

DAILY CURRENT AFFAIRS

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India-ASEAN ties making steady progress, says PM

Modi says strong partnership is emerging as robust foundation for global stability, development; he announces further deepening of cooperation in the domain of maritime security in 2026

Kallol Bhattacharjee
NEW DELHI

India-ASEAN strategic partnership has continued to prosper despite the prevailing "era of uncertainties", Prime Minister Narendra Modi said on Sunday.

Delivering his opening remarks virtually at the 22nd ASEAN-India summit being held in the Malaysian capital of Kuala Lumpur, Mr. Modi described ASEAN as a "cultural partner" of India, and announced further deepening of India-ASEAN cooperation in the domain of maritime security in 2026.

"Even in this era of uncertainties, India-ASEAN comprehensive strategic partnership has continued to make steady progress. And this strong partner-



NARENDRA MODI
Prime Minister

Even in this era of uncertainties, India-ASEAN Comprehensive Strategic Partnership has continued to make steady progress. This strong partnership of ours is emerging as a robust foundation for global stability and development.

ship of ours is emerging as a robust foundation for global stability and development," the Prime Minister said in his remarks that were telecast to the summit.

'Shared values'

Mr. Modi welcomed Timor-Leste as the newest mem-

ber of ASEAN, and said India and ASEAN together represented nearly one-fourth of the global population and the two sides were connected by "historical ties and shared values".

"The 21st century is our century, the century of India and ASEAN," he said.

Cong. targets PM as Trump repeats oil imports claim

NEW DELHI

Hours after U.S. President Donald Trump reiterated that India will cut down its imports of Russian oil "completely", the Congress criticised Prime Minister Narendra Modi, saying his "hugobolomacy" was not visible in Kuala Lumpur. » **PAGE 10**

Malaysian Prime Minister Anwar Ibrahim, who co-chaired the ASEAN-India summit, said India-ASEAN relationship was rooted in the "values of friendship, trust, and shared interests".

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Sterilisation, immunisation of stray dogs fell by half in August

Suruchi Kumari

NEW DELHI

The Municipal Corporation of Delhi's (MCD) animal birth control (ABC) programme witnessed a sharp dip in sterilisation and immunisation in August when the Supreme Court was hearing a *suo motu* case related to stray dogs.

A senior official from MCD's Veterinary Department said that between April and September this year, 54,623 stray dogs were sterilised and vaccinated.

"Sterilisation and immunisation averaged over 10,000 dogs per month in April-June, then dropped to 9,353 in July. The figure halved to 5,096 in August because, following the SC's orders, stray dogs were picked up from streets and confined to ABC centres due to shelter shortages which disrupted the sterilisation and immunisation exercise," the official added.

Sterilisation and immunisation rose to 8,112 in September but stayed below the 10,000 monthly



A designated stray dog feeding spot outside JLN stadium.

SPECIAL ARRANGEMENT

average.

The SC's August 11 order directed the civic authorities to round up all stray dogs and keep them in shelters. The ruling was partially modified on August 22, when a three-judge Bench allowed vaccinated and dewormed dogs to be released back into the same locality, except those found aggressive or rabid.

The official said data from NGOs show that the MCD has already "achieved 70-80% sterilisation" of stray dogs in 230 out of 250 wards. There are 20 ABC centres run by 13 NGOs under MCD supervision. These centres must achieve 80% sterilisation in

their areas as per the Animal Birth Control Rules, 2023.

Status report

In compliance with the apex court's directive, the MCD is preparing a status report to be submitted on Monday detailing the steps taken for sterilisation, immunisation, feeding zones, and the establishment of dog shelters.

The MCD has also identified 292 feeding points across 12 zones of Delhi where stray dogs may be fed in a regulated manner.

"Councillors, Deputy Commissioners, RWAs, and feeders were asked to identify suitable feeding spots in every ward, but reaching a consensus has taken time," said Yogesh Verma, member of MCD's subcommittee for stray dog management. Local feeders and RWAs, however, claimed that the initiative remains "largely on paper". Ashok Bhasin, president of the North Delhi RWA Federation, said, "We have not received any notification on the designated feeding spots."





The contours of constitutional morality

The relationship between morality and the law has fascinated many minds over the ages. Some have regarded the enforcement of morals as the function of law. The famous Hart-Devlin debate in the 1960s saw an unparalleled exposition by two fine legal minds on the benefits and pitfalls of fusing morality into the veins of the law. The 1960s also saw the House of Lords declaring, in *Shaw vs DPP* (1962 AC 220), that there existed a residual power to enforce the “supreme and fundamental purpose of the law”, viz., “to conserve not only the safety and order but also the moral welfare of the State”.

The Supreme Court of India recognised the relationship in *P. Rathinam vs Union of India* (1994) 3 SCC 394, when it quoted with approval the observations of Justice Frankfurter in *Solesbee vs Balkcom* (94 L Ed 604: 339 US 9 (1949)) that the law “embodies a system of rights based on moral principles ... which comports with the deepest notions of what is fair and right and just”. In ancient times there was no particular distinction between law and morals. There was the concept of dharma which embraced concepts of law and morality. The *Tirukkural*, for instance, has much emphasis on the virtue, *Aram*.

This complex relationship entails that, sometimes, law leads morality (abolishing untouchability before societal acceptance which is yet to happen) or law follows it (slow recognition of gender equality). The challenge is to ensure that laws remain just and representative of fundamental ethical imperatives – not merely majoritarian opinions or transient popular sentiments.

A resurgence of the concept

In recent times, there has been a resurgence of the concept of morality in the constitutional scheme of things, under an umbrella term ‘constitutional morality’. What is this term? How does it empower courts to look at constitutional questions? These are the two key issues.

The term itself is not of recent vintage. In his book, *History of Greece* (1846), historian George Grote wrote that the Greeks found it necessary to protect their Constitution by kindling “a passionate attachment” which he termed “constitutional morality”. Grote observes: “A paramount reverence for the forms of the constitution, enforcing obedience to the authorities acting under and within those forms, yet combined with the habit of open speech, of action subject only to definite legal control, and unrestrained censure of those very authorities as to all their public acts, combined too with a perfect confidence in the bosom of every citizen, amidst the bitterness of party contest, that the forms of the constitution will be not less sacred in the eyes of his opponents than in his own.”

In the course of his fiery debates in the Constituent Assembly, Dr. B.R. Ambedkar invoked this passage to underscore the need for



Justice N. Anand Venkatesh

is Judge,
Madras High Court

There needs to be a ceaseless cultivation of constitutional morality among citizens, lawmakers and judges

an elaborate and detailed administrative mechanism in the text of the Constitution. He added that “Constitutional morality is not a natural sentiment. It has to be cultivated. We must realise that our people have yet to learn it. Democracy in India is only a top-dressing on an Indian soil, which is essentially undemocratic.”

Drawing a distinction

It is now discernible that constitutional morality may be termed as rules of constitutional propriety/conduct amongst constitutional functionaries. However, the question is whether breach of such ‘rules’ could give rise to action in courts. Professor Dicey observed that “constitutional law” consisted of two elements: the first is “the law of the constitution”, which is a body of undoubted law relied upon and enforced by the Courts. The second is a set of rules consisting of conventions, understandings, habits or practices which regulate the conduct of several members of the state, but which are not enforced by the courts, which he termed as “conventions of the constitution” or “constitutional morality”.

Thus, Prof. Dicey draws a clear distinction between constitutional morality and the law, in the positivist sense of the term. According to him, a breach of constitutional morality or the conventions of the constitution are not actionable in courts. Yet, they derive their binding force from the fact that a breach of constitutional morality or a constitutional convention would almost immediately bring the offender into conflict with the courts and the law of the land. In the *S.P. Gupta* case, Justice Venkataramiah pointed out: “A convention is a rule of constitutional practice which is neither enacted by Parliament as a formal legislation nor enforced by courts, yet its violation is considered to be a serious breach of constitutional morality leading to grave political consequences to those who have indulged in such violations”.

In *Indian Young Lawyers Association vs The State of Kerala* (2018, Sabarimala case), (then) Chief Justice of India (CJI) Dipak Misra held that the expression “public morality” occurring in Article 25 ought to be understood as being synonymous with constitutional morality. This position has since been doubted, and the matter has now been referred to a nine-judge Bench.

The expression was once again considered in *Manoj Narula vs Union of India*. In *Narula*, the Supreme Court was invited to read into Article 75 of the Constitution a disqualification against Members of the Legislative Assembly/Members of Parliament who were facing charges for heinous or serious offences.

The CJI observed: “The principle of constitutional morality basically means to bow down to the norms of the Constitution and not to act in a manner which would become violative of the rule of law or reflectable of action in an arbitrary manner.”

The passage resembles Grote’s appeal for a

“paramount reverence to the forms of the Constitution”. However, the Court ultimately held that it was not possible to re-write Article 75 by prescribing a disqualification which was plainly not there. It went no further than to say that it could “legitimately expect” that the Prime Minister would not choose a person accused of heinous offences as a Minister in his Cabinet, and concluded: “This is what the Constitution suggests and that is the constitutional expectation from the Prime Minister. Rest has to be left to the wisdom of the Prime Minister. We say nothing more, nothing less.”

In *State (NCT of Delhi) vs Union of India*, the Court went further and held that constitutional morality did not mean mere allegiance to the substantive provisions and principles of the Constitution. The Court identified liberal values and consensual decision making amongst state agencies as facets of this concept. To this were added responsibilities and duties that it imposed on those who held constitutional offices. In *Justice K.S. Puttaswamy (Retd.) vs Union of India*, the Court once again was of the opinion that the requirement of constitutional morality required that the government not to act in a manner that violated the rule of law. By the same token, it was emphasised that the requirement of constitutional morality required the state from acting in a manner that violated the orders of the Court.

These decisions show that constitutional morality encapsulated morally acceptable standards of conduct by constitutional actors in the constitutional sphere of things. A breach of such standards may not, *per se*, be actionable in law courts. A breach of constitutional morality could breach a constitutional convention, triggering the violation of the constitutional principle of rule of law. It must be remembered that courts are not the sole arenas where the breach of constitutional norms can be remedied.

Such breaches may have consequences elsewhere, as, for instance, being held accountable on the floor of Parliament or at the hands of the electorate. The remedy in an appropriate case is, therefore, always contextual.

A vital role to play

The road forward for India lies in continually cultivating constitutional morality among citizens, lawmakers, and judges alike. It is the living ethos that will transform constitutional guarantees into tangible justice, fostering inclusion, protecting minorities, and ensuring equality in a rapidly changing society. As B.R. Ambedkar poignantly advised, constitutional morality is not inherited but must be nurtured and embraced. Its vitality is the difference between a constitution that is merely a document and one that is a vibrant, equitable reality for all Indians. It is only then that democracy can be a vital ingredient and not a mere top dressing on Indian soil.



Winding up the clock of India-Nepal economic ties

Hands-off approach

Scientists are the best judges of excellence in science

The government has announced a list of 24 individual scientists and a team as recipients of the second edition of the Rashtriya Vigyan Puraskar (RVP), awards, conferred by the Centre for scientific achievement. As in 2024, this year too has four broad categories: the Vigyan Ratna, Vigyan Shri, Vigyan Yuva-Shanti Swarup Bhatnagar award and Vigyan team award. The Vigyan Ratna and Vigyan Shri are for scientists who have made distinguished contributions over their lifetime, and recent distinguished contributions respectively. The Yuva is for individuals under 45 and the final one for a team endeavour in technology development.

In theory, the total number of awards, under all categories, is capped at 56; though this year, there are fewer than the 33 awarded last year. The award announcement has been delayed by several months, but this could indicate greater scrutiny of potential awardees. It is important to note that unlike earlier editions of national science awards, for instance the Shanti Swarup Bhatnagar (SSB) awards, there is no cash component given for the RVP, to align with the spirit of the Padma awards. But scrutiny is a double-edged sword. Last year, it emerged that some scientists were told about being recipients, only to be informed later that their names had been dropped. Several prominent scientists across India wrote to the Office of the Principal Scientific Adviser (PSA), demanding transparency in the process of award selection. There were concerns that factors other than scientific merit – for instance, criticism of government policy and political ideology – may have played a role. The PSA has not categorically responded to these demands except to point out that the selection committee, called the Rashtriya Vigyan Puraskar Committee (chaired by the PSA and which includes Secretaries of Ministries and members of scientific academies), “recommended” awardees to the Minister of Science and Technology. It is not explicit whether the Minister can overturn a recommendation made by the committee. The RVP awards were instituted after the Ministry of Home Affairs and heads of science departments concluded in 2022 that there were too many awards being given out by individual scientific departments and, hence, necessary to trim them and raise their ‘stature’ to national awards. While awards such as the SSB awards too were finalised in consultation with the Science Minister, the centralisation and the explicit attempt to make the RVP ‘Padma-like’, means that they appear far more politicised than they ought to be. If the aim of the RVP is to increase ‘stature’, the government must be seen to have an explicitly hands-off approach and let scientists judge the excellence of their peers.

In October 1, 2025, the Reserve Bank of India (RBI) Governor Sanjay Malhotra, in the context of internationalising the Indian rupee (INR), announced three measures that have the potential of adding serious positivity in India-Nepal ties.

The first is to allow authorised dealer (AD) banks to lend the INR to non-residents from Nepal, Bhutan and Sri Lanka for cross-border transactions. The second is that the RBI is now going to allow Special Rupee Vostro Accounts, which are accounts of foreign banks with Indian banks in INR, for investment in corporate bonds and commercial papers. This is in addition to the already permitted investments in central government securities. And, the third is to establish a transparent reference rate for currencies of India's major trading partners to facilitate INR-based transactions.

For years, India and Nepal have kept the INR to Nepalese rupee (NPR) exchange pegged at 1.6. There are demands in certain quarters for institutional credit, which are not unfounded as it is this peg that has shielded the NPR from serious depreciation against hard currencies. But it is also worth noting that what is working should not be expected to be fixed.

The RBI allowing ADs to lend INRs to Nepal should greatly help Nepal in its bilateral trade with India. This is because the Nepalese industry has a lot to gain in overcoming the chronic challenges that it faces for working capital and scalability in the domestic market and in trade with India. Of course, the lending policies of Indian banks and their interest rates would need to be competitive for Nepalese interest.

The hurdles in Nepal

Nepal saw a partial recovery from the COVID-19 induced lockdown based on high remittances but that did not sustain, and its industrial



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performances continued to be in a tailspin. A key reason was the lack of confidence of Nepalese banks to lend to businesses. Stringent lending considerations by Nepalese banks (mostly controlled by Nepal's big industrial houses) made it even more difficult for small businesses to get the required working capital to sustain and survive. The lack of confidence even made big businesses, with easy access to institutional credit, jittery, with obstacles having crept into their supply chains linked to domestic ancillaries, all of which was compounded by low domestic demand.

These hurdles created structural flaws, leading to economic woes for its population; high unemployment was certainly a big contributing factor in the latest political developments in Nepal.

India's lending outreach should give traction to Nepalese businesses as trade with India should now be devoid of institutional credit hassles. With the United States having announced a tariff of only 10% for Nepal, INR-financed trade with India can lead its imports for value addition in Nepal, build up a global capacity for ancillaries and even explore joint ventures with India.

Trade with India

Indian firms continue to be among the largest investors in Nepal, accounting for 33% of the total foreign direct investment (FDI) stock in Nepal, worth nearly \$670 million. Nepal is India's 17th largest export destination, up from 28 in 2014. India constitutes 65% of Nepalese international trade, including \$8 billion of exports from India to Nepal and just under \$1 billion exports from Nepal to India. India is Nepal's largest export destination, receiving an overwhelming 67% of its total exports consisting of edible oil, coffee, tea and jute.

The uneven, yet interdependent, bilateral

trade fundamentals demand that trade and economic cooperation between India and Nepal should see a further spurt, and for the Nepalese economy, make it less vulnerable and resilient in the topsy-turvy world of today.

Possible multiplier effects

In Nepal, there would be many who would see the RBI moves as an effort to strengthen the INR. But that notwithstanding, Nepal would certainly benefit in lowering the role of the dollar and making INR as preferred currency for trade with India, by far its largest trading partner. It will also shield the economy from the dollar's exchange rate fluctuations. Hard currency availability issues should also ease, thereby reducing pressure on forex and the Current Account Deficit (CAD), which could lead to other advantages and have positive multiplier effects. Indeed, these currency openings should lead to wider consultations between India and Nepal on other crucial economic matters such as Nepal's framework of sovereign guarantees (sector/project wise), Standby Letters of Credit and country risk rating.

Of course, a decoding of the RBI announcements by the Nepal Rastra Bank (NRB) would be useful and important and they may have to put in place several required instrumentalities at their end to take advantage of the Indian move and to protect their economic and money interests. Moreover, the process compliance as per RBI's guidelines will not be something to be skipped by any potential borrowers beyond borders. The RBI has a strong reputation for keeping prudence ahead, and the NRB's reciprocation will herald a new era for rebooting India-Nepal economic ties. India and Nepal should come closer to a level playing field.

The views expressed are personal

Prepare for Janjatiya Gaurav Divas in November, Centre tells States

Abhinay Lakshman
NEW DELHI

In the run-up to the fifth Janjatiya Gaurav Divas on November 15, which will mark the end of tribal icon Birsa Munda's 150th birth anniversary, the Union government has written to the States, including poll-bound Bihar, and Union Territories, saying they “must organise” commemorative events at the State and district levels from November 1 to 15.

In a letter sent to the Principal Secretaries of Tribal Welfare Departments in the States and Union Territories last week, the Tribal Affairs Ministry said that since November 15 marked the end of Birsa's 150th birth anniversary year, “all the States/UTs must participate in celebrating” the occasion.

“However, States where



Tribal artists performing traditional dance during the Janjatiya Gaurav Divas programme in Bhopal in 2021. A.M. FARUQUI

the model code of conduct is in force are being requested to celebrate the Divas adhering to the MCC.”

The letter asked the States and Union Territories to “actively participate” in “inauguration or benefit disbursal targeting tribal populations, launch of tribal-focused schemes, capacity building” and highlighting government schemes such as PM-JAN-

MAN, Dharti Aba Janjatiya Gram Utkarsh Abhiyan, and Adi Karmayogi Abhiyan.

The letter said that for the national-level event at this year's Janjatiya Gaurav Divas, Prime Minister Narendra Modi is expected, and participation has been requested of 25 States and Union Territories, excluding Bihar.

In the suggested activi-

ties annexed with the Tribal Affairs Ministry's letter, the government has recommended the display of “Tribal Village Vision 2030” documents prepared under the Adi Karmayogi scheme, interactions of State VVIPs with PM-JANMAN beneficiaries, and painting exhibition of artworks by students of Ek-lavya school for tribal students. The list also recommends events like Adi Haats for products made by Van Dhan Vikas Kendras, self-help groups, and tribal artisans.

The government has also suggested that the States and Union Territories hold campaigns for saturation of individual entitlements and contests in schools, colleges, to celebrate tribal heritage, in addition to arranging health awareness campaigns through Mobile Medical Units.

Why has IUCN red-flagged the Western Ghats?

What has the International Union for Conservation of Nature's World Heritage Outlook 4 report said? What are the four main threats to the loss of habitats and species in South Asia? Are the Western Ghats highly endangered? What are the factors threatening the Sundarbans mangroves?

EXPLAINER

Divya Gandhi

The story so far:

The expansive Western Ghats and two national parks in India – Assam's Manas national park and West Bengal's Sundarbans national park – have been categorised as being of "significant concern" in the International Union for Conservation of Nature's (IUCN) list of natural World Heritage sites across Asia.

Why did the IUCN state?

The IUCN's World Heritage Outlook 4 report released earlier this month attributes four threats to the loss of habitats and species in South Asia: climate change, tourism activities, invasive alien species, and roads. The report categorises the natural sites as "good", "good with some concerns", "significant concern", and "critical". The report uses four cycles of conservation assessments undertaken since 2014.

"Each of these categories not only shows the potential for a site to preserve its values and underlying attributes but also indicates the urgency of measures that need to be taken to improve the conservation outlook and ensure the long-term conservation of all sites," says the report. The IUCN assessment of over 200 natural and mixed World Heritage sites "offers the most in-depth analyses of threats facing natural World Heritage around the world and their protection and management status," says Gretel Aguilar, IUCN director general, in the introduction to the report.

The report points out that the percentage of sites with "a positive conservation outlook has, for the first time, decreased significantly."

Do we have 'good' protected areas?

Protected areas in South Asia are being usurped rapidly, obliterating natural habitats. Of the 228 sites assessed since



Flourishing fauna: A flock of hornbills in the Western Ghats. M. SATHYAMOORTHY

2014, some 63% of sites had a positive outlook in 2014, 2017 and 2020, however, 'the IUCN World Heritage Outlook 4 shows that in 2025 only 57% of these sites have a positive conservation outlook.'

The threats are also shapeshifting, "it is ...notable that roads and railroads are now among the top five greatest threats to natural World Heritage in Asia, while in 2020 this was not the case." The other threats include: forest fires, hunting, roadkill, waste disposal, encroachment, illegal logging etc.

Of the 32 Asian sites categorised as "good with some concerns," four happen to be in India – The Great Himalayan National Park Conservation Area, Kaziranga National Park, Keoladeo National Park, and Nanda Devi and Valley of Flowers National Parks. Khangchendzonga National Park in Sikkim has been rated "good" in its

conservation outlook, valuing "attributes [that] are currently in good condition and likely to be maintained for the foreseeable future, provided that current conservation measures are maintained."

The Western Ghats, a mosaic of forests and grasslands, are older than the Himalayas and have an exceptionally high level of biological diversity and endemism, habitat to some 325 globally threatened (listed in IUCN's Red List) flora, fauna, bird, amphibian, reptile and fish species, according to UNESCO. This includes the Nilgiri tahr, a stocky, agile goat found nowhere else in the world.

What makes the Ghats vulnerable?

The Western Ghats are highly endangered not least by hundreds of hydropower projects such as the proposed ₹5,843 crore Sillahalla Pumped Storage Hydroelectric project in the Nilgiris,

which involves constructing dams across River Sillahalla and River Kundah, with an aim to generate 1,000 MW of power for Tamil Nadu's plains.

Moreover, tourism is creating problems of garbage, often consumed by wild animals such as elephants and exacerbating conflict. Plantations are replacing natural ecosystems. And climate change has forced fauna to adapt by redistributing themselves from fast-warming lower altitudes to higher reaches, such as in the case of the Nilgiri flycatcher and the black and orange flycatcher. Exotic species are colonising natural forests, such as eucalyptus and acacia (both originally from Australia), which were introduced here during the colonial era. As for the Sundarbans mangroves where tigers swim, salinity, heavy metal contamination, and unsustainable resource extraction threatens the ecosystem. Sea level rise and frequent storm surges reduce mangrove biodiversity, says the report.

Is there hope yet?

Outside India, seven sites in China have been proclaimed "best protected and managed protected areas," including the Badain Jaran Desert-Towers of Sand and Lake, Chengjiang Fossil Site, and Mount Huangshan.

The Natural World Heritage sites make up less than 1% of the Earth's surface, but nurture more than 20% of mapped global species richness. "This includes over 75,000 species of plants, and over 30,000 species of mammals, birds, fishes, reptiles and amphibians," says the report.

This report is timely. "The world has agreed to halt biodiversity loss through the Kunming-Montreal Global Biodiversity Framework, and the UNESCO World Heritage Convention is uniquely placed to meet these challenges by bridging the gap between nature and culture, and protecting places with extraordinary biodiversity, functional habitats and high ecosystem integrity," says the report. "This report is more than a health check. It is a guide for action," says Ms. Aguilar.

THE GIST

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Hanle protects its dark skies and builds a future on stargazing

With the motto 'come for the mountains, stay for the stars', the Hanle Dark Sky Reserve is showing how the Himalayan skies are being preserved today and will be carried forward for future generations, with thousands of new visitors also lending a helping hand to the local economy.

Shreejaya Karanth

Astronomy is the oldest of the sciences. The sky is a free resource, and those who live away from city lights are fortunate to enjoy it for their passion, imagination, and even livelihoods. That's the story of Hanle, a small Himalayan village that hosts one of the darkest skies in the world. Its Bortle 1 skies – the highest clarity rating on a nine-point scale – seem to say astronomy is for everyone.

Located in Ladakh, Hanle is now protected as India's first dark sky reserve. It's managed as part of a memorandum of understanding between the Indian Institute of Astrophysics (IIA) in Bengaluru, the Union Territory of Ladakh, and the Ladakh Hill Development Council in Leh. Once a region of nomadic people, Hanle is now emerging as a stargazing destination.

A dark sky reserve is a designated area with an exceptionally clear sky, and maintained that way by minimising light pollution. The Hanle Dark Sky Reserve, a unique government-funded and science-driven sustainable development initiative, is located within the Changthang Wildlife Sanctuary, surrounding the Indian Astronomical Observatory, a research facility operated by IIA.

The observatory hosts two optical telescopes, the Himalayan Chandra Telescope and the GROWTH India Telescope (with IIT Bombay), and two Cherenkov telescopes – the High Altitude Gamma Ray Telescope Array (with the Tata Institute of Fundamental Research) and the Major Atmospheric Cherenkov Experiment (with the IIT Bombay).

"Countless clear night, fewer atmospheric particles that absorb the celestial objects' light, and low light pollution make Hanle an ideal location for astronomical observations," Dorje Angchuk, the engineer-in-charge of the Observatory, said.

To minimise light pollution at the reserve, the IIA has distributed lamp shades, blackout curtains, and bulbs of warm tones to all homes and infrastructure in the village, Mr. Angchuk said. In support of astrotourism, IIA scientists have trained 25 local youths, 18 of whom are women, as "Astronomy Ambassadors." These ambassadors are equipped with telescopes and basic astronomical concepts. The night sky tour they lead for visitors helps them with a part-time income.

The star party
Since 2023, Hanle Dark Sky Reserve has been hosting an annual "star party" at this location. The third edition took place from September 19 to September 23 this year. At these parties, astronomy enthusiasts, astrophotographers, and stargazers together observe and celebrate the night sky. Their gathering creates space for astronomy education, hands-on learning, and collaboration.

Unlike conventional parties, a star party is a gathering held under dark skies, devoid of white light (or loud sounds for that matter), with the participants engaged in quiet observations.

Some 47 participants, including beginner as well as professional stargazers (and this author), gathered at this year's party. The early evenings featured tutorials and lectures on the best ways to make use of the clear, dark skies, while the nights were spent viewing and capturing images of the heavens. The team was supported by volunteers from the Bangalore Astronomical Society and repeat participants.

"The skies in Hanle are so pristine that you can observe many elusive and exclusive phenomena not seen anywhere else," Ajay Talwar, an amateur astronomer and telescope maker who runs a company called Aperture Telescope in Gurugram, said.

These phenomena include zodiacal light, a faint glow that appears during the twilight hours along the Sun's path in the sky, caused by sunlight scattering off dust particles in the inner Solar System, and which he said "can only be viewed from Hanle."

Mr. Talwar has been an astrophotographer since 1987. During the orientation programme for the star party, he spoke to the participants about other similar astronomical phenomena and the best times for viewing them. For example, the gegenschein, he said, is a luminous patch in the sky found opposite the sun's position, i.e., the antipodal point. The belt of Venus is likewise a pink band of light visible in the evening sky, above a dark blue band, in the direction opposite



Stargazers gathered at the Himalayan Chandra Telescope for the Hanle Star Party. AJAY K NEELAM TALWAR/SPECIAL ARRANGEMENT

to that of the setting sun. The dark blue band is the earth's shadow, and the pink band is backscattered sunlight.

"Clear skies and dry weather and the time I get to spend with the sky brings me back here every year," Neelam Talwar, an Air India crew member and a member of the Amateur Astronomers Association of New Delhi, said at the event.

Ms. Talwar expressed a particular fondness for capturing images of the Belt of Venus and the zodiacal light. She also shared accounts of last year's events, where participants learned to capture people in the dark against a starry background by illuminating their subjects from different angles.

Hanle has low oxygen, low humidity, and high ultraviolet radiation – all factors considered very suitable for astronomy, according to Mr. Talwar. However, he added, they are very bad for the human body.

"So, it is very important to come here with a lot of planning and rest."

Indeed, the IIA advised the star party's attendees to arrive in Leh two days before the journey to Hanle so we could acclimatise ourselves to the low oxygen levels and dry air. A medical professional set out the potential health problems at high altitudes, and each had to complete a medical check up before commencing the journey. At Hanle itself, which is located 4,250 m above sea level, there were nightly medical checks and volunteers to help.

Participants registered via an application form that the IIA opens for the star party around August. They were selected based on their experience, passion for astronomy, and their plans for utilising Hanle's pristine skies.

Life around stars

Rangdöl Dorje, an Astronomy Ambassador since 2022, said the local



Hanle village and the Indus River in Changthang. ASHISH KOTHIKAWALA

Countless clear nights, fewer atmospheric particles, and low light pollution make Hanle an ideal location for astronomical observations.

DOORJE ANGCHUK
ENGINEER-IN-CHARGE OF THE OBSERVATORY

economy is thriving thanks to an influx of tourists to Hanle to look at the stars. According to Mr. Angchuk, the reserve had around 10,000 visitors in 2024.

Mr. Dorje also said visitors often ask if they can see the stars at night as they enter the village and that many are particularly interested in viewing planets and the moon through telescopes. Mr. Dorje studied computer science but said he found it easy to learn astronomical concepts, adding that "astronomy is for everyone."

"Truly speaking, I'm really fortunate to be born in Hanle," Tsering Skitson, a newly appointed Astronomy Ambassador with a background in accounting, said.

She added that sharing their natural surroundings and astronomy experiences with others outside Hanle is important. "I think practical is more important than theoretical. We are doing practical learning through telescopes, with the help of the senior ambassadors," Ms. Skitson added.

There are fewer tourists in the winter because of the cold, at this time the Astronomy Ambassadors tutor the local schoolgoing children.

"I teach alternative learning courses on astronomy and culture as a pedagogical approach," Padma Ishay, an Astronomy Ambassador, said. (The alternative approach refers to teaching topics that aren't covered in schools.) He added that young students will do better research if they learn about their own culture well.

Mr. Ishay and Anmol Tikoo, an educator and filmmaker, have been working on preserving local traditional knowledge of the night sky by collecting stories, proverbs, and folk songs from elders in Hanle and the surrounding area. Many participants said their presentation at the star party was eye-opening.

Come for the mountains
Namratha Pathak, a scientist in the Department of Science and Technology of the Government of India, stressed the importance of the connection between science, nature, habitat, and indigenous knowledge and urged their joint conservation. She also called her own star party experience "spectacular" and "breath-taking," and said she would assure her students the Milky Way.

Khanbhad Alam, a senior lecturer from Jamuna and Kashmir, said he plans to share what he learnt with his students. "I learnt about different types of telescopes, especially the automated ones. One of the most interesting things I learnt was how to take astrophotographs using my phone."

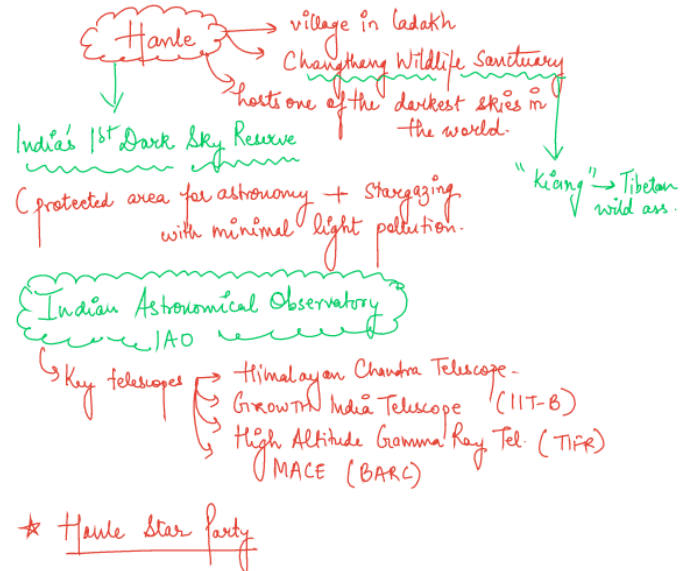
Rashmi Sheeran, an astronomy educator from Baryana who was attending the star party for the first time, said she used to believe that the images of the universe available on the internet were qualitatively superior to those seen through a telescope. Her time at the party changed her mind: "After seeing the planets with my own eyes, I found the view to be as good as or even better than pictures I had seen before," she remarked.

Muneer Wani, a teacher and divisional nodal officer for STEM and Akash labs in Jamuna & Kashmir, said he'd encourage people interested in space science and astronomy to explore careers beyond the traditional engineering and medicine. At the party, Mr. Wani said he was able to improve his own astrophotography skills with help from Mr. Talwar, and succeeded in capturing high-quality images of the Milky Way and the Andromeda galaxy. On the party's last night, the participants welcomed tourists and locals to explore the sky with telescopes. This open event involved nearly 300 people, including soldiers from the Indian Army and officers stationed nearby.

"To boost astro-tourism, we are building a mini planetarium at [the reserve]. We also plan to build a transparent dome called the 'Astroglobe' to benefit tourists and stargazers during the harsh winter season," Mr. Angchuk said.

With the motto "come for the mountains, stay for the stars," the Hanle Dark Sky Reserve is showing how the Himalayan skies are being preserved today and will be carried forward for future generations, while also lending a helping hand to the local economy.

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Practice Question

Q. With reference to the Animal Birth Control (ABC) Rules, 2023, consider the following statements:

1. The Rules mandate that every local authority must ensure at least 80% sterilisation and immunisation of stray dog populations within its jurisdiction.
2. The Rules prohibit relocation of stray dogs from one area to another except for medical treatment or adoption.
3. The Rules empower the Animal Welfare Board of India (AWBI) to monitor and coordinate the implementation of the programme across States and Union Territories.
4. The Rules provide for setting up of designated feeding points for stray animals in every ward.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1, 2 and 3 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4