afghan diplomats with a view to contributing to that Asian nation’s progress and stability is indeed significant. Finally, India has become an active member of the SCO, participating in all its activities, including joint military exercises. Such collaboration provides India important partners including in the Central Asian Region.

Whether a second informal summit between the leaders of India and China will be held later this year is for the two sides to decide. Be that as it may, it appears to most observers that the “Informal Summit” option for leadership level meetings seems to be here to stay.
As the nation awaits the results of the recently concluded 2019 general elections, we take a look at the massive electoral process that witnessed a record 900 million voters, making it the world’s biggest democratic exercise.

BY ABHIJIT MAJUMDER
Jaws dropped worldwide at the mention of 900 million people choosing a government in one giant exercise as India witnessed the 2019 general elections. The biggest democratic exercise in the world, the Indian general election to constitute the 17th Lok Sabha was held in seven phases from April 11 to May 19, 2019.

This year, the Election Commission of India (ECI) set up about 1 million polling stations in the country, 10 per cent higher than the 2014 elections. Conducted in seven phases spread across 39 days, the elections were the longest ever in India, in terms of the number of days the polling was held for.

This was also the first time when voters were allowed to carry any of the 12 approved identity cards to the polling station and voter slips were not used as the stand-alone identification document. The 2019 elections also witnessed the highest ever voter turnout at a tentative 67.11 per cent across 542 constituencies barring Vellore in Tamil Nadu where polls were rescinded.

This year’s voter turnout is 1.16 per cent higher than 2014’s 65.95 per cent. While Lakshadweep recorded the highest voter turnout percentage at 84.96, the northeastern states of Tripura, Nagaland and Manipur also scored well with 83.20 per cent, 83.09 per cent and 82.69 per cent respectively. Madhya Pradesh witnessed the highest increase in turnout from the previous elections with a jump of 9.50 per cent.

More than 10 million election officials ensured fair and smooth polling across the country. That is more than the total electorate of Hungary and Iceland put together. That, however, is not the most fascinating point. After all, 900 million is just a number. What is staggering is the diversity of these 900 million human beings who were choosing their leaders, ideologies which must govern them, and the socio-economic trajectory they would take as a people.

What is even more remarkable is that this gargantuan democratic ritual by almost an eighth of humanity was not done at bullock-cart speed or with scattershot precision. It involved the latest technology, clockwork workflow management, expansive security deployment and economic activity bigger than the annual budget of many small nations.

As many as 3.96 million electronic voting machines were used during the elections.

While Indians may still not be able to cast their vote online, 2019’s poll was technologically the world’s biggest and most advanced.
ELECTIONS

The many Indias
As of March 2019, there were 2,293 registered parties in India which include seven recognised national parties and 59 recognised state parties. How many ideologies, regional aspirations, manifestos of all these parties add up to? It is difficult for those from more monolithic nation states to fathom. India officially has 22 officially recognised languages and more than 2,000 ethnic groups. There are fair, dark, yellow and brown-skinned people, and all can legitimately claim to be original settlers of this land. There are people from the hills, plains and islands.

The elections were a celebration of a neurotic level of diversity. There were five transgender candidates in the fray, and 41,292 voters had enlisted under the ‘third gender’, a rise of about 45 per cent from the figures of 2014, when the EC first started this category. Mahant Bharatdas Darshandas was the sole voter at the Banej polling station deep in the Gir forest, the home of Asiatic lions. He boasted of a 100 per cent turnout at his booth!

101 year old retired school teacher from Himachal Pradesh Shyam Saran Negi, who has cast his vote since India’s first general election in 1951, was the oldest to cast his vote. At 15,256 ft., Tashigang in Himachal Pradesh served as the world’s highest polling station. In Arunachal Pradesh, officials hiked for an entire day to reach a lone voter. Telangana’s Nizamabad became the...
first constituency in the country where 12 big-sized EVMs were used at every polling booth as a whooping 185 candidates were contesting the elections.

On the other hand, 84.3 million people were eligible to caste their votes for the first time in these elections. Fifteen million voters between the age group of 18 and 19 years were eligible to caste their votes. They are usually an idealistic, rebellious, technologically savvy bunch which is confident about new India and its place under the sun.

**TECH-AWAYS AND MORE**

The massive electoral exercise in India was also one of the most technologically advanced. The Election Commission officials deployed a total of 1.74 million VVPAT units and 3.96 million electronic voting machines in 1,035,918 polling stations across India during the 2019 elections.

This was also the first time when the EVMs and postal ballot papers carried the photographs of all the candidates along with their party names and symbols. This election also saw the use of Voter Verifiable Paper Audit Trail (VVPAT) in all EVMs across the country, for the first time.

The EVMs were tested immediately prior to the election day, where a sample number of votes for each political party nominee was entered into each machine in the presence of polling agents. At the end of this sample trial run, the votes were counted and matched.

India has more eligible voters than the electorate of the US, UK, Brazil, Germany, France, Italy, South Korea, Pakistan and Nigeria combined.
ELECTIONS

Both in the number of female voters, and in total turnout across the country, the 2019 elections are expected to set records, further expanding India’s role as the world’s largest democracy.

New York Times

Did you know?

The India International Institute of Democracy and Election Management (IIIDEM), working under the aegis of the Election Commission of India has conducted 53 international programmes and trained over 1,000 election officials from over 30 countries. For officers manning Indian elections, the institute has conducted 800 programmes. About 40 officials from more than 30 countries visited India this year during the elections to observe how the election is conducted. It guides officials based on the individual challenges that each democracy faces. The institute also houses an interesting museum that displays photographs from India’s parliamentary elections since the first in 1951-’52. The IIIDEM was established in June 2011.
with the entered sample votes to ensure that the machine is operating reliably. Machines that yielded faulty results were replaced.

This election also witnessed the most sophisticated tech-driven campaign extensively using social media, 360-degree and drone cameras for broadcast and much more. While Indians are still not able to cast their vote online like Estonians, it is technologically the world’s biggest and most advanced democratic exercise as well. Around 2,70,000 paramilitary and 2 million state police personnel provided organisational support and security at various polling booths over the seven-phased elections.

**THE MONEY YAGNA**

The Centre for management Studies estimated that this election, campaign expenditure will exceed USD 7 billion. There are other official and unofficial spending which runs into hundreds of millions. Elections in India spawn millions of dollars’ worth ancillary industry. Businesses providing tech to hoardings to data consultancy flourish.

The Election Commission, for instance, had ordered 2.6 million bottles of indelible ink to mark voters’ fingers with. Just the paper and printing cost of leaflets and other poll material could feed hundreds of families for the entire years. The size of the Indian democracy makes elections an oceanic exercise. But the real soul of the human ocean lies in its diversity that breathes in one syncretic cultural identity Indians call ‘nation’.

**Facing Page (Clockwise from top):** Students hold banners appealing people to vote for Lok Sabha elections in Mumbai; Polling officials collect EVMs, VVPATs and other election material from a distribution centre in Jaipur, Rajasthan; A student seen helping an elderly woman to cast her vote during the sixth phase of Lok Sabha elections in Delhi; Election Commission officials carry EVMs to a polling booth at a tribal village in Kaza, one of the remotest polling booths in the country, located in the district of Lahaul-Spiti in Himachal Pradesh, on the eve of the final phase of the Indian general elections on May 12, 2009.

Abhijit Majumder has been a renowned journalist for 23 years and has extensively reported on elections in the country.
View of PSLV-45 at the Umbilical Tower at Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.
INDIA GETS ITS OWN
Mini Space Lab

The Indian Space Research Organisation has added another feather in its cap with the successful launch of EMISAT and 28 international customer satellites

BY PALLAVA BAGLA, PHOTOGRAPHS ISRO

This is no joke, but it was on April 1, 2019, that India and the world got its first ‘mini space laboratory’! It was the 47th mission of India’s workhorse rocket, the Polar Satellite Launch Vehicle (PSLV), and it was one of the most innovative and novel missions which also gave India a floating laboratory in space at 485 km orbit. This was also a first-of-a-kind three-in-one mission where the Indian Space Research Organisation (ISRO) was optimising the use of a single rocket to garner three different orbits.

The 320 tonne, nearly 44-metre-tall rocket carried as its main passenger, the 436 kg EMISat, a satellite intended for electromagnetic spectrum measurement and essentially made for the Defence Research and Development Organisation. Alongside, the launch also lofted 28 small satellites from USA, Switzerland, Lithuania and Spain. These include 20 Flock-4A satellites and four Lemur satellites from Planet Labs in California. The satellites were placed in three different orbits. Hence, at the cost of a single launch, triple benefits were reaped.
Speaking after the successful mission, ISRO chairman Dr K Sivan congratulated the launch vehicle and satellite teams involved in the mission, saying, “Today’s PSLV mission was unique in several ways. It was a four strap-on new variant, the vehicle achieved three different orbits and for the first time, the PS4 stage is powered by solar panels.”

This was a long three-hour mission and at the end of the marathon mission, the PSLV placed in orbit ‘India’s mini floating laboratory’ in near zero gravity. To do this, ISRO converted the last stage of the rocket, or PS4, into a full-fledged orbital platform. The last stage of the rocket usually turns into space debris after the launch but ISRO decided to extend its life by a few weeks and made it into a space-borne lab.

The PS4, orbiting at 485 km orbit, has been laced with solar panels, radio communication equipment and three payloads or mini satellites have been plugged into the spent rocket stage. The payloads carried by PS4 are the automatic identification system from ISRO, Automatic Packet Repeating System from AMSAT, India and an Advanced Retarding Potential Analyzer for ionospheric studies from the Indian Institute of Space Science and

This was also a first-of-a-kind three-in-one mission where the Indian space agency was optimising the use of a single rocket to garner three different orbits
NOT MANY COUNTRIES HAVE TRIED TO RE-USE SPENT ROCKET STAGES. THIS HAS OPENED A NEW ERA FOR LOW COST BUT EFFECTIVE SPACE RESEARCH BY UTILISING INDIA’S INNOVATIVE MINI SPACE LAB

Dr K Sivan
ISRO chairman

Technology. These are all experimental payloads where researchers have been given a free ride into space to test futuristic technologies.

Sivan said the PSLV C-45, mission was special in the sense, for the first time PSLV had a three orbit mission in a single flight. Initially the principle satellite was launched in the 784 km orbit, subsequently the PS4 functioned two times to reduce the orbit to 504 km, there the PSLV launched the 28 customer satellite subsequently the PSLV was again fired up and the PS4 was burnt two times to reduce the orbit to 485 km, here the PS4 now functions as an orbital platform.

Not many countries have tried to re-use spent rocket stages, Sivan points out. According to him, “This will give new opportunities to start-ups and university researchers to make optimum space worthy payloads. Moreover users need not struggle to make full satellites all they need is to make their space grade experiment rest is really a play and plug job to be undertaken by ISRO. Sivan adds, “This now opens a new era for low cost but effective space research, by utilising India’s innovative mini space lab.
MISSION SHAKTI

The Game Changer

With the success of Mission Shakti, India has become the fourth nation to acquire the capability for launching anti-satellite weapons. Till now, only the US, Russia and China had the capability to hit a live target in space.

BY PALLAVA BAGLA
On the morning of March 27, 2019, a special rocket lifted off from the Dr APJ Abdul Kalam Island off the coast of Odisha in the Bay of Bengal, which changed the course of history for India’s space faring once and for all. Code named Mission Shakti, India’s Defence Research and Development Organisation (DRDO) spearheaded a secret mission that knocked out in one single ‘hit to kill’ blow India’s own live satellite, around 300 km above the Earth.

Prime Minister Narendra Modi made the stunning announcement in a national broadcast and said that in the journey of every nation, there are moments that bring utmost pride and have a historic impact on generations to come. “Mission Shakti was a highly complex one, conducted at extremely high speed with remarkable precision. It shows the remarkable dexterity of India’s outstanding scientists and the success of our space programme,” he said.

India has joined a select group of four nations that have the capability for launching anti-satellite weapons. So far only Russia, United States of America and China had this capability. China conducted its test in 2007 at over 865 km above Earth, generating thousands of pieces of space debris that still threaten the International Space Station, through a possible space collision.

The building blocks of this important mission were laid more than a decade ago when India started the development of the Ballistic Missile Defence (BMD) Interceptor Missile. According to DRDO, the final go ahead for this critical test was given in 2016 and it took more than two years to master the complex technology about 150-200 scientists toiled hard to make this a reality.

In a three-minute flight, the 19-tonne three stage missile with a length of 13 m travelled around 300 km into outer space guided by computers above the Bay of Bengal.

"Entire effort is indigenous. India stands tall as a space power! It will make India stronger, even more secure and will further peace and harmony"

Narendra Modi
Prime Minister of India
In a head-on collision, the BMD missile’s imaging infra-red seeker homed onto the 740 kg Microsat-R and killed it in one shot. Dr VK Saraswat, missile scientist and the former chief of DRDO and currently member of the national policy think tank NITI (National Institution for Transforming India) Aayog said that it was akin to hitting a bullet with a bullet in outer space.

India carried out the test specifically in a planned low Earth orbit to ensure that there is no space debris. “Whatever debris that is generated will decay and fall back onto the earth within weeks”, a statement released by the Ministry of External Affairs stated. Dr Reddy says that most of the 300 pieces of debris would decay in 45 days in all likelihood. The Ministry of External Affairs further added that India is not in violation of any international law or Treaty to which it is a party or any national obligation by conducting the A-SAT test.

Ministry of External Affairs also
India carried out the test specifically in a planned low Earth orbit to ensure that there is no space debris.

clarified that the test is not directed against any country. “At the same time, the government is committed to ensuring the country’s national security interests and is alert to threats from emerging technologies. The capability achieved through the anti-satellite missile test provides credible deterrence against threats to our growing space-based assets from long range missiles, and proliferation in the types and numbers of missiles,” it said.

Many observers feel the decision to carry out ‘Mission Shakti’ was equivalent in magnitude to India carrying out underground nuclear explosions at Pokhran in 1998. India had found place on the high table from where it could effectively parlay in future discussions on how global conventions and laws that will shape the way how outer space is used. A visibly over joyed PM Modi said the entire effort is indigenous. “India stands tall as a space power! It will make India stronger, even more secure and will further peace and harmony.”
SNAPSHOTS

A CELEBRATION of Spring
The month of April marks the beginning of the Indian new year. It is also the month when harvest festivals are observed across the country. Here’s a glance at how India celebrates through vibrant rituals and dances in these festivals.

**Rongali Bihu**

Celebrated in the state of Assam, Rongali Bihu marks the beginning of the Assamese new year and also the harvest season. During the festival, people adorn traditional attire and perform the Bihu dance.

**Facing Page:** Children pose for a picture during Bihu celebrations in Assam.

**Top:** A dancer performs Bihu dance during a workshop in Guwahati, Assam.
Gangaur is celebrated across Rajasthan with great fervour by women, who worship Lord Shiva’s wife Gauri. It is the celebration of spring, harvest and marital bliss.

GANGAUR & MEWAR Festivals

Above: Women participate in Gangaur festival in Udaipur, Rajasthan

Facing Page Top: Folk artists perform during the Mewar festival in Udaipur

Facing Page Bottom: Women holding small idols of Shiva and Gauri during Gangaur festival in Rajasthan
SNAPSHOTS

PUTHANDU
A Carnatic singer performs in Ontario, Canada on Puthandu, the traditional Tamil new year.

GUDIPADWA
Facing Page (Clockwise from top): People in traditional clothes take part in a procession to celebrate the Marathi new year, Gudi Padwa, at Mumbai’s Girgaon area.
Celebrated by the Konyak people of Nagaland, the Aoling festival marks the arrival of spring and includes prayers for a good upcoming harvest.

**AOLING**

A Konyak man during the Aoling festival in Nagaland’s Mon district.
BAISAKHI

One of the major festivals of Sikhs, Baisakhi marks the time of harvest of rabi crops. People perform *bhangra* and *gidda* as they get drenched in the festive spirit.

**Above:** Girls run across a wheat field on the outskirts of Amritsar, Punjab, on the eve of Baisakhi.

**Left:** Devotees light candles on the occasion of Baisakhi at the Golden Temple in Amritsar, Punjab.
Yoga for a BETTER WORLD

The grand success that the International Day for Yoga has witnessed over the past few years across the globe clearly indicates that India has been successful in preserving the ancient tradition for future generations.

BY BHARAT THAKUR

In India, traditionally, any activity or event, be it a talk, prayer or a meal would end with “Om shanthih shanthih shanthih”, which means “peace to all”. This chant sums up the Indian civilisation’s vision and lasting contribution to world, not just today, but from way before recorded history.

If there ever has been one comprehensive science that has mapped out a way for every human being, without exception, to attain to these qualities, these levels of achievement, and station in life, then that science is yoga.

The Yoga Sutra of Patanjali, one of the definitive texts on yoga, begins with a profound vision statement, “yogah chitta vritti nirodha. tada drushtuh svareo apasthanam” (yoga...
is the process by the help of which we stop the modifications of the human mind. Then the seer is established in his natural state of being).

If one were to assess what could be the greatest contribution of India, the oldest living civilisation in the world, to humanity, it can be argued that it is the institution of the guru-shishya, the master-disciple tradition. From the oldest scripture on earth, the Rig Veda, to the Upanishads, to the ancient Indian books on yoga, tantra, ayurveda, astronomy, trigonometry, architecture, law, logic, alchemy, metallurgy, the arts .. the role of the enlightened teacher or the guru has been revered and held above all other achievements, stations, roles and relationships in life. The body of material of yoga has not been passed on through books. They have been handed down from an enlightened master, the guru, to a worthy pupil who has achieved the goal. Thus, we have always had yogis in India, who have embodied the teachings of yoga, and it is because of them, to this day, that this stream of ancient wisdom remains relevant.

To sum up what the ancient texts of India have contributed to today’s world, it is that they said that a clear, sorted out, enlightened body, mind and

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**Bottom left:** PM Modi performs Yoga with participants at Dehradun during the fourth edition of the International Day of Yoga, in 2018

**Bottom right:** The fourth edition of the International Day of Yoga being celebrated at the Capitol Hill in Rome, 2018

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**June 21 has been recognised as the International Day of Yoga by the United Nations General Assembly**
soul is the best contribution to world peace. And this is what is the vision of yoga - to enlighten humanity. This method has always been rational. Yoga does not require you to believe, or to forsake your faith, but to experiment and find out for yourself. It is the science of self actualisation, of becoming the best you can be.

One among the many diverse approaches of yoga and the most popular in the modern day is Ashtanga or the eight-limbed approach, presented in the Yoga Sutra. These eight limbs are yama or discipline, niyama or duties, asana or posture, pranayama or regulation of the life force, pratyahaara or mastery of the sensory apparatus, dharana or single pointedness, dhyana or meditation, and samadhi or being. In this presentation of yoga, the physical body, the psyche as well as the being are all addressed. Yoga, can, therefore, be described as the blueprint and a detailed road map for the transmutation of every human being to a Buddha, or the enlightened one, and the transformation of society into a peaceful, vibrant and joyous whole.

With the establishment of June 21 as the International Day of Yoga (IDY) by the United Nations General Assembly in 2015, through the efforts of Prime Minister of India Narendra Modi, yoga has now entered into the popular consciousness of the whole soul is the best contribution to world peace. And this is what is the vision of yoga - to enlighten humanity. This method has always been rational. Yoga does not require you to believe, or to forsake your faith, but to experiment and find out for yourself. It is the science of self actualisation, of becoming the best you can be.

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FACTS YOU DID NOT KNOW ABOUT THE IYD

All of this happened during the last four editions of the International Day of Yoga

In 2015, the event entered the Guinness World Record for the largest yoga lesson at a single venue, at New Delhi’s Rajpath

RBI released two commemorative coins of denominations of INR 10 and 100 in 2015

A second Guinness World Record was set for most nationalities in a yoga session in 2015
In 2018, PM Modi did yoga with 50,000 people at Dehradun’s Forest Research Institute.

In 2018, IAF officials did yoga in air and performed *vayu-namaskar* and *vayu-padmasan*.

Women officers of the Indian Army did Yoga at the Bhagirathi-II peak, setting a new world record in 2018.

ITBP personnel performed yoga at a freezing temperature of -25 degrees in Ladakh in 2017.

The Indian postal department released commemorative stamps, first day covers and minisheet in 2015.

How Yoga Works

Yoga maintains the flexibility of the spine and it is believed that keeping the spinal cord flexible heals many health problems. An effective functioning of the spine and improved functioning of circulatory, digestive, lymphatic and other systems takes an individual to better health. *Kriyas* help cleanse the internal organs. *Pranayama* strengthens the respiratory system while *bandhas* restore the hormonal balance in the body. Relaxation techniques help individuals to relax and destress and meditation helps to calm and balance the mind.

Artistic Yoga

A newer form, Artistic Yoga focuses on strength, flexibility, cardiovascular endurance, agility and coordination. It is more intense and it tones various muscle groups, increases energy levels and can also help those trying to lose weight. Involving the entire spectrum of yoga asanas, it does not restrict diet but, as practitioners get fitter, more flexible and develop more stamina, they automatically adopt healthier eating habits.

of humanity, with the day being not just observed but celebrated by the people of every country, who belong to diverse callings, nationalities, faiths and orientations.

This has been possible because Prime Minister Modi, who being a yoga practitioner himself, understands what yoga can do to every single human being by making the person cheerful, optimistic, and peace loving, and how yoga can, therefore, transform the very fabric of the world order. Yoga improves an individual and better individuals will form a better society, country and world.

Over the last two decades and particularly over the last four years, yoga has become a portal through which the world at large
International Day of Yoga 2018

High Commission of India
Dhaka

International Day of Yoga
Harmony & Peace

Yoga
India Perspectives
has connected with India’s real and timeless appeal, its soft power. The reason why India once accounted for 25 per cent of the world GDP and was the knowledge capital of the world, was due to its strong and visionary civilisational values that are embedded in its heritage of yoga. The growing global popularity of yoga and the IDY can help achieve the same again.

At a time when the world looks at how to handle great leaps in technology, how to move to the next level of evolution without being vulnerable to conflict, without having to pay the price of poverty, disease and exclusion, yoga is turning out to be a great tool to forge and strengthen relations between leaders who appreciate it, people who practice it and therefore, between all the stake holders of the global community. The day dedicated to yoga has helped India preserve this wellness stream that is relevant for the current and future generations of humanity.

No matter how stressed a person is, a one-hour yoga session can soothe the mind.
As two art historians set out to explore Lodhi Art district in New Delhi, they realise that public art can actually be an aggregator for social change that is subtle, yet noteworthy.

BY SHALEEN WADHWANA & PATANJALI PUNDIT
PHOTOGRAPHS SOURABH GOSWAMI
An elaborately painted wall in Lodhi colony displaying scenes from everyday life.
A flute seller stands by the roadside selling his ware; a sardarji sits behind a pile of books reading a newspaper; a little distance away a shopkeeper keeps an eye on her spread of sweets even as a cow indolently stares... There seems to be nothing out-of-the-ordinary in this quintessential scene from any Indian town or city. The only unique aspect being that all the vivid figures are much larger than life and are part of a street mural! It’s unbelievable but these gigantic and colourful works of art have completely transformed a quiet residential colony in New Delhi. From being a nondescript neighbourhood with uniformly boring buildings, today Lodhi Colony is a buzzing kaleidoscope of a parallel world; a living canvas that brings to life stories from around us and beyond us! The blank walls along the streets have become a canvas for artists from India and across the world, who have turned the area into one of India’s most vibrant public art districts.

THE PAST
The Lodhi residential area in South Delhi was built around 1940s to house government employees. The complex, the last residential neighbourhood built during the British era, reflects neoclassical construction with barrack-like placement of houses, which was a standard feature of colonial-era architecture. Today, after sections of it were painted by artists as part of a public art project, the colony stands transformed. With its walls, lanes and bylanes bursting with eclectic colours, quirky shops and cafés turning themselves into art galleries and a steady trickle of visitors, the neighbourhood has shot up the popularity charts and has got itself a new moniker: the Lodhi Art District.
Street art or public art, as it is now popularly known across the world, was born out of a simple idea that art cannot be confined only on canvases for a select group of people. It has now acquired legal and social acceptance and hence differentiated itself from the graffiti-inspired vandalism of the 1960s. It is said that public art adds joy to intense cities, bringing relief in the lives of busy metro residents. At Lodhi Colony, this change is visible all around.

**CHANGING MINDS**

The artworks at Lodhi Colony have not only made the walls of the colony beautiful, they seem to have made the neighbourhood cleaner and happier as well! The residents, street vendors, shopkeepers and municipal workers have made community-collective-civic pride one of the major intangible outcomes of the project. Art now permeates the social fabric of the colony. From residents who make sure the exteriors of their homes are well-maintained and children who take pride in preserving the art, to local shop-owners proudly displaying artworks and paintings that were collecting dust in shut cupboards, the entire neighbourhood is celebrating art. Even popular café chains have added artistic elements like holographic projections and custom designed souvenir boxes to their previously monotone interiors. The district has brought new respect to street art in the national capital, with mega events like the India Art Fair organising walkthroughs of the area in February and galleries readily representing street artists in their gallery roster.
St+art India Foundation has been invited by the DUAC to draft the Delhi Public Art Master Plan to incorporate art in the fabric of Delhi.

**THE PROJECT**

What started out as a three-wall experiment in 2015 gave shape to the idea. The people behind the project, the NGO St+art (Street+Art) India realised Lodhi Colony had everything an art district would need: expansive walls, wide streets and an uncluttered layout. In 2016, as part of the Lodhi Art Festival, the art expanded to 25 works and in 2016, the art district took shape. This year, international artists too were invited at the Lodhi Art Festival, to lend their colours to the walls. Today, the area includes works by Indian artists such as Sajid Wajid, Sameer Kulavoor and Hanif Kureshi, and international artists like Daan Botlek from the Netherlands, Singaporean artists Yok and Sheryo, and Japan’s Yoh Nagao, among others. Before the festival opened, questionnaire leaflets were distributed among almost 7,500 households in the neighbourhood inviting them to be a part of the festivities. When the festival opened it featured a special ‘Saath Saath’ wall painted by artists and residents in an effort to make art truly democratic and to activate a sense of ownership and community pride.

The founders of St+art, Arjun Bahl, Akshat Nauriyal, Thanish Thomas, Hanif Qureshi and Giulia Ambrogi, want to take art to a wider audience and to make art accessible to all. The organisation aims to bring art out of conventional spaces and make it an...
integral part of cityscapes. “Art in public spaces empowers people and enables them to think beyond borders. It opens up dialogue between people,” they say.

**THE WAY FORWARD**

Upholding the ethos of social and cultural contextual relevance, which means no jarring political or religious imagery, the artworks also reflect realities such as deforestation, climate change and social diversity. Furthermore, St+art’s collaboration with Access for All, an initiative determined to push the boundaries of physical, intellectual and social access in spaces like museums, art galleries and sites of social significance, has led to five walls with tactile elements, and special curated walkthroughs for visually impaired children. The project is now supported by the European Union. What remains to be seen is the continued impact of public art and the evolution of multi-dimensional collaboration. The Lodhi Art District is no doubt the aggregator that has allowed for this change to take place, and the unfolding of this journey is essential for the public to participate in it.
Set up in 2009, Invest India, the non-profit entity under the Ministry of Commerce and Industry, has emerged as the one-stop shop for investing in India.

BY NB RAO

- 118,800 Actual jobs
- 174,543 Business requests
- $124.45 billion investments in pipeline
- $33.49 billion total FDI investments in India (April-December 2018)

AWARDS RECEIVED BY INVEST INDIA:
- The UNCTAD Award 2018 for promoting investment in sustainable development
- Best investment project three years in a row - 2016, 2017 and 2018 - at the Annual Investment meeting, UAE
- Investment Award 2016 from the Indian Ocean Rim Association (IORA)
- United Nations Conference on Trade and Development Investment Promotion Award 2016 for excellence in partnering for investment promotion
With the country ushering in an era best-suited for foreign investments, numerous multinational corporations are pleasantly surprised with the ‘New India Experience’. The investment drive has been fuelled by multiple government schemes focussing on the ease of doing business in India and the young team of individuals who are passionate about leading the transformation to a new and better India. In addition to the widespread support from governing authorities, several organisations that boost and facilitate investments have recently been formed. Among the most prominent of these is Invest India, set up in 2009, it is a non-profit entity under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry. Invest India is at the front of the campaign to educate potential investors from around the globe about opportunities in the country. It also comprises of a core team to focus on sustainable investments. Invest India also partners with substantial investment promotion agencies and multilateral organisations.

One such example of investment facilitation for companies in India is Hyundai Motor. Established in 1996, Hyundai Motor India is the second-largest car manufacturer in India, exporting to over 88 countries. Aided by Invest India, the company has signed an MoU with the government of Tamil Nadu to invest INR 70 billion to augment its existing facility for manufacturing Electronic vehicles. The company was also able to fast-track its land acquisition agreement with the government of Haryana by over 60 days due to Invest India’s active efforts in several Indian states to build production capacity as well as bring in global practices, best suited for investment targeting, promotion and facilitation.

Invest India officials have been encouraging investors from around the world to invest in the country and have helped many potential clients by clearing obstacles on their path.

Top foreign investments
FDI proposals that Invest India has been successfully handling (Investments of $1 billion and above)

- Indo-UK (NHS), UK, Healthcare
- Peugeot, France, Automobiles
- Ikea, Sweden, Retail/Furniture
- Wanda, China, Real Estate
- Kia Motors, South Korea, Auto
- Airbus, France, Defence and Aerospace
- H&M, Sweden, Apparel retail
- Sany, China, Wind energy/Affordable housing

*The above mentioned data is from 2017*
Global Interactions
Top executives of Invest India also travel extensively to various foreign countries extensively, interacting with government officials and business leaders in different countries. They are quick to react to developments taking place in India and abroad and formulate policies while interacting with global investment giants.

A typical example of the swiftness and efficiency of Invest India can be seen in its interactions with Saudi Arabian officials in Riyadh and Jeddah in April 2019.

Just two months after the high-profile visit of Saudi Crown Prince Mohammed bin Salman bin Abdulaziz Al Saud to India, senior officials from the organisation visited the Kingdom of Saudi Arabia to interact with the high-ranking executives there. Business seminars were held in the two cities, which were organised by Invest India and the Saudi Arabian General Investment Authority (SAGIA). The visiting dignitaries from India explored the synergies and avenues of partnership between industries from the two countries. They also discussed the vast opportunities that India offered to the investors in the KSA.

Active Participation
Besides Saudi Arabia, there were visits to Singapore, Thailand and Malaysia, where Invest India officials explored the synergies and avenues of partnership between India and the respective nations. Besides seminars on
opportunities in India, they also had detailed one-on-one meetings with top bureaucrats in those countries. Deep dives were also held into focus sectors covering a wide spectrum including infrastructure, logistics, construction, Smart Cities, consumer, manufacturing and financial services along with automotive, healthcare, tourism, renewable energy and food processing.

As an investment specialist of Invest India pointed out recently, “An entity that is working towards innovation, development or improvement of products or processes or services has to not only operate within existing frameworks such as the Income Tax Act and the Companies Act but also charter hitherto unregulated spaces such as drones, e-pharma, e-commerce etc.”

India’s startup ecosystem, now the world’s third largest, is maturing rapidly and is no longer dominated by copycat e-commerce companies. In fact, tech start-ups have attracted over USD 20 billion in the past three years. The wide-ranging discussions focused on the possible opportunities of joint cooperation and collaboration across sectors like energy, food processing, pharmaceuticals, infrastructure, mining, ICT and tourism.

**INFRASTRUCTURE STORY**

India has seen a considerable chunk of its budget allocated to infrastructure growth. The country has been increasing its expenditure on infrastructure development such
Why Invest in India?

During their extensive interactions with government and international business leaders, the Invest India executives highlight five reasons to invest in the country. They include:

One of the world’s fastest growing economies: According to the International Monetary Fund, India will remain one of the fastest growing economies in the world over the next few years.

Largest youth population in the world: The UN Population Fund estimates that India will have the world’s largest youth population by 2020.

Huge domestic market: Rising affluence is the biggest driver of increasing consumption in India, according to a Boston Consulting Group report.

Rising economic influence: Lloyd’s Register Marine and the University of Strathclyde, Glasgow, estimate that the centre of global maritime trade will shift from the Pacific to the Indian Ocean region, and India and China will be the largest manufacturing hubs of the world by 2030.

Rising global competitiveness: India, which jumped 65 positions from 142nd to 77th between 2014 and 2018 in the World Bank’s Ease of Doing Business Ranking, also ranks 40th on the Global Competitiveness Index, according to the World Economic Forum.

Evolutionary Change

The rising affluence in India’s middle economic region widely known as the middle class has led to a very rewarding field for some of the biggest global players. However, it’s true that India’s business environment poses challenges for all companies in the consumer economy. Nevertheless, some global consumer companies, such as Unilever, Xiaomi, Suzuki, Hyundai, Honda, LG, Samsung, and Colgate, have been able to overcome challenges and constraints to do spectacularly well in the middle of the economic pyramid. Clearly, the rapid increase in India’s economic growth has been attributed by both national and international experts to the sweeping changes that have been initiated both by the central and state governments across the country.
The most significant changes in recent times include the introduction of a unified indirect tax law system, introduction of insolvency and bankruptcy code to turn around stressed assets and improve the flow of money in the economy (primarily through banking and financial institutions), stabilisation of government’s outlook towards imposing taxes on foreign investors, and liberalisation of the framework for foreign investment.

Top minds at the Invest India have worked tirelessly in this regard and the efforts have been recognised by some of the most respectable associations across the world. It was conferred with the UNCTAD (United Nations Conference on Trade and Development) Award 2018 for promoting investment in sustainable development, the UNCTAD Award 2016 for excellence in partnering for investment promotion and the Investment Award 2016 from the Indian Ocean Rim Association. With reforms continuing to be the focus of the Indian government, the various innovative initiatives of Invest India are likely to pay handsome dividends over the coming years.

Amit Agarwal
President
KOTRA (Southwest Asia)

Nithin Belle Rao, a veteran journalist with more than 35 years of experience, both in India and abroad. He has written extensively for national and international newspapers and magazines and contributes to various publications.
SEEKING wellness

South India is a verdant land of tropical beaches, lush rainforests and mist-clad mountains. It’s an ideal location for those in search of relaxation and wellness.

BY MARIELLEN WARD
A lovely view of the Mandovi river and Divar island in Panjim, Goa
It was on my first trip to India, back in 2005, that I discovered the charm of the southern regions of India. Travelling solo, I landed in Delhi but once winter set in, I flew southwards, in the search of a warmer clime, to Kovalam in Kerala. There began my relationship with southern India, yoga, Ayurvedic massages and traditional detoxification; an association that continues till date.

**IN GOD’S OWN COUNTRY**

Kerala is known as the home of Ayurveda, an ancient curative healing science from India. Ayurveda – which can be loosely translated into the science of life – helps restore health and wellness using natural methods such as massages, diets, and herbal medicines. I spent two weeks immersed in all that Kerala and Ayurveda have to offer at the Shinshiva Ayurveda Resort near Kovalam: a sun-drenched beach, tropical breezes, fresh local food, the healing hands of my massage therapists, and the knowledge and wisdom of the in-house Ayurvedic doctor.

It was a great introduction to the sunny south of India. After I left the Ayurveda resort, I hired a car and driver and drove north to Kochi or Cochin, as it is popularly called. I stopped at the lush Sivananda Ashram near Neyyar Dam outside of Thiruvananthapuram or Trivandrum, and at the Amritapuri Ashram of Mata Amritanandamayi, who is otherwise known as “Amma, the hugging saint.”

At the end of my trip, I had in my mind formed an image of Kerala as a very special destination, where yoga, In southern India, I have found peace, nature, and healing atmospheres. It’s a land that keeps calling me back again and again
Massage at Kovalam
Nothing relaxes the mind, body and soul like a soothing massage. Head to a health resort or spa and pamper yourself with a truly rejuvenating experience.

Visit the Divar Island
Soak-in the rustic and laid-back charm of Goa at Divar island, located in the interior of the state. When done admiring the splendid natural beauty of the place, unwind at a nearby Ayurveda centre.

Relax at Om Beach
Feel in harmony with the natural beauty and healing energy of South India at Om beach, one of the most popular attractions of Karnataka’s Gokarna.
Ayurveda and wellness meet. As a solo female traveller, I also felt completely safe and cared for. Today I often describe Kerala as a “soft landing” to travel in India.

WHEN GOA HEALS

On another trip to India, I again felt drawn to the sun-soaked southern parts of the country, but this time I chose to explore Goa. The tiny state on the Arabian Sea is of course known for beaches, vibrant sundowner parties and lively shacks by the water, but I decided to discover a not-so-known side of Goa on a wellness trail.

First I headed north to Ashiyana Yoga Retreat near Mandrem beach. I was so pleasantly surprised to discover a yoga centre that seemed to have it all – a great location near a good beach, a beautiful property with a wide range of rooms, a spa, delicious vegetarian food and a genuine commitment to practice yoga traditionally. At Ashiyana, I discovered a community of people dedicated to living a healthy lifestyle and concerned about their impact on the environment.

Throughout my trip to Goa, I continued to discover people and places that demonstrated this attitude of health, wellness, and environmental awareness. While in Goa, I also visited an Ayurveda centre on Divar island near old Goa. This rural region is located in the interior of the state and has a laid-back, rustic charm, which is itself very relaxing and healing.

Slowly, I made my way down to south Goa, with a stop at Panjim, the capital
city. I stayed at a lovely property at Fontainhas, one of Asia’s few Latin quarters. I wandered alone through the lively streets lined by quaint heritage buildings on balmy evenings, soaking up the unique atmosphere of the neighbourhood that seems suspended in time. The combination of the old world charm and tropical climate acted like a magical elixir on my soul.

That magic followed me to Agonda beach, where it was love at first sight. A crescent-shaped swathe of sand, lined with small beach resorts and shacks, and a very peaceful, natural vibe, Agoda is heavenly. I started to make friends immediately as there were many other solo female travellers there, who all shared an interest in adventure, spirituality, and following a healthy lifestyle. I made memories for life!

THE CALL OF KARNATAKA
More recently, my travels to South India have taken me to Karnataka. The state’s coastline is not as well-known as the one in Goa and Kerala, but with places like Gokarna and Udupi, it’s well worth visiting. Udupi is the home of an ancient Krishna temple, and it is also gaining a reputation as an Ayurveda and health centre. I have visited Udupi twice for Ayurvedic treatments, always making time to enjoying the expansive sand bars of the nearby Malpe beach.

Ayurveda is an ancient curative healing science from India which helps in restoring health and wellness using natural methods.
**Goa**

- Give your senses a therapeutic treat by visiting a wellness centre near Mandrem in North Goa
- Head south to Panjim and get drenched in the old-world charm. Take a stroll through the colourful and lively streets of Fontainhas, one of the few Latin quarters in India
- Spend the evening witnessing a gorgeous sunset and meeting new people at the enchanting Agonda beach
- For more information, visit [http://goatourism.gov.in/](http://goatourism.gov.in/)

**Kerala**

- Start your wellness trip with the beautiful coastal town of Kovalam and heal yourself at an Ayurveda resort
- Head North to Cochin, one of the most visited tourist destinations of India
- On your way, stop at the Sivananda Ashram near Neyyar Dam, on the outskirts of Trivandrum
- For more information, visit [https://www.keralatourism.org/](https://www.keralatourism.org/)

**Karnataka**

- Visit the ancient Krishna Temple in Udupi before heading to a wellness resort
- Explore nature’s beauty at its best in Gokarna as you discover charming hamlets
- End your trip with a visit to the grand palace of Mysore
- For more information, visit [http://www.karnatakatourism.org/](http://www.karnatakatourism.org/)
rewarded myself with a trip to Gokarna and the famous Om beach. The latter is the most well-known of Gokarna’s beaches, which run along the entire coastline in this area. It’s fun to meander among the backroads of Gokarna, discovering tiny hamlets and charming, simple resorts. I took the train from the picturesque railway station in Udupi and stayed at a cliff top resort with sweeping views of the ocean, the rugged coastline, and the – yes – om- symbol shaped Om beach. Om or Aum is a sacred syllable in Hinduism that is chanted before or after prayers. As I had learnt during my previous trips, meditating and reciting “om” along with every deep breath can be one of the most serene experiences in life, and can make a person feel in tune with the universe. Sitting on that cliff, listening to the ocean waves crash on the rocks below, I too felt in harmony with the natural beauty and healing energy I had discovered in South India.

Inland, Karnataka also has a lot to offer to soulful travellers in search of nature and peace. Mysuru or Mysore is a small city with a glorious past and heritage site like the grand Mysore Palace, and it’s currently one of the leading yoga hubs in India.

In southern India, I have found peace, nature, and healing atmospheres. It’s a land that keeps calling me back again and again.

Mariellen Ward is a Canadian travel writer, digital storyteller, and long-time yoga student who publishes the award-winning travel site Breathedreamgo.com, based on her extensive travels in India.
From growing up in the small town of Shahbad in Haryana to captaining the Indian Women’s Hockey Team, Rani Rampal has come from strength to strength. This is her story

BY MALLIKA BAJAJ
Champions are not made overnight nor are they born with a special instruction manual or a special set of genes that help them win. Indian Women Hockey team captain Rani Rampal’s story is a lesson in what it really takes to be a champion. Her dedication, perseverance, focus and discipline have made her one of the most prominent faces of Indian sports today. From a humble beginning as a cart puller’s daughter living in the small town of Shahbad in Haryana to becoming an Arjuna Awardee, Rampal’s story is truly inspirational.

Sharing her story, Rampal says that she was only six years old when she was first introduced to the sport. “I knew nothing but hockey. Everybody in my hometown played the sport. I was 14 when I was chosen to represent the country in the 2010 World Cup, despite being the youngest player in the national team,” she says.

Rampal had to face gender bias and societal pressures during her journey but she never let these distract her from her ultimate goal of playing for India. She lived away from her family and earned her finances to support her dream. Even though she could not finish formal education like others her age, she has been successful in breaking the gender stereotype with her pathbreaking journey.

Expressing her gratitude on receiving the prestigious Arjuna Award (given by the Ministry of Youth Affairs and Sports, Government of India to recognise outstanding achievement in sports) in 2016, the young achiever points out that the credit goes to her coach Dronacharya-awardee Sardar Baldev Singh, who coached and mentored her towards success and stood by her through every one of her victories.

Rampal and a whole new tribe of young athletes are bringing the dreams, skills, and capabilities of rural India to the forefront. Far away from high-end sporting technology,

“WOMEN MUST PLAY SPORTS. NOT ONLY IF THEY WANT TO BE PROFESSIONAL ATHLETES BUT ALSO TO STAY FIT”

Rani Rampal
India Women Hockey Team Captain
Rampal had to face gender bias and societal pressures but she never let these distract her from her ultimate goal of playing for India and urban infrastructure and resources, these youngsters, and their dedicated coaches, tap into the resources they have, create the infrastructure for themselves and use digital networks to connect with academies and potential sponsors. They are also well aware of the setbacks along the way such as the lack of media coverage and mass popularity. But nothing seems to stop them from dreaming big.

Remembering her initial struggles, Rampal says that a lot of people had told her that she was wasting time and money. She herself felt that there was a complete lack of dedication and consistency in Indian sports. However, her father and her coach supported her at every step.

“They practically trained me to wear blinders and stay focussed. I faced the hurdles that came my way with a lot of patience. All I wanted was to win for India and see the tricolor right on the top, and this desire helped me to push myself,” Rampal says.

The talented player has had many historic days on the field - be it the Champion’s Challenge Tournament in Kazan, Russia, (2009) where, along with the team, Rampal accelerated India’s win by scoring four goals in the finals, or be it winning the silver medal for the Indian team in the Asia Cup held in 2009. She was also
chosen as the player of the tournament during the Junior Hockey World Cup in 2013 in Monchengladbach, Germany. More recently, Rampal and her team bagged the Women’s Asian Cup for the second time in 2017 at Kakamigahara in Japan and ended 2018 by winning a silver medal at the Asian Games for India.

While the country now knows her hometown Shahbad, by her name, and international players acknowledge the Indian team’s fierce competition, Rampal refuses to be content. She wants more. She is confident about her team and with this belief in herself, and her teammates, she has been training incessantly to achieve two goals in the near future: qualifying for the Olympics 2020 and winning the gold for India.

The captain not only contributes to the field with her unmatched skills but also works off the field towards the betterment of Indian women’s hockey. She has been helping talented women hockey players by personally mentoring and supporting them in their efforts to join the national team. She travels across villages in India in search of talented hockey players.

Rampal has also contributed towards the “5-mins aur khelega India, tabhi toh jeetega India”, an initiative of the Ministry of Sports. Started by Union Sports Minister Rajyavardhan Singh Rathore during the Khelo India Youth Games, this initiative is aimed at promoting sports at school levels.

The sports star wants women to be fit and healthy. “Women must play sports. Not only if they want to be professional athletes but also to stay fit. I truly believe that staying fit is the key to a happy life and all women of the country owe it to themselves to be fit,” she says.

Global media entrepreneur and sportscaster Mallika Bajaj is a celebrated name in the field of sports journalism. A graduate from the University of Melbourne, Bajaj is known for inspiring women and empowering the youth through digital media platforms.
Binge on

With gripping stories, stellar performances and a demand for fresh content and on-the-go entertainment, online streaming platforms are the future of home entertainment in India

BY KARAN KAUSHIK
Four unapologetically flawed women live, love, blunder and discover what really makes them tick in millennial Mumbai in *Four More Shots Please*, a series that aired on Amazon Prime recently. Leaving the audience surprised and impressed with its bold content, *Four More...* is the latest among many such films and shows the online streaming platforms are offering today. With gripping stories, fresh content, stellar performances and easy on-the-go viewing options, online streaming platforms, or over the top (OTT) platforms as they are popularly called, are trending in the world of Indian home entertainment. The biggest global brands in the business, from Amazon to Netflix, are now vying for a share of the Indian audience with local channels like Hotstar, ALTBalaji, and Zee5 streaming the latest blockbuster films and creating the highest quality of original content to woo the viewers, especially millennials.

**THE NUMBER GAME**

A recent survey conducted by Boston Consulting Group suggested that the online streaming industry in India is worth over USD 500 million and in the next five years, it is expected to grow to a staggering USD 5 billion. The survey also says that the number of online content and video streaming platforms in India has jumped from nine in 2012 to 32 in 2018. The number of users of OTT services is estimated to reach 500 million by 2020, according to the findings of another study by Ernst & Young. If this comes true, India would become the second biggest market for such services after the US. The sudden rise experienced by the online entertainment industry can be attributed to evolving technology, dipping data charges, and an increase in smartphone usage. (Data consumption in the country is expected to grow as mobile connections will reach 850 million by 2022, according to a recent report published by global accounting firm PricewaterhouseCoopers).

**TALENT TO THE FORE**

This phenomenal rise is attracting bigger stars and big-shot film directors and producers

Netflix has announced 10 new original films which include *Class of 83*, being produced by Shah Rukh Khan’s Red Chillies production and Dibakar Banerjee’s *Freedom*
to this genre. Who would have imagined that one will get to watch superstars like Saif Ali Khan and R Madhavan in a web series? While Khan was roped in by director Anurag Kashyap for the Netflix original Sacred Games, Madhavan was seen in Amazon Prime’s Breathe, the second season of which, will star Abhishek Bachchan. That acclaimed film makers in India like Anurag Kashyap, Vikramaditya Motwane, Zoya Akhtar and Tigmanshu Dhulia have had a successful run at OTT platforms with shows like Sacred Games (Netflix), Made in Heaven (Amazon Prime) and Criminal Justice (Hotstar) is a reason enough to believe that these platforms have created a niche for themselves. What works in favour of these platforms is compelling storytelling. The kind of stories that are being offered, are not only varied and fresh, but also exciting and well crafted. The ideas are original, faces new and characters, more relatable. From regional content, documentaries and short films to international movies and shows, online streaming services have enabled audiences to explore new cultures through diverse content. “As the Indian audience becomes more diverse, storytellers and actors on digital platforms are getting a chance to explore ideas that find a resonance at local level yet can be appreciated internationally,” says digital content startup FilterCopy’s founder Anirudh Pandita. Some have even developed signature content like Hotstar, which is dominating the market for sports fans by broadcasting premier cricket and football leagues around the world.

Neeraj Roy, founder and CEO of Hungama Digital Media, says this genre has thrown
With the number of users of OTT services in India estimated to reach 500 million by 2020, India will become the second biggest online streaming market.

open the door to new kind of content as well. “Indian content creators now have access to a platform that gives them greater flexibility and allows them to work on narratives that they otherwise can’t on conventional platforms,” says Roy, citing the example of bestselling novels being turned into shows. After the amazing response received by Sacred Games, which was based on author Vikram Chandra’s masterpiece of the same name, others too have joined the bandwagon. While Deepa Mehta’s adaptation of Prayaag Akbar’s novel Leila will soon stream on Netflix, director Sudhir Mishra has roped in Nawazuddin Siddiqui for an adaptation of Manu Joseph’s Serious Men.

OPPORTUNITIES FOR ALL
Not just actors and filmmakers, the OTT industry is also creating jobs for technicians, writers, camera persons, musicians, sound engineers, editors and a host of other professionals involved with the entertainment industry. “With new shows being released on multiple platforms every month, there is no dearth of work for talented people. Shows that are made for the OTT platforms take less time to be produced in comparison to full-length feature films, which means more work for everyone,” adds Roy.

People with great story ideas, engaging content and the required resources can launch their own mobile app as a full-fledged OTT platform as well. The success story of The Viral Fever (TVF) is a perfect case in point. From a widely-watched YouTube channel to an independent streaming platform, this online entertainment company has come a long way.

“There were a lot of writers who did not want to
write for TV or movies, which they felt were not doing justice to new India’s emerging citizens. We gave them a platform,” says TVF’s chief content officer Sameer Saxena.

TVF has had three releases this year with *Immature*, *Tripling season 2* and *Kota Factory*. “The response has been phenomenal. With *Kota Factory*, a web series based on Kota in Rajasthan known for educational coaching centres, we made the first-ever black and white digital show of India. It was a deliberate attempt to portray the monotony of a student’s life in Kota,” Saxena says. Like most digital platforms, TVF too is targeting a new wave of viewers. He adds, “Our idea is to create relatable content that goes beyond age and class. While we have youth-oriented shows, we have a production like *Yeh Meri Family* as well.”

Online streaming platforms have truly emerged as the new mirror and voice of the Indian society by bringing to life stories that had no takers in the conventional entertainment space. As Indians evolve and experiment, the OTT platforms makes sure they capture the change. As actor Huma Qureshi, who featured in *Leila* in the digital space, said, “This genre has made entertainment truly democratic.” Anyone from anywhere can tell a story and become a star! Digital entertainment may have shrunk the viewing screen but is on a stupendous expansion spree!

Clockwise from top: Set in Uttar Pradesh, *Mirzapur* starred talented actors like Pankaj Tripathi and Vikrant Massey; Based on Aravind Adiga’s book, *Selection Day* is about the journey of two young brothers who arrive in Mumbai to achieve their dreams of playing cricket for India; *Breathe* is a crime thriller based on organ donation and stars R Madhavan and Amit Sadh.

Karan Kaushik is a Delhi-based journalist. An alumnus of the Indian Institute of Mass Communication, Kaushik likes to travel and document his experiences across the country.
From no-gas kitchens and farm gardens inside hotels to traditionally cooked dishes, here’s how restaurants in metropolitan India are adapting to new dining experiences

BY MADHULIKA DASH
The last five years have been nothing short of a turning point for the Indian dining scene and the Indian food lovers. Courtesy the surge in concept-based restaurants, the average Indian diner has experienced almost every international trend—from progressive and modern cuisine to experiential table-to-farm dining. And not just in the food segment but in dessert and beverages as well. The cherry on the cake is how chefs have not only adopted the trend but have reworked the same to make it more relevant to the Indian palate.

An excellent example of this is the multi-award-winning restaurant Indian Accent, New Delhi, which began the inning of revisualising soul food. This trend inspired many chefs and restaurants to follow suit.

Another path-breaker was the modern-day eatery Pluck at Pullman, New Delhi, the dream project of the hotel’s culinary director chef Ajay Anand, who grew the first-ever farm garden inside a hotel. The launch of Pluck with its Indian cuisine presented in French style, became an example of good fusion food and minimalistic cooking. For chef Anand, however, it was a successful creation of a “new dining niche” that was border-less and could take inspiration from every part of the country. Pluck, which worked with a series of local food producers and other farmers deliberately kept the menu open. This, says the chef, “worked well, given that our menu changes every season and can have a modern interpretation of any dish taken from all Indian states.”

It was considered a radical move considering that most restaurants followed a set pattern of success by investing in tried and tested cuisine and styles. But that wasn’t the only reason Pluck was considered a trendsetter. It successfully bought back two distinct concepts that were popularised in the 1990s— the samplers, or bite-sized portions of every dish, on a plate to showcase a chef’s range and

There has been a rise in the popularity of hyperlocal dining, where chefs use indigenous produce to create interesting dishes.
the sophisticated styles of plating and menu pairing.

While Pluck and Indian Accent spearheaded the rise of modern Indian cuisine on one side, on the other, chefs like Sabyasachi Gorai revived the trend of lesser known, sub cuisine-based restaurant with Lavaash By Saby in New Delhi, a restaurant that largely focuses on lesser-known Armenian cuisine. Today, the establishment serves as a destination to explore the culture and cuisine of Armenia. Inspired, the dining scene, over the years, saw the brewing of a few more food culture-based restaurants like Mineority By Saby that serves cuisine of the mining community and Bob’s Bar, which offers traditional Karnataka cuisine. Although it wasn’t the first time that a cuisine-based restaurant was created. Chor Bizzare, New Delhi, that serves Kashmiri delicacies, has completed nearly three decades. Restaurants like Potbelly, famous for serving Bihari cuisine in the capital and Meeraki, which serves plant-based cuisine, have given modern relevance to a heritage cuisine through the perfect marriage of ambience and relatable plating. These outlets also led to another culinary movement - hyperlocal dining, where chefs use indigenous produce to create interesting dishes. An excellent example is the current menu of Bombay Canteen in Mumbai, where chef Thomas Zacharias uses ingredients such as ponk (Gujarati snack) and bombil fish to create delicious dishes.

With local produce and traditional food becoming popular, the path was open for concepts that now showcased not only the cuisine, but also the founding principles and techniques like

Chefs have not only adapted to the changing global trends but also reworked them to make them more relevant to the Indian palate.
Royal Vega in Chennai, which was based on the principles of seasonal eating and Ayurveda; and Tuskers in Mumbai that revived the healthfulness of a traditional Indian thali.

Mumbai’s Arth, an award-winning restaurant, took the concept a step ahead with a no-gas kitchen and became the first-of-its-kind to go pan-India with its menu to bring in dishes that were cooked in the traditional way. The response of urban diners to these evolving trends has been overwhelming across metropolitan India. With more chefs and restaurants joining the bandwagon, the Indian foodie can expect more tempting surprises in the days to come.

Madhulika Dash is a celebrated food and hospitality writer, and food columnist. She has contributed to various publications including Yahoo, Sify, Swarajya, Hotelier India, Way2Hotel, Indian Express and Forbes Life.
Khun, a 4,000-year-old handwoven fabric, was almost extinct when designer Vaishali Shadangule chanced upon its magic. We retrace her journey and the art’s revival.

BY PRIYA KUMARI RANA

It’s akin to the search for the Holy Grail but of a rare handloom weave of India, khun or khana. Traditionally favoured by women in north Karnataka and some parts of Marathwada and Vidharbha regions in Maharashtra, this light-weight cotton or cotton-silk handwoven fabric is used to stitch ravike or choli (blouse) to be paired with Ilkal saris from the same region. With an intricate brocade pattern, which is 4,000 years old, khun is dotted with small delicate motifs. Once a staple among village women from the region, over the centuries and under the onslaught of powerlooms, the original handloom fabric had almost disappeared: neglected and on the verge of dying a slow death. That was when Mumbai-based fashion designer Vaishali Shadangule chanced upon the textile and embarked on a journey of rediscovery.

“Nobody in the markets of Mumbai or Pune had seen the fabric, which has a distinctive brocade pattern, much like the Banarasi. It seemed it had become extinct,” says Shadangule. After some research, in 2012 she reached Guledgudda, a small nondescript village in Bagalkot district of Karnataka, the home of khun.

Gulegudda was once a flourishing hub of handloom weaving, with every household having its own loom and every family member involved in the weaving of the fabric. While there is no definite historical evidence about the origin of the weave, folklores say it started in the 8th century when the Chalukya dynasty was in power in this region. It is said weavers in this village started weaving this typical fabric to accompany Ilkal sarees. It is also said that during religious festivals, these pieces of fabric would be folded in triangles, placed on a saree and offered to the goddess. Some say,

The fabric is so lightweight that it’s hard to judge its measure by just holding it.
A model walks the ramp for designer Shadangule's collection ‘Bisra’ during the Lotus Makeup India Fashion Week.
it’s the folding pattern of the fabric into small squares that got it the name khana or khun. Nature and mythology inspired the fabric’s unique motifs. Unfortunately, later, as most of these age-old traditions started becoming irrelevant, so did khun. The traditional designs were almost lost, and the generation of authentic weavers disappeared, with the few remaining shifting to powerlooms. “When I had first visited the village around five years ago, there were around 500 handlooms, a drastic fall from 4,000 a few decades ago,” says the designer. “I was in New York and I returned to India from the US after a long gap and realised the fabric was still being neglected. Everyone was talking about Chanderi, Banarasi, Maheshwari, and no one even knew of khun,” she adds.

Adamant to revive this textile, she returned to Guledgudda and to her dismay, found only one loom in working condition. She got to work, reviving and adopting 50 looms and sitting with the weavers to chalkout a revival plan to make it popular among a global urban audience. “It’s an intricate brocade weave and very lightweight,” says Shandugle, adding that she wanted to present khun as it is, in bright colours. “If you go to any village, people are so updated, they don’t follow a trend yet are connected with nature. So there are greens, metallic shades, combinations of wine, mustard, and fluorescent green in them,” she says.

Khun as a fabric has immense potential. The traditional dual-tone designs have now being reinvented to include more contemporary colours.
Explaining the painstaking weaving process, Shandugle says: “When you change the colour of even one patch of the fabric, the weaver has to connect by hand 4,000 yarns on the loom, and this process takes the entire day to be completed. Even today, the time taken remains the same but the earnings have less than halved, with a weaver earning only INR 400 a day!”

Raju, 40, who’s been weaving khun for 15 years, is the designer’s master weaver. He says that in more prosperous times, there were 50,000 people in the village who worked at the looms. “They would work on dyeing and weaving, dedicated units for raw materials and for joining the fabric.” Today, he says, the few families who pursue this craft do it as a passion and not for money! “Khun is such a beautiful weave and so artful and it can be produced only in this village. It’s a tradition, not just an inanimate object.
Shadangule has adopted the 50 looms that still exist in Guledgudda village and is trying to preserve them with her sincere efforts.

It’s influenced by the climate, motifs, everyday life and even the environment of the village,” explains the designer, who has previously worked with Chanderi and paithani weaves.

In 2012 and 2014, she showcased two khun-based design collections at fashion shows held in India. The positive response, encouraged her to create another collection of contemporary garments that was showcased in 2018 at the India Fashion Week in Delhi, the most reputed design showcase of the country. “My idea of revival is to keep the soul and the functionality of the fabric intact and just design it to suit a contemporary audience. People love the comfortable feel of the fabric on their skin and the lustre on the outside.” In her latest collection, she expanded the traditional colour palette, pairing the native oranges, greens and pinks with bronze, gold and grey. The designer is showcasing a 40-piece khun collection in New York in June this year and again at the globally acclaimed New York Fashion Week, a 45-piece line, including dresses and jackets. She’s also planning an Indian bridal couture show, her first ever, in July in India, with this beautiful textile. “I’m just trying to take whatever the weavers are making and giving them an assurance that I will pay them a certain
sum per month. I have improved the quality of the fabric and contemporised the designs but my first aim is to make the trade lucrative for the villagers again.”

Another challenge in the revival of *khun* is that the traditional looms are small to cater to pieces of fabric for blouses. Shadangule is now working towards creating a cluster of Guledgudda *khun* weavers and larger looms to produce yardages that more commercially and creatively suited. She also plans to diversify into using *khun* for home furnishings and home décor in addition to her clothing line.

Shadangule says that her contribution is very small and more people need to be made aware of this magical fabric. She says, “We need to respect a weaver’s hard work, who sits at a loom for hours to make a saree that can take four months to be completed. This is art work and not just a piece of fabric. Only once the work brings the weaver and his family money and respect will the next generation carry the tradition forward.” Her efforts seem to have given a ray of hope to the weavers of Guledgudda village, as Raju sums it up: “I like working on the loom again. When I see the beautiful clothes being showcased across the world, I feel proud. It motivates me to save the looms and the craft. I will teach my children too.”

*Above:* Designer Vaishali Shadangule formally presents her collection highlighting the fabric at the Lotus Makeup India Fashion Week 2019

*Facing Page:* A model walks the ramp wearing *khun* from the Bisra (the forgotten one) collection during the same show.
FROM GEEKY TEENS TO Saviours

Young innovators from IIT Madras have developed the SEPor (‘Septic Tank-Oye!’) Robot that aims to provide an intelligent solution to the problem of manual scavenging.

By Vinayak Surya Swami
As India leapfrogs into the digital era, one of the biggest challenges is to develop the means required for holistic development. Even with major advancements, the country’s infrastructure still exhibits immense possibilities for technological ratifications. However, over the last decade an unprecedented involvement in schemes related to national interests came from the younger generation. This recent trend was born of the fact that by 2020, the average age in India will be 29, making it the world’s youngest country with 64 per cent of the population in the working group and the realisation that progress is always accelerated with involvement. With government initiatives that provide the much needed boost for innovative start ups and sponsored missions like Swachh Bharat and Digital India initiative, the mantle for intrinsic infrastructural development has been taken up the country’s youth. In the last five years alone, numerous innovative projects have been developed across India that aim to curb the various vices hampering advancement. While many projects have been realistic conceptualisations of ideas, the feasibility and widespread application are still amongst the questions left unanswered. However, innovative breakthroughs have enabled the students across the country to develop solutions for some of the biggest problems that blemish India’s global image. One such project from the halls of the Indian Institute of Technology, Madras, the SEpoy septic tank robot, has managed to capture the attention of several NGOs working to eradicate the problem of sanitation and manual scavenging.

**ROBOTICS FOR ALL**

After four years of research, IIT Madras has come up with a technologically sound, stand-alone alternative that aims to eradicate the need to put valuable lives at risk. The students and faculty in-charge of this project had

A team of researchers at IIT Madras are on the cusp of delivering a product that could end manual scavenging across the world
been trying to put together a remote-managed robot that would cut through the solidified waste and simultaneously pump out the sludge to cleanse even the most constricted drainage systems.

“Propelling a robot in this environment is a major challenge”, explains Professor Prabhu Rajagopal of the Centre for Non-Destructive Evaluation at IIT Madras. His team has developed fish fin-like bio-inspired propulsion for such environments, through research projects with contributions from students including R. Santhosh and D. Srikanth, Aman Agarwal, Kranthi Chaitanya and Tanmay Mothe. One of the major challenges throughout the development of the prototype was its feasibility. Even today, there is no dearth of mechanised options for waste clearing and treatment, however, at current costs, which range anywhere between INR 2-5 million, the nation-wide application poses a problem.

THE PROCESS
As a first step, the team developed a cutter that can shred and homogenise the sludge, which can then be sucked out using a vacuum apparatus. Initially working with a simplistic cutter model, they have now developed an umbrella-like cutter. In close consultation with the Safai Karamchari Andolan(SKA), an organisation that works for the rights of manual scavengers across the country, this team of researchers at IIT Madras are on the cusp of delivering a product that could prevent cleaners from engaging in the debilitating practice of manual scavenging. Priced between INR 1-3 million, the SEpoy Septic Tank

THE INSPECTION AND CLEANING OF SEPTIC TANKS ARE OF CRUCIAL SOCIAL RELEVANCE, AND A MECHANISATION OF THIS PROCESS WILL BENEFIT THOUSANDS OF SANITATION WORKERS WHO ARE INVOLVED IN THIS TASK AND FACE AN ACUTE SHORTAGE OF AFFORDABLE SOLUTIONS

Dr Prabhu Rajagopal
Professor, IIT Madras

Divanshu Kumar
Student, IIT Madras
Robot holds the key for the successful and risk-free solution to the problem of manual scavenging. The prototype which was developed by the skilled students uses high-velocity cutters to cut through the thick sludge in septic tanks and clear drains. But the supervising faculty members are hopeful that with a few more modifications the cost of the project can be significantly reduced to promote widespread application.

Student Divanshu Kumar, who has played a key role in the development of the SEpoy Septic Tank Robot, says that the challenge of manual scavenging is both social and technical. “From our end, we are trying to develop a technological solution which can also overcome the social barrier by ensuring that the Sepoy product is actually operated by the same people who would initially work as manual scavengers,” he says.

**A TREASURE TROVE OF SKILL**

India is emerging as a force to reckon with, when it comes to innovative and technically sound solutions to some of the most challenging problems related to infrastructure and widespread development. The credit must go to the robust system of higher education in the country and the spirit of the nation’s youth to find simple albeit innovative solutions to the biggest obstacles on the road to development. The institutions, particularly the IITs, pull focus towards real world, practical applications of the various theories that are the foundation of the various disciplines. The assignments encourage the technique of ‘brainstorming’ and there is a free sense of interaction between students and professors on the feasibility of projects. Moreover, with India becoming a hub for production by numerous multi-national corporations, student migration has seen a considerable decline over the last decade.

From machines that dispense clean drinking water for every recyclable waste item and SmartCane technology for visually impaired individuals to solar powered cold storages, the young innovators graduating from various institutions have taken the better India mission to their hearts. From being teenage nerds to remarkable innovators, the youngsters of India are without a doubt, its biggest saviours.
WHAT A GREAT BARTER!

India generates around 26,000 tonnes of plastic waste everyday and to deal with the problem, a school in Pamohi, Assam, has come up with a unique idea. The Akshar Foundation School is asking parents to pay their child’s fees with used plastic bags. The school has 100 students and every student is asked to bring in at least 25 items every week. The innovative concept is not only helping to improve the environment but also local families by preventing child labour.

TWITTER APPLAUDS EAM SWARAJ

Indians took to Twitter to thank outgoing External Affairs Minister Sushma Swaraj. The leader has been popular as an easily accessible foreign minister and was lauded for helping Indians living abroad with her quick response on Twitter to requests for help.

“You did so much good M'am. Those whom you have helped will never forget you. Those of us who read about your good deeds with admiration will always admire you. God Bless you (sic)”

Soni Razdan
Indian actress

“Her work has been great, MEA is the only Govt dept from the last government that arguably performed the best. Thank you, ma'am”

SanamArora
Twitter user

INDIAN ARMY PLANS TO USE AI

To tackle the menace of terrorism, the Indian Army has planned to take the help of Artificial Intelligence (AI) to detect terror framework and track confidential information. Through this technology, the army will also be able to decipher the life and working condition of the war equipment used by the armed forces. Artificial Intelligence can also help in picking up critical pieces of information from speeches made by terrorist leaders. It was after the National AI Taskforce recommended the defence services to work on 10 AI projects, that task of developing AI technologies began. The projects focus on imagery, text, speech and predictive analysis.
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INDIA PERSPECTIVES GOES ONLINE

The flagship magazine of the Ministry of External Affairs, India Perspectives is now online and can be viewed on all mobile and tablet platforms in 17 languages.
CONSULAR GRIEVANCES MONITORING SYSTEM

01 Step
Click on “Register (New User)” and fill required details

02 Step
Click on “Activation” link sent in email (or OTP sent in SMS to Indian Mobile Holders) to activate the account.

03 Step
Log in to the Consular Grievances Monitoring System (MADAD).

04 Step
Click on “Register Grievances” link to fill details of your grievances.

05 Step
Click on “Track Grievances Status” link to View latest status and processing done on your grievance.

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