





# Suryakant finally surrenders, ED gets 12 days custody

STAFF REPORTER ■ RAIPUR

Prevention of Money Laundering Act (PMLA) court here on Saturday granted custodial remand of an absconding coal business and multi-crore coal scam kingpin Suryakant Tiwari for 12 days to the Enforcement Directorate (ED) for allegedly extorting money from coal and mining transporters in Chhattisgarh.

Additional District and Sessions Judge Ajay Singh Rajput granted the remand till November 10, Tiwari's lawyer Faizal Rizvi said.



Tiwari was absconding since the agency conducted multi-city raids in the state on October 11 and he appeared in the PMLA court

to surrender. Two days ago, a 2009 batch IAS officer, Sameer Vishnoi, coal businessman and Indermani Group head

Sunil Agrawal and Tiwari's uncle and advocate Laxmikant Tiwari were sent to 14 days judicial custody by the court in the case.

Illegal levy of Rs 25 per tonne was being extorted from each tonne of coal transported in Chhattisgarh by a cartel of senior bureaucrats, businessmen, politicians and middlemen, amounting to Rs 2-3 crore a day, the ED said in a statement on October 14.

The agency said it seized unaccounted cash of Rs 4.5 crore, gold jewellery, bullion and other valuables worth Rs 2 crore during the raids.

The ED also raided the premises of two IAS officers, Raigarh Collector Ranu Sahu and her husband J.P. Maurya, Director, Mining and Geology Department in Chhattisgarh.

# Ensure hassle-free paddy procurement: Baghel

STAFF REPORTER ■ RAIPUR

Chhattisgarh Chief Minister Bhupesh Baghel on Saturday reviewed the preparations for paddy procurement at a meeting here and asked officials to ensure a hassle-free purchase from farmers.

An official communication said Baghel directed the officials to ensure that the farmers should not have to face any inconvenience at the committees and procurement centers.

Under the leadership of the Chief Secretary, the Secretaries and Collectors should be ready to ready all the arrangements for paddy procurement, he said.

The Chief Minister said a meeting of farmers should be held at the committee-level



on November 1 and planning for transportation of paddy should be done in consent with the farmers.

The Chief Minister pointed out that due to unseasonal rains in many areas, paddy harvesting has not yet begun in full swing.

He also reviewed the

status of farmers' registration, gunny bag arrangements, preparations for transportation of paddy and the status of registration of mills. A total of 29.42 lakh hectares of 25.23 lakh farmers has been registered so far for paddy procurement in the Kharif year 2022-23.

# 'Expedite road repairs on priority'

STAFF REPORTER ■ RAIPUR

Chhattisgarh Chief Minister Bhupesh Baghel on Saturday exhorted the Public Works Department to expedite the ongoing patchwork of roads while maintaining quality.

Expressing concern over dilapidated roads in the state, Baghel said there was no dearth of budget to do road repairs.

The meeting was told that road construction work worth nearly Rs 1,000 crore has been completed so far.

The Chief Minister said the work should be done on priority and told the



Collectors to personally monitor the work. The Chhattisgarh Road

and Infrastructure Development Corp Ltd (CRIDCL) has set a target of

completing 165 road and bridge work by December 2022.

# Hike Central aid for police modernization: Tamradhwaj

STAFF REPORTER ■ RAIPUR

Chhattisgarh Home Minister Tamradhwaj Sahu on Saturday asked Prime Minister Narendra Modi to increase the central aid for police modernization in the Naxalism-affected state.

Sahu was speaking on the second day of a two-day Chintan Shivir called by Prime Minister for Home Ministers of all the states.



**"Central aid for Chhattisgarh in 2013-14 was Rs 50 crore which has now been curtailed to less than Rs 20 crore"**

Sahu said the central aid for Chhattisgarh in 2013-14 was Rs 50 crore which has now been curtailed to less than Rs 20 crore.

Chhattisgarh is working in the direction of eliminating the Naxalite menace, he said, and added that many schools in the affected areas have been restored.

Similarly, basic civic amenities were arranged in the affected region including health, potable water and opening of fair price shops, he said.

# Husband among three arrested for killing wife

STAFF REPORTER ■ RAIPUR

With the arrest of three persons including the husband, police in Raipur on Saturday claimed to have solved the killing of his wife in 2018.

Raipur Senior Superintendent of Police Prashant Agrawal said Devchand Kurre, his brother Devdas and Tejram Chaturvedi, all from Raipur district, have been taken into custody. Efforts are on to nab one more person, he added.

They killed Devchand Kurre's wife Anita in November 2018 and lodged a bogus missing complaint with the police.

In April 2019, a skeleton found near a quarry in



Keshla village was identified as the victim by her family through her jewellery.

A DNA test confirmed the victim was Anita Kurre.

The police detained Chaturvedi, who confessed his involvement in the crime

and named two others.

After the arrest, Devchand Kurre told the police he along with his brother and one more person killed the woman.

Chaturvedi helped the killers in dumping the body.

# Nagarnar Steel Plant commissions coke oven battery

STAFF REPORTER ■ JAGDALPUR

Public sector NMDC's Nagarnar Steel Plant in Chhattisgarh inched closer to its commissioning on Saturday when Director (Technical) Somnath Nandi commissioned coke battery No.1.

The event took place in the presence of K. Praveen Kumar, Executive Director in-charge of the plant, and other senior officials.

The first batch of coke was discharged in the afternoon, paving the way for sequential commissioning of subsequent key units.

Nagarnar Steel Plant being a greenfield integrated steel plant, several major units need to be commissioned sequentially



so that their interdependence can be established smoothly.

Battery No. 2 is due for commissioning in a few days. The process will eventually culminate in the commissioning of the Hot Strip Mill and Thin Slab

Caster in the coming months.

Nagarnar Steel Plant aims to produce 2.89 million tonnes of high quality HR coils, plates and sheets annually, using state of the art technology and achieving the highest level of energy

efficiency.

Sumit Deb, CMD, NMDC, described the development as "an important day in the history of Nagarnar Steel Plant".

Nandi said: "This is the first major step towards commissioning of the steel

**The first batch of coke was discharged in the afternoon, paving the way for sequential commissioning of subsequent key units**

plant. Today's development inspires confidence that we will soon fulfil the dream of a steel plant in Bastar."

Praveen Kumar expressed the hope that these eco-friendly coke oven batteries will produce coking coal without releasing toxic fumes.

# Obesity causing health risks among women

■ IANS

Over the last 50 years, the human population has experienced several lifestyle changes from the advent of advanced technologies to the increasingly fast pace that the world now moves at. An epidemic that has risen rapidly over the same period is of obesity with an estimated 1.5 billion overweight adults residing in the developed world out of which 300 million are women. Furthermore, based on a statement made by WHO in 2014, it is believed that being overweight has significant ramifications not only for the obese but also for their immediate family as they may struggle to carry the burden of related medical conditions. Women may find

themselves facing respiratory issues such as sleep apnea, diabetes, high blood pressure, several types of cancer, heart disease, high cholesterol, stroke, and even issues with fertility and pregnancy. While all of this may sound fearsome, and it is, it is important to understand the causes of obesity in women and the way forward from there.

While there are several causes, the ones elaborated on below take pertinence:

**Lack of Movement:** The primary cause of obesity is the lack of balance in people's lifestyles. Overconsumption of fast food or home-cooked food with little to no effort made to exercise and burn fats and sugars results in an excessive amount of calories, leading



to obesity.

The same conclusion has been supported by numerous studies that claim that reduced movement during

work hours and leisure time has led to obesity due to the adoption of sedentary lifestyles.

Lack of Moderation:

Excessive consumption of alcohol, fast food, sugary drinks, and comfort eating also leads to obesity. Due to this it is important to eat

such foods occasionally and in moderation only.

Genetics: This one is quite self-explanatory, the children of obese parents may lean towards being obese themselves compared to those of leaner parents.

Hormones: It is imperative to understand that hormones are essential to the regulation of our hunger and satiety indicators. Often, commonly found issues such as stress and a lack of sleep at night can severely disrupt these natural indicators. When such an event takes place, one may experience cravings even if they are not genuinely hungry.

Medication: Several medications such as steroids, beta-blockers, anti-depressants, anti-seizure and dia-

betes medications can often lead to weight gain and eventually obesity if not regulated. Of course, seek guidance from your general physician before taking any drastic steps with your prescribed medication.

Keeping that in mind, it is now essential to elaborate on the way forward for those who have obesity and those who can prevent it.

It is imperative for those suffering from obesity to either reduce their energy intake, increase their form of exercise, or both. Therefore, both the diet and the lifestyle must be mitigated to achieve the best results. Doing so will also help in the prevention of diabetes. Once again, please do not implement drastic decisions by yourself and always consult a general

physician or certified dietician for the same as each person's body, condition, and needs are unique and individual to their circumstances.

Ultimately, obesity is a combined product of several socioeconomic, cultural, environmental, behavioural, and genetic factors. Therefore, it is time for society at large to take personal and collective responsibility for and action toward the prevention of obesity while actively supporting those suffering from it. Encouraging healthy eating habits and an effective routine full of physical movement in every aspect of life is the need of the hour and will require the support and understanding of all stakeholders involved.







# PHILLIPS, BOULT POWER NEW ZEALAND TO BIG WIN OVER SRI LANKA

**PTI ■ SYDNEY**  
Glenn Phillips rode his luck to smash a special hundred as New Zealand put their poor start behind to register a crucial 65-run win over Sri Lanka in the T20 World Cup, here on Saturday.  
New Zealand found themselves tottering at 15 for three inside the powerplay before Phillips (104 off 64) shared an 84-run stand with Daryl Mitchell (22 off 24) to stabilise the innings.  
The 25-year-old, who was dropped twice including early on in his innings, played some sensational strokes en route to his second T20 hundred. His knock comprised four sixes and 10 boundaries.



Sri Lanka too lost early wickets but, unlike New Zealand, could not recover from there to end at 102 all out in 19.2 overs.  
Trent Boult caused the maximum damage with the new ball and ended up with career-best figures of four for 13 in four overs.  
It was New Zealand's second win in three games, with their previous game against Afghanistan being a total washout. The semifinal passage gets a lot tougher for Asia Cup champions Sri Lanka, who suffered their second loss in three games.  
The game was as good as over with Sri Lanka slipping to 24 for five in the seventh over.  
The veteran pace of duo of Boult and Tim Southee ran through Sri Lanka's top-order with the former picking up three wickets in his opening spell. Left-arm spinner Mitchell

Santer (2/21) and Ish Sodhi (2/21) also chipped in with couple of wickets.  
Barring Bhanuka Rajapaksa's breezy 34 off 22 balls, none of the Sri Lankan batters could get going against a formidable Kiwi attack.  
Skipper Dasun Shanaka (35 off 32), who has bailed his team out of tough situations, could not do so on Saturday.  
It was New Zealand's first game since their win over Australia a week ago but it did not take long for them to operate at their optimal best.  
Earlier, Phillips flat batted forehand shots off both the spinners and pacers stood out in his memorable innings. His first six off Chamika Karunaratne, a pick up shot that went flying over long leg, gave him the confidence to go ballistic and lift the team from a precarious start.  
Phillips reached the three figure mark with a pull off mystery spinner

Maheesh Theekshana, prompting roaring celebrations from the belligerent batter.  
Theekshana, who impressed with the new ball, was too short in the death overs and Phillips took full advantage of that. The New Zealander smashed him for two successive sixes in the 18th over that went for 16.  
The last five overs yielded 67 runs for New Zealand. Sri Lanka's catching and ground fielding on the day left a lot to be desired.  
The only positive for Sri Lanka was their performance in the first six overs in which they removed the dangerous Finn Allen, Devon Conway and New Zealand skipper Kane Williamson.  
Theekshana removed Finn with an inswinger, pretty unusual for a spinner, that was too close to cut. Williamson was caught behind as he tried to drive wide ball off pacer Kasun Rajitha on the up.

# Stern Proteas test awaits India's top-order in Perth



**PTI ■ PERTH**  
Kagiso Rabada and Anrich Nortje are expected to spit fire on a track that will offer steep bounce as India's top-order gears up for its toughest test in adverse conditions against a top-notch South African side in T20 World Cup on Sunday.  
The match in all likelihood will decide the Group 2 topper and India's probable semi-final venue.  
The WACA has been the traditional venue for many decades but now the newly-built concrete jungle called Optus Stadium hosts the international games.  
While it looks like any other modern cricket stadium devoid of WACA's old world charm, what is similar to both grounds is spicy nature of its track and the good bounce on offer that could make life difficult for batters.

In this backdrop, Rabada and Nortje, two of world's most fearsome speed merchants are expected to pose some tough questions for Rohit Sharma, KL Rahul, Virat Kohli and Suryakumar Yadav.  
While Rabada will bowl full and get the bowl to seam and swing at 145 clicks, expect Nortje to mix it up with either back of length or the hard lengths at 150 plus speed.  
Both Rohit and Virat are fabulous horizontal bat players and the Powerplay overs will be all about how well the hand-eye co-ordination of the top-order works.  
The extra pace off the track will give batters that split second less time to react and it will be interesting to see what will be the approach of the Indian batters.  
Will they start to attack from the word 'go' or like it has been a trend in this T20 World Cup, play the first 10 overs cautiously and take the attack back to the opposition during the back-10.  
While left-handed Rishabh Pant with his audacious stroke-play would have been a good foil for Rohit at the top of the order, it is understood that head coach Rahul Dravid for the time being does not want to look beyond an out-of-form Rahul.  
The other alternative to include Pant is to drop Dinesh Karthik, whose keeping in the two matches has been below par.  
The Netherlands game isn't a good enough indication to provide how well Indian team is ready for the Proteas Test.  
The last series between the two sides was played on low bounce Indian belters, on which, hitting through the line and plonking one's front-foot was meat and drink for batters.  
As far as South Africa's bowling combination is concerned, it will not be surprising if they drop left-arm wrist spinner Tabraiz Shamsi and include an extra seamer in either Marco Jansen or Lungi Ngidi.  
The Indian team has played Shamsi comfortably in the past and two spinners at the Optus could be a luxury unless they are looking to speed up over-rate.  
Tinkering with the winning combination isn't advisable but with three in-form left-handers in Quinton de Kock, Rilee Rossouw and David Miller in South Africa's top six, Axar Patel's recent match-ups will certainly be in focus while discussing the team combination.  
Axar's economy rate while bowling to left-handers in close to 9 runs per over and with Ravichandran Ashwin in the playing XI, it will be a cover for the Gujarat left-arm spinner.  
Also Hardik Pandya in that case might bowl his full quota unless India think of playing Yuzvendra Chahal instead of Axar.  
But in that case, they will have to somehow get a left-hander Pant in the side in place of Rahul.

# Bowler should be credited: Chappell calls for review of dead ball rule

**PTI ■ PERTH**  
Australian great Greg Chappell has called for a review of the laws of cricket, saying if the ball beats the bat and hits the stumps during a free-hit it should be declared dead to credit the bowlers as the game is already tilted in the favour of batters.  
An over-the-waist no ball and three byes off the subsequent free hit in the final over had helped India claim a memorable victory against Pakistan in the ongoing T20 World Cup last week.  
However, there has been a lot of discussion around why the free-hit ball was not called dead immediately after it hit the stumps.  
Former cricketers have objected that a batter bowled off a free-hit would result in a dead ball that prevents further scoring from the same delivery.  
"I would review that rule to give the bowler credit for the dead ball if he is good enough to beat the bat and hit the stumps," Chappell wrote in his column for "The Sydney Morning Herald".  
With India needing 13 off three balls, Virat Kohli hit a six off a waist-high full toss which was adjudged a no ball.  
"There is no doubt that the umpires got their calls right in the glare of the spotlight, but one must ask: is a ball that is hit for six really a no-ball?  
The height of a delivery is monitored



close to being a 'song of god', the literal translation of 'Bhagavad Gita', and has legitimised T20 cricket as an 'art form', feels Australian legend Greg Chappell.  
Kohli's knock floored Pakistan in India's T20 World Cup opener and Chappell had no hesitation in avowing that the former skipper is the "most complete Indian batsman" of his time. "The Bhagavad Gita is the holy book which is the synthesis of Hinduism. Literally translated, it means 'the song by God'. Kohli played an innings that was as close to a 'song by god' as has ever been played in T20 cricket," Chappell wrote in his column for the 'Sydney Morning Herald'.  
The 74-year-old pointed out that Kohli's aggressive knock took the art of batting to another level and has actually legitimised the T20 cricket as an art form.  
The purists love Test cricket while the T20 format is considered and promoted as the slam-bang style of the game where the batters throw their willow at every ball.

# CAN'T DROP RAHUL ON BASIS OF TWO BAD INNINGS: BATTING COACH RATHOUR

**PTI ■ PERTH**  
KL Rahul might have failed in a couple of games but that's not a big enough "sample size" to drop him and include Rishabh Pant at the top of the order, batting coach Vikram Rathour said on eve of the T20 World Cup match against South Africa on Sunday.  
Rahul scored 1 off 4 balls against Pakistan while a touch and go leg before decision saw him get dismissed for 9 off 12 balls against the Netherlands.  
While Pant has shown a lot of intent as Rohit Sharma's opening partner in the brief chances that he has got, Rathour made it clear that the talented Rourkee man will have to wait for now.  
"No. We aren't really not thinking about that," Rathour dismissed the idea of Pant's inclusion for the time being.  
"I don't think that's a good enough sample size anyway. He's been batting really well and also batted well in practice games. So we aren't changing anything," he was categorical in his reply.  
While Pant is an absolute match winner, it is difficult to fit in both Dinesh Karthik and him in same playing XI. Also with team roping in Karthik for a specific role, there is no chance that the 37 year old will be kept out of the playing XI.  
"Only 11 can play unfortunately and I know and understand Rishabh is a fantastic player and we know he can be destructive against any opposition," said Rathour.  
While Rathour wanted to soften the blow but it was clear they are not even thinking about Pant.



# Buttler confident of making semis despite rain woes

**PTI ■ MELBOURNE**  
A washout against Ashes rival Australia and a DLS defeat to Ireland may have made their knockout qualification tougher but England captain Jos Buttler said they are not worried unless it goes "completely out of control" in the T20 World Cup.  
The 2010 champions, who have just one win against minnows Afghanistan in the Super 12 stage, now face two tough must win contests against New Zealand (Tuesday) and Sri Lanka (Saturday).  
Australia, on the other hand, have relatively easier tasks facing Ireland (Monday) and Afghanistan (Friday) in their remaining Group 1 fixtures. Top two teams qualify for the semi-finals.  
"Listen, until something's completely out of our control, we won't worry about that. We know we've got two games left to play. We want to win those two games, give ourselves the best chance to get through to the next round," Buttler said after their match against Australia was abandoned due to persistent showers at the MCG here on Friday.  
As of now, all the six teams of Group 1 are in the fray for a semifinal berth. New Zealand, England, Ireland and Australia have three points each. Sri Lanka and Afghanistan have two apiece with the former having a match in hand.  
"Yeah, we'd do well to live up



# Vengsarkar, Kulkarni elected ICA representatives on BCCI council

**PTI ■ NEW DELHI**  
Former India captains Dilip Vengsarkar and Shubhangi Kulkarni were on Saturday elected to represent Indian Cricketers' Association (ICA) on the BCCI Apex Council.  
While Kulkarni was elected unopposed as the female ICA representative on the BCCI Apex Council, Vengsarkar defeated outgoing ICA president and former India cricketer Ashok Malhotra. In e-voting held over three days, Vengsarkar received 402 votes compared to Malhotra's 230.  
Anshuman Gaekwad and Shantha Rangaswamy were the first ever ICA representatives in the BCCI with their tenure lasting from October 2019 to October 2022. The Lodha reforms led to the inclusion of ICA representatives on the BCCI Apex Council.  
Former India spinner Pragyan Ojha retained his place on the IPL Governing Council. He beat Vijay Mohan Raj by 396 to 234 votes. Vengsarkar, 66, has administrative experience as he has served as the director of the National Cricket Academy and was also a chief selector of the national team.  
"The role is not very different to what I have done before (in sports administration). I want thank to all the former cricketers who voted for me," Vengsarkar told PTI.

# Pooran vows to bounce back strongly, use T20WC debacle as motivation

**PTI ■ PORT OF SPAIN (TRINIDAD & TOBAGO)**  
West Indies white-ball captain Nicholas Pooran is in no mood to quit in the aftermath of their T20 World Cup debacle, and vowed to bounce back strongly by taking the first round ouster as "motivation".  
Two-time champions West Indies were eliminated in the qualifiers for the first time in the history of the ongoing showpiece.  
West Indies, the most successful T20 World Cup team, failed to qualify for the Super 12 stage, following which head coach Phil Simmons has decided to step down, with the two-  
"Playing cricket is my dream and obviously I have had my test in life as well and this is another test for me," Pooran said ahead of leading defending champions Trinidad and Tobago in the Super50 Cup, a regional List A tournament.  
"I am a person that embraces challenges and this was just another one for me. It is not going to stop me. I am going to continue to learn from my experiences and again, I am happy I can wake up in the morning and see that I have an opportunity to play cricket again," he added.  
Test series in Australia, starting November 30 in Perth set to be his last assignment.



have no international white-ball assignment till the tour of South Africa in February-March next year.  
"Obviously, we don't know what the future holds but we will take it day by day. Again, it was a learning experience for all of us and this is our journey and our story," Pooran said.  
"Time will tell what will happen but for now it is just about focusing on ourselves and how we can get better as individuals."  
"Rest is the ultimate (way to heal) and every player needs that but inside it is still hurting as well. I want to use that hurt as motivation and obviously come back strong."  
As of now, the West Indies

# Bumrah can't play all formats for too long: Thomson

**PTI ■ PERTH**  
Jasprit Bumrah can't afford to play all three formats if he has to prolong his career since burdening the body with too much cricket will keep him injury prone, says Jeff Thomson, one of the greatest fast bowlers the world cricket has seen.  
Bumrah, easily one of world's premier fast bowlers in contemporary cricket, missed the T20 World Cup due to a stress fracture on his back. It might keep him away for months.  
Thomson, who himself

hurlled 95mph thunderbolts with an awkward slinging action in the '70s and '80s, wants Bumrah to decide which of the three formats he would like to let go.  
"Bumrah puts too much weight on his body and because he plays all formats, he is bound to get injured. It is now upon him to decide what he wants to do," Thomson told PTI during an interaction.  
Call it being politically correct, no player worth his salt would ever say that he wouldn't play Test cricket and opt for shorter versions.



bowl 15 overs in a day. You can well understand which formats he needs to play to prolong his career. And with World Cups every year, white ball formats are no less important," he explained.  
But with one ICC tournament pencilled in the FTP for the next seven years, the pace ace wants Bumrah to weigh in all practical possibilities.  
"In a player's career, it is only a decade that you can bowl at the top. So more than emotion, it is about what works for you. What makes your career work better and what helps you serve your country for longer," said  
Thomson, who took 200 Tests wickets in 51 games.  
But does that mean that Bumrah has to opt for white ball formats because that is more popularity in today's time and age.  
"It is about what the crowd wants and what he wants. If people love to see him bowl for India in white ball cricket and he can help India win World Cups, why should he give up on white ball for other formats?  
"That he can't play all formats is evident to everyone because of the number of times he is getting injured."

# INDIA BEAT AUSTRALIA 5-4 IN SHOOTOUT, CLAIM 3RD SULTAN OF JOHAR CUP CROWN

PTI ■ JOHOR BAHRU (MALAYSIA)

**T**wo-time champions India defeated Australia 5-4 in a nail-biting penalty shootout to reclaim the Sultan of Johor Cup crown, breaking their five-year-old title jinx here on Saturday.

Hart then scored Australia's first goal in the shootout, after which Sudeep shot wide, and the tie-breaker was locked at 1-1 after the first two shots. Mohith foiled Jayden Atkinson's attempt, before captain Uttam Singh won a penalty stroke, which Sharda Nand Tiwari promptly put away, giving India a 2-1 lead. Up next for Australia was Joshua Brooks and he made it 2-2, but Bobby Singh Dhami could not put India ahead. Australia won a penalty stroke off the next attempt as Brodee Foster was checked by the keeper and Joshua scored without much ado. Ankit Pal then walked up to the spot for India, and he equalised, to make it 3-3, taking the game into sudden death. In sudden death, Vishnukant stepped up for India, but he missed, after



which Hart was denied by the post. Uttam then gave India a 4-3 lead with the next attempt, and Burns made it 4-4.

Sudeep then held his nerve and made it 5-4, while Joshua missed as Indian players ran amok in celebration. Earlier, both sides looked to play at a high tempo, with Mohith Shashikumar pulling off a fine save early on. Australia controlled proceedings in the early exchanges, while Uttam and Bobby tried to push India forward. The efforts paid off as India broke the deadlock through Sudeep (14') and went into the first break leading 1-0, much to the joy of fans at the stadium. Looking to build on the lead in the second quarter, India began on the front foot, with most of the contest being played in Australia's half. As the quarter progressed, Australia's hunt for the equaliser intensified, and even though India were absorbing the pressure well, Jack Holland (29') scored. India and Australia

# Satwik-Chirag duo enters French Open doubles final



PTI ■ PARIS

Satwik and Chirag, the 2019 edition's runner-up pair, never looked in trouble as they kept things in their grip right from the start.

Commonwealth Games Champion Satwiksairaj Rankireddy and Chirag Shetty progressed to the men's doubles final of the French Open Super 750 badminton tournament with a commanding straight-game win over Korean pair of Choi Sol Gyu and Kim Won Ho, here on Saturday.

The Indians came up with an all-out attack and were up 2-0 early on and despite the Koreans managing to claw back at 7-7, Satwik and Chirag ensured they were four points ahead at the midgame interval. After the break, the Koreans briefly tried to dictate the pace of the rallies with their returns getting steeper. Soon they were 16-13 up, but an alert Chirag produced a precise return to keep moving ahead. With the Indians hitting the net and out of the court on a number of occasions, the Koreans brought the equation down to 18-19 but Choi then committed an unforced error to hand two game points to their opponents. Chirag then sealed the opening game with a precise smash. The Indian combination continued with their aggressive game plan in the second game which saw some good rallies early on. After 3-3, Satwik and Chirag moved to a 7-4 lead. The Koreans, however, rallied their way back to 9-10 after a slew of exchanges but Chirag unleashed a smash to give himself a two-point cushion at the interval.

# Sankar Muthusamy seals final spot at BWF World Junior Championships

PTI ■ SANTANDER (SPAIN)

India's Sankar Muthusamy on Saturday booked his place in the men's U-19 singles final with a clinical straight-game win over Thailand's Panitchaphon Teeraratsakul at the BWF World Junior Championships here. Seeded fourth in the tournament, Muthusamy showed great athleticism and tactical acumen to outwit Teeraratsakul 21-13 21-15 in a 40-minute semifinal.



He will take on the winner of the other semifinal between Chinese Taipei's Kuo Kuan Lin and Korea's Byung Jae Kim in the summit clash on Sunday. In the tournament history, India has so far won a gold, 3 silver and five bronze medals with Lakshya Sen bagging the last medal, a bronze, in 2018.

# Marin beats Yamaguchi to reach women's singles French Open final

IAN S ■ PARIS

Rio 2016 Olympic gold medalist Carolina Marin defeated reigning two-time world champion Akane Yamaguchi 21-14, 21-18 to reach the women's singles final at the French Open 2022 badminton tournament, here on Saturday.



Marin, who needed 47 minutes to defeat Japan's Yamaguchi in the semifinal, will face the winner between China's He Bing Jiao and Chinese Taipei's Tai Tzu Ying, in the final. After recovering from an ACL injury that prevented her from defending her Olympic title in Tokyo, the Spaniard won the European Championships crown in April. On Sunday, she will seek title number 35 of her career. It will be for the first time in two years that the 29-year-

old will play a final of a World Tour Super 750 tournament. The last time she played a final of a BWF World Tour Super 750 tournament was in Odense, Denmark, in October 2020. In her best victory since returning to the circuit, Marin dominated throughout, varying

direction and pace of play toward an increasingly exhausted opponent. Yamaguchi had halted Marin's progress to the podium at recent tournaments, including August's World Cup in Tokyo, but this time she beat the circuit's form player.

# Tough day for Indian trio at Asia Pacific, Australian Crowe takes lead by two

PTI ■ CHONBURI (THAILAND)

Indian golfers Krishnav Nikhil Chopra, Aryan Roopa Anand and Shaurya Bhattacharya endured by far the toughest day at the 13th Asia Pacific Amateur Championship as but managed to stay inside the top 50. Chopra and Aryan carded 2-over 74 each while Shaurya Bhattacharya shot 75. Krishnav remains the top-ranked Indian at 1-over 217 and was Tied 39th, while Aryan was 2-over 218 and tied 44th. Shaurya, on the other hand, was 3-over 219 and tied 46th. The field was led by the 21-year-old Australian Harrison Crowe, a first timer at the Asia Pacific Amateurs.



He shot a bogey free 5-under 67 even as some of the other favoured stars, including overnight leader Bo Jin (71) and the second placed duo of Ratchanon 'TK' Chantananuwat (76) and Wooyoung Cho (74), dropped a lot of shots.

Bo, trying to emulate his brother who won this title in 2015, slipped to tied second. China's 17-year-old Wenyi Ding, the reigning US Junior Amateur champion, took a strong step towards getting two Major berths as he put himself in contention for the AAC, which gives the winner a passage to the Masters and the Open.

Cho, tied second last night, had three bogeys and a double in his first 10 holes. He is tied seventh. Also tied second after 36 holes is Chantananuwat, who had the biggest fall to tied 19th as he had two bogeys and two doubles in his last seven holes. Krishnav had a rough start from the 10th, as he bogeyed the 11th, 13th, 15th and 18th holes against one birdie on the Par-3 Island Green 17th. He had two birdies and a bogey on front nine. Aryan, also starting from 10th, was 4-over after first seven holes, but recovered slightly with three birdies and one bogey in the remaining 11 holes. "I just got off to a bad start, but tried to recover as much as I could on the second stretch," said Aryan, the two-time All India Amateur Champion. Shaurya birdied 11th, bogeyed 14th and 15th and then on the second nine, he parred only the first and ninth. In between he had three birdies, three bogeys and a double bogey. Crowe with two birdies on the front nine and three more on the back nine was 3-under and leader by two.

# Three Challenger events for Indian tennis players early next year

PTI ■ NEW DELHI

The cities of Chennai, Bengaluru and Pune will host back-to-back ATP 100 Challenger events early next year, the AITA announced on Saturday. The All India Tennis Association (AITA) did not specify the dates but it is understood that all the tournaments will be held in February after the Indian team's Davis Cup World Group Play-off tie. "The dates have not been sanctioned as yet by the ATP to us. We will know soon. This time, UP also wanted a Challenger in Lucknow but mutually we decided that Bengaluru hosts one of the events," AITA Secretary General Anil Dhupar said. "UP will now host three ITF Futures, one USD 25,000 and two USD 15,000 level events," he added. It has been learnt that Chennai will host the first event



and the second tournament will be held in Bengaluru and finally Pune, which has hosted ATP50 events in the past. The fourth Challenger, an ATP 50 event, is being contemplated in Nagpur, provided ATP gives a green signal. "Pune will be back on Challenger calendar after a gap of three years. We are also making efforts to put a challenger in Nagpur but the venue needs to be approved by ATP. However we are hopeful that this will happen," said Sunder Iyer, who is MSLTA Secretary. The AITA will organise a total of 21 men's and women's ITF and ATP Challenger events, worth Rs 5 crore prize money,

# Haaland out of Man City's game at Leicester with ankle knock



AP ■ LEICESTER

Striker Erling Haaland was left out of Manchester City's squad for Saturday's Premier League game at Leicester after picking up an ankle problem. Haaland has started every game this season following his off-season move, scoring 22 goals in all competitions, but was taken off at halftime of City's midweek Champions League game against Borussia Dortmund and was seen limping the day after the match. Julian Alvarez came in for his second league start of the season at Leicester to replace the Norwegian forward.

# Upbeat India look to continue winning momentum against Spain in Pro League

PTI ■ BHUBANESWAR

An upbeat Indian men's hockey team will aim for a disciplined effort and avoid unnecessary cards when it takes on Spain in the FIH Pro League here on Sunday. The Indians produced a great fightback in the opener against New Zealand on Friday, rallying from 1-3 deficit to eke out a close 4-3 win at the Kalinga Stadium. The hosts will be eager to carry forward the momentum. Down 1-3, skipper Harmanpreet Singh (42nd) and Mandeep Singh (52nd, 57th) found the net to hand India a morale-boosting win. Mandeep Mor (14th) was the other goal scorer for the hosts. But it won't be easy against Spain as in the previous season, India lost 3-5 to the same opponents in the second match of the double-leg tie after registering a 5-4 victory in the opening game.



"Spain is a strong side and has the ability to bounce back from any situation. It's important for us to keep up the tempo in all quarters and not drop the momentum at any point in the match," Reid said. "I like how we finished the game (against New Zealand) and the team's self-belief coming to the fore. It's never easy to bounce back from a situation that we were in against New Zealand but it shows the team's fighting spirit."



# Palmeiras beat Boca Juniors to win women's Copa Libertadores

AP ■ SAO PAULO

Brazil's Palmeiras won its first women's Copa Libertadores title after beating Argentina's Boca Juniors 4-1 in the decider at the Casa Blanca Stadium in Quito, Ecuador. Ary Borges opened the scoring for the Brazilians in the fifth minute on Friday but Brisa Priore levelled eight minutes later. Palmeiras controlled the match after the break and scored with Byanca (48th), Poliana (57th) and Bia Zaneratto (88th minute). Palmeiras won all its six matches in the tournament. The team from Sao Paulo scored 19 goals and conceded only three. Brazilian teams have won 11 out of 14 editions of the women's Copa Libertadores. Corinthians and Sao Jose have won it three times each and Ferroviaria and Santos twice each. Two Brazilian teams will play on Saturday for the men's Copa Libertadores title, also in Ecuador. Flamengo and underdogs Athletico will take part in the third consecutive all-Brazilian decider of the tournament.

# FIFA REPORT SHOWS GROWTH IN WOMEN'S SOCCER

AP ■ ZURICH

Women's soccer is seeing growing revenues globally from sponsorships, broadcast deals and merchandising, while also seeing greater interest from fans, according to a new survey by the game's governing body. FIFA released its second benchmarking report on women's soccer on Friday as the sport gains momentum ahead of next summer's Women's World Cup in Australia and New Zealand. The organisation surveyed 30 of the top leagues and 294 clubs, building on the first benchmarking report released last year. While COVID-19 impacted club revenue in the prior report, the latest survey found growth across the board from matchday, broadcast, commercial and prize money sources. Clubs reported year-on-year commercial revenue growth of 33 per cent — indicating growing interest from sponsors. It found that 77 per cent of leagues had a title sponsor, up from 11 per cent in 2021. Year-on-year broadcast revenue grew 22 per cent. Ten leagues reported broadcast revenue compared to nine in the previous survey. But there's also room for growth. The report found that just 7 per cent of clubs globally reported more than \$1 million in revenue from matches, broadcast, commercial and prize money. Sarai Bareman, FIFA's chief women's football officer, said the report underscores women's soccer is a wise investment. "The changes are clear in the second edition of the report. We know it, we feel it," she said. "And for me, it's just getting those people that are involved, particularly in the highest levels of our game all around the world, to see and understand the opportunity that sits in front of them. It's facts and data that are often the things that appeal to those people. ... It's not anecdotal anymore. It's here on paper."





I'm not one icon. I'm every icon. I'm an icon that is made out of all the colors on the palette at every time. I have no restrictions. No restrictions.  
—Lady Gaga



Konrad Lorenz (1903-1989), the author of the best-selling book *On Aggression*, wrote in *Man Meets Dog*, "The whole charm of the dog lies in the depth of the friendship and the strength of the spiritual ties with which he has bound himself to man," writes

HIRANMAY KARLEKAR

# MAN'S BEST FRIEND UNDER SCANNER



**W**hy do stray dogs bite humans? It is important to find out in the light of several recent reports of their attacking humans.

Three foremost questions arise at the beginning: Are dogs by nature aggressive and hostile to humans? Is the aggression they sometimes show a response to human oppression and provocation? How does one reduce the incidence of stray dog bites?

Konrad Lorenz (1903-1989), the author of the best-selling book *On Aggression*, wrote in *Man Meets Dog*, "The whole charm of the dog lies in the depth of the friendship and the strength of the spiritual ties with which he has bound himself to man." Lorenz should know. An Austrian zoologist, ethnologist and ornithologist, and recipient of the 1973 Nobel Prize in Physiology of Medicine along with Nikolaas Tinbergen and Karl Von Frisch, he is regarded as one of the founders of modern ethology as well as the study of animal behaviour.

To find the reasons for stray dogs biting humans, one must delve into the history and nature of human-dog relationship from the earliest times. According to Lorenz in *Man Meets Dog*, dogs had already become domesticated at the beginning of the later Stone Age when humans seem to have established their first settlements. The later Stone Age, also known as the Neolithic age, began around 10,000 BCE, which is 12,000 years ago. The period since then has witnessed the evolution of a relationship which has led dogs to be called "man's best friend" and the expression, "dog-like devotion."

## DEVOTION AND LOYALTY

Epics, mythology and history offer many examples of dogs' deep devotion and loyalty to humans. In Homer's *Odyssey*, Argus, Odysseus' dog, was the only one who instantly recognized him as he returned home in disguise after 19 years of warfare and travel. Even his wife, Penelope, son Telemachus, and loyal servant Eumaeus, could not do that.

The fact that in the *Mahabharata*, Dharma assumed the form of a little brown dog while following the Pandavas in their final journey, is not without significance. Krittibas Ojha's Bengali translation of the Ramayana, relates how Ram, ruling in Ayodhya following his return from his victory over Ravana, punished, on the complaint of a street dog, a *sanyasin* for hitting it on the head with a stick. More, the punishment was what the dog had wanted.

In comparatively recent history, Shivaji's dog, Waghya, who was by his side in every battle he fought, jumped on to his funeral pyre as he was being cremated following his death. Two memorials stand next to each other in Raigad fort—the larger one for Shivaji and the smaller for Waghya.

Dogs are often prepared to die for humans they love. JN Gupta, a member of the Indian Civil Service, was commissioner of Burdwan division in Bengal in the early 1920s. His official residence was at a place called Chinsurah on the Ganges, in which he bathed every day. One evening, a crocodile moved to attack him. While the others

watched in horror from the shore, a stray dog, whom he fed occasionally, jumped on the head of the crocodile. This disoriented the latter so much that Gupta could wade ashore, where the stray dog joined him with a leap. Thenceforward, he became a much-loved member of the Gupta family.

In *Drawing the Line: Science and the Case for Animal Rights*, Steven M Wise, founder and president of the United States-based Nonhuman Rights Project, and one of the world's foremost scholar of jurisprudence pertaining to animal issues, cited the instance of the primatologist, Roger Fout's dog, Brownie, diving under the family's backing pick-up truck which was about to hit his nine-year-old brother Ed. He quotes Fout, who was then four years old, as writing subsequently that not a family member "doubted for a while that Brownie had sacrificed her own life to save my brother."

## PROTECTING CHILDREN

Protecting children and babies is an instinct with dogs. On 25 May, 1996, the Bengali daily, *Aajkaal*, published from Kolkata, carried on its front page a report, by Pinaki Majumdar, along with a photograph by Tapan Mukherjee, of three stray dogs guarding an abandoned new-born baby—a girl—near a dustbin in a Kolkata street. They remained there from May 23 night to May 24 morning when they followed her to a local police station to which she was taken by some local people, returning to their own turf only after the baby was taken to a home by car. They had not even gone to look for food in the interim.

In Tumkur, Karnataka, three dogs saved the life of a new-born baby abandoned by its mother in Devarayanadurga reserved forest. According to a report in the Bangalore edition of *The New Indian Express* of March 10, 2007, a forest department employee had refused to marry the mother, a young girl, whom he had made pregnant. Fearing social ostracization, the mother, accompanied by a person whom the report described as a "caretaker", went into the forest and delivered the baby. She and the "caretaker," came away but three dogs from the village, who had accompanied them into the forest, stayed back guarding the baby. Next morning, their barks attracted the attention of a man who had gone to the forest to gather tamarind. He brought the baby back to the village and returned it to the mother after finding her.

The episode had a happy ending. The villagers patted the dogs profusely for saving the baby's life and resolved to get the woman married to the man who had made her pregnant.

## WHY DO STRAY DOGS BITE?

These are just a few examples from the long narrative of warm human-dog ties. Why then do stray dogs bite? The search for an answer takes one to human settlements—cities, towns, villages—in which humans and stray dogs interact and where human and animal psyches evolve. While many stray dogs have referral homes in these that feed and care for them or have animal welfare organisations doing the same, the large—if not overwhelming—majority have to fend for themselves. The search for food takes them to

restaurants, roadside vendors of food, shops, homes, and dustbins for left-overs thrown in the latter. They are shooed off, hit or threatened with sticks, or have stones thrown at them at most places. They are left hungry and resentful. Besides, when bitches have puppies, these are often killed or taken away and abandoned somewhere else by people who don't want them around. Stray dogs react to such acts, sometimes in the form of biting. More, as victims of such aggression they become aggressive not only against the perpetrators but humans as a species. Hence, attacks on people who have in no way harmed them but are humans. It is, as in the case of most other animals, reactive and not instinctive aggression.

## AGGRESSIVE HUMANS

On the other hand, attacks on stray dogs reflect the intense aggressiveness inherent in the human psyche. Erich Fromm, one of the most significant social philosophers and psychologists of our time, says in his *The Anatomy of Human Destructiveness*, "Man is the only mammal who is a large-scale killer and sadist." He says elsewhere in the same book,

"If human aggression were more or less at the same level as that of other mammals—particularly that of our nearest relative, the chimpanzee—human society would be rather peaceful and non-violent. But that is not so. Man's history is a record of extraordinary destructiveness and cruelty and human aggression, it seems, far surpasses that of man's animal ancestors and man is, in contrast to most animals, a real killer."

According to Fromm, indulgence in destruction and cruelty can always cause "intense satisfaction" to men, masses of whom can suddenly be "seized by the lust for blood. Individuals and groups may have a character structure that makes them eagerly wait for—or create—situations that permit the expression of destructiveness." Anyone who knows about the behaviour patterns of German Nazis and Italian Fascists or any communally or racially charged mob, would agree. Animals, on the other hand, says Fromm, "...do not enjoy inflicting pain or suffering on other animals, nor do they kill for nothing." No dog has committed genocide, which humans done repeatedly in history.

If dogs bite humans, infinitely more numerous humans strike and hurt other humans, not to speak of the innumerable cases when they hit and/or kill dogs. Choruses of alarm go up in the rarest of rare cases in which a dog-bite causes a person's death. No call for killing all humans is heard when a person kills another. Murder is treated as an aberrant act by an individual and not caused by a human proneness. This is because humans have created the moral and juridical order prevailing in the world. Dogs and other animals may have a very different view.

EPICS, MYTHOLOGY AND HISTORY OFFER MANY EXAMPLES OF DOGS' DEEP DEVOTION AND LOYALTY TO HUMANS. IN HOMER'S ODYSSEY, ARGUS, ODYSSEUS' DOG, WAS THE ONLY ONE WHO INSTANTLY RECOGNIZED HIM AS HE RETURNED HOME IN DISGUISE AFTER 19 YEARS OF WARFARE AND TRAVEL. EVEN HIS WIFE, PENELOPE, SON TELEMACHUS, AND LOYAL SERVANT EUMAEUS, COULD NOT DO THAT

Let that be. One way of reducing the incidence of stray dog bites will be for most humans to cease treating stray dogs savagely. Simultaneously, their population should be reduced to minimise the scope of their interaction with humans.

The answer lies in implementing the sterilization and vaccination programme as laid down by the Animal Birth Control (Dog) Rules. It provides for the removal of stray dogs for sterilization and vaccination against rabies and their return to the places from which they had been taken. The latter is important. Dogs being territorial, neutered and vaccinated dogs keep un-neutered and unvaccinated dogs away from the area and those carrying out the programme can forget about it and carry on with neutering and vaccinating stray dogs at other areas.

## THE ONLY EFFECTIVE AND HUMANE WAY

The ABC programme constitutes the only effective and humane method of controlling stray dog populations. In its report, *Technical Report Series 931*, the World Health Organisation's Expert Consultation on Rabies, which met in Geneva from October 5 to 8, 2004, states: "Since the 1960s, ABC programmes coupled with rabies vaccination have been advocated as a method to control urban street male and female dog populations and ultimately human rabies in Asia."

The killing of stray dogs serves no purpose. Dr K. Bogel, Chief Veterinary, Public Health, Division of Communicable diseases, WHO, and John Hoyt, then President, World Society for the Protection of Animals (WSPA), as well as the Humane Society of the United States (HSUS), made this clear in their joint preface to the *Guidelines for Dog Population Management* released by the WHO and WSPA in May 1990. They stated, "All too often, authorities confronted by problems caused by these [stray] dogs have turned to mass destruction in the hope of finding a quick solution, only to find that the destruction had to continue, year after year, with no end in sight."

The birth control programme for stray dogs has not taken off in India because municipal and government authorities have done little to implement it.

(The writer is a senior journalists and author)

# DON'T LET THAT STROKE STRIKE YOU



Work-related stress, low physical activity, and long working hours are taking toll on our youth, leaving them more at the risk of stroke than heart attack. The HEALTH PIONEER shares findings from a study published in the journal JAMA on the 'World Stroke Day 2022' on October 29.

A team of researchers has found a sharp increase in the incidence of stroke in young adults, especially among the working professionals. Among young people who had a stroke, there was a significant increase in the proportion who were in more skilled occupations, particularly for professional or managerial jobs.

The findings analysed the rate of new stroke cases in Oxfordshire in the UK over the last 20 years, reflect emerging evidence that young stroke is a growing problem in high-income countries.

"Establishing the importance of known risk factors in young stroke will help to raise general awareness of the need for better control. We also need better ways of identifying young people at high risk of stroke, as current risk models are based on predictors of stroke in older people," said Medical Research Foundation Fellow, Dr Linxin Li, from the University of Oxford.

Stroke is a major health problem that can have devastating consequences. It happens when the blood supply to the brain is cut off, causing the death of brain cells and dysfunction in one or more parts of the brain.

The restricted blood supply can be the result of an artery supplying blood to brain becoming blocked, a blood vessel rupturing causing a bleed inside the brain, or a brief reduction in the blood supply to the brain.

The traditional view is that vascular risk factors, such as high blood pressure, diabetes and obesity, play a minor



"Stroke is the second most common cause of death and the third-leading cause of death and disability combined in the world. Typically, stroke is considered to be a disease of the elderly. However, recent data suggest that stroke is occurring commonly in the younger population as well. "Other than traditional risk factors like hypertension, diabetes mellitus, and hyperlipidemia, some other risk factors are said to be unique to the young Indian population, according to reports. Cardioembolic stroke secondary to rheumatic heart disease is the most common cause of stroke in young in India."

**DR SANJAY PANDEY**  
Head, Department of Neurology,  
Amrita Hospital, Faridabad

role in young stroke, but recent studies have begun to contradict this view.

Dr Li's research focuses on multiple types of stroke, such as ischaemic



"This is to be expected given the changing lifestyle worsen by low physical activity and consuming junk food. Cases of stroke have grown four times in the past 30 years. So, if a person adopts a healthy lifestyle, they will reduce the chances of such health complications. Besides, habits such as consuming good food and taking adequate rest also result in a healthier body and a healthier brain, thereby reducing the risk of stroke."

**DR RAJINDER K DHAMIJA**  
Neurologist and Director of Institute of  
Human Behaviour and Allied Sciences, Delhi

A stroke, also known as a brain attack, occurs when the blood supply to the brain gets blocked or a blood vessel in the brain bursts. According to doctors, strokes lead to damage or death of parts of the brain and this condition can cause lasting brain damage, long-term disability, or even death.

According to the Centre for Disease Control and Prevention (CDC), a stroke is a serious medical condition that requires emergency care. The CDC also stresses that when the flow of blood to the brain gets blocked, due to the absence of oxygen the brain cells start to die within minutes.

strokes, caused by a blockage of arteries, 'mini-strokes' (transient ischaemic attacks) and bleeding in the brain (intracerebral haemorrhage and sub-arachnoid haemorrhage).

The researchers found that between 2002-2010 and 2010-2018, there was a 67 per cent increase in stroke incidence among younger adults (under 55 years), and a 15 per cent decrease among older adults (55 years or older).

A similar divergence in incidence was not found for other vascular events, such as heart attacks. "Historically,

we've thought of stroke as only affecting older adults, but studies like this suggest a growing problem in young adults," said Dr Angela Hind, Chief Executive of the Medical Research Foundation.

"Stroke in young adults can have a huge impact, often occurring when they are starting a family or already have young children to look after, and have yet to reach the peak of their careers. The economic, social and personal consequences can be devastating," Hind added.

## Feeling Chirpy: Being Around Birds is Linked to Lasting Mental Health Benefits



New research from King's College London has found that seeing or hearing birds is associated with an improvement in mental wellbeing that can last up to eight hours.

This improvement was also evident in people with a diagnosis of depression – the most common mental illness worldwide – indicating the potential role of birdlife in helping those with mental health conditions.

Published in Scientific Reports, the study used smartphone application Urban Mind to collect people's real-time reports of mental wellbeing alongside their reports of seeing or hearing birdsong.

Lead author Ryan Hammoud, Research Assistant at the Institute of Psychiatry, Psychology and Neuroscience (IoPPN), King's College London, said:

"There is growing evidence on the mental health benefits of being around nature and we intuitively think that the presence of birdsong and birds would help lift our mood. However, there is little research that has actually investigated the impact of birds on mental health in real-time and in a real environment. By using the Urban Mind app we have for the first time shown the direct link between seeing or hearing birds and positive mood. We hope this evidence can demonstrate the

importance of protecting and providing environments to encourage birds, not only for biodiversity but for our mental health."

The study took place between April 2018 and October 2021, with 1,292 participants completing 26,856 assessments using the Urban Mind app, developed by King's College London, landscape architects J&L Gibbons and arts foundation Nomad Projects.

Participants were recruited worldwide, with the majority being based in the United Kingdom, the European Union and United States of America.

The app asked participants three times a day whether they could see or hear birds, followed by questions on mental wellbeing to enable researchers to establish an association between the two and to estimate how long this association lasted.

The study also collected information on existing diagnoses of mental health conditions and found hearing or seeing birdlife was associated with improvements in mental wellbeing in both healthy people and those with depression. Researchers showed that the links between birds and mental wellbeing were not explained by co-occurring environmental factors such as the presence of trees, plants, or waterways.

Senior author, Andrea Mechelli, Professor of Early

Intervention in Mental Health at IoPPN, King's College London said: "The term ecosystem services is often used to describe the benefits of certain aspects of the natural environment on our physical and mental health. However, it can be difficult to prove these benefits scientifically. Our study provides an evidence base for creating and supporting bio-diverse spaces that harbor birdlife, since this is strongly linked with our mental health. In addition, the findings support the implementation of measures to increase opportunities for people to come across birdlife, particularly for those living with mental health conditions such as depression."

Research partner & Landscape Architect Jo Gibbons, of J & L Gibbons said: "Who hasn't tuned into the melodic complexities of the dawn chorus early on a spring morning? A multi-sensory experience that seems to enrich everyday life, whatever our mood or whereabouts. This exciting research underpins just how much the sight and sound of birdsong lifts the spirits. It captures intriguing evidence that a biodiverse environment is restorative in terms of mental wellbeing. That the sensual stimulation of birdsong, part of those daily 'doses' of nature, is precious and time-lasting."

## Secret Tips for Flawless Skin

Anybody can have great skin. Just like anybody can have bad skin. And anybody can have bad skin days, just like bad hair days. Only, bad skin days last longer. Sometimes for weeks, which seem with no ending?

A few problems are related to the weather. Let's understand them and deal accordingly!

### ACNE

It is an inflammatory condition of the skin partially caused by increased sebum production and an abnormality of the bacteria found normally on the skin. The result can be red and enlarged patches on the skin, whiteheads or blackheads in monsoon. The oily activity on skin is more and can produce rash and pimples. Use some homemade facepacks to remove excessive oils from the surface and keep face glowing and smooth: fuller earth based packs with curd shall be best for oily and combination skin types. Also, applying antibacterial creams like Benzoyl Peroxide 2.5%-5%, Nafidofloxacin etc shall also help. But avoid the condition with a few tips like washing the face 4-5 times a day with a gentle soap free cleanser, drinking 3-4 Liters of water during monsoons will definitely help. Also, switch to a non comedogenic, gel-based sunscreen during this season to maintain your flawless beauty. A mild face wash is good for the face. You can also opt for some home remedy like a mixture of gram flour, rose water and milk. Apply evenly on the face and wash off after 15 - 20 minutes. Always follow your cleansing, toning and moisturizing routine to keep your skin youthful and bright. Cleansing should be followed by toning



**DR DEEPAI BHARDWAJ**  
Senior Dermatologist,  
Centre for Skin & Hair Pvt Ltd

using an alcohol-free toner. This is helpful since increased humidity could open up your pores.

### HAIR CARE

Never let your hair get wet in the rain. Pollution, suspended particles in the air especially few dangerous acids which are suspected to be there in the rain now at certain times can settle on your scalp. Hence, the itchy feeling, after getting wet in the rain. Always cover your hair with cheerful and colourful umbrellas or rain-coats. Combined effect of sun heats and humidity can damage your hair. Keep your hairstyles simple and easy. Elaborate hairstyles are more difficult to manage. Using bangs and layered hairstyles are best. Using an Anti Dandruff shampoo once a week will also help. Do not comb wet hair. Also do not tie your hair tightly as it may lead to breakage.

### FUNGAL INFECTIONS

A fungus thrives in humidity -- wet skin folds rubbing against each other get macerated easily, providing easy entry to fungi and yeast. As a result, you develop itchy, circular, reddish, flaking patches on the body, especially in skin folds at the groin (jock

itch), underarms and around the breast in women.

Fungal infections can also affect your feet, especially if closed shoes are worn all day. Staying dry is the best way to avoid them. Carry a set of dry clothes and footwear to the office and change immediately if you've gotten drenched on your way.

Once you are at your desk, take your shoes and socks off to allow air circulation around your feet. Wear sandals or floaters as far as possible. Use plenty of dusting talc to prevent accumulation of sweat and moisture in skin folds. Those prone to repeated fungal infections can use medicated powders like Absorb, Tyza, Mycoderm C, Candid, etc.

Athlete's Foot is a combined bacterial and fungal infection. Starting from the toes, the skin turns whitish or greenish itches terribly and may even be a foul-smelling discharge or pus seeing the state of our city with exposure to a lot of grime and muck Athlete's foot is quite common. Prevent this by keeping feet as dry as possible. If the water is dirty, it's advisable to soak your feet for a few minutes in a tub of warm water with three or four cups-full of betadine solution in it. Also a visit to a dermatologist is required as an antibiotic is needed.

### THERE'S MORE

- From hot cup in the morning, switch to a cool, mint based green-tea.
- Flavor your food with green herbs and tomatoes instead of garlic, onions and red chilli.
- Switch to loads of salads and greens in your diet. Drink lots of water even in the winters.

## NTDs: High R&D Investment Need of the Hour

Neglected Tropical Diseases (NTDs) like Lymphatic Filariasis, Dengue and Malaria affect one in five people in the world. Globally, the number stands at a staggering 1.7 billion, mostly from the poorest communities. Given the severity of the problem, experts from world over converged at the five-day 20th International Congress for Tropical Medicine and Malaria (ICTMM), 2020, in Bangkok to discuss threadbare the issue at hand. ARCHANA JYOTI, who covered the event, reports.

The ICTMM event (October 24-28) saw the attendance of around 1000 participants from 60 countries, an indicator of their commitment towards helping end the NTDs scourge. The underlining call was for higher investment in Research and Development (R&D) to bring in new vaccines and drugs in the sector.

The event provided the key players in the sector an opportunity to discuss and debate tropical medicine and Malaria including communicable and non-communicable diseases, neglected tropical diseases, emerging and re-emerging diseases, Covid 19, Smallpox, drug resistance, parasitology, zoonosis, food-borne and water-borne diseases, travel medicine and other public health issues.

Hosted by the Parasitology and Tropical Medicine Association and Faculty of Tropical Medicine, Mahidol University, Thailand, the mega event at the Bangkok International Trade & Exhibition Centre (BITEC) was declared opened by Dr Yongyuth Yuthawong, Thailand's Deputy Prime Minister and the former Minister of Science and Technology. It was themed 'Stamping out Tropical Diseases: The Countdown Begins.'

The participants also focused on opportunities in the post-Covid-19 scenario and the need for more investment in the R&D arena to tackle the neglected diseases caused by vectors like mosquitoes which are rearing their ugly head helped by climate change-induced surging temperatures.

NTDs are a group of diseases affecting the poorest and



most vulnerable, causing permanent disabilities, impacting mental and emotional health and well-being.

As per the World Health Organisation, NTDs include: Buruli ulcer, Chagas Disease, Dengue and Chikungunya, Dracunculiasis (Guinea-worm disease), Echinococcosis, Foodborne Trematodiasis, Human African Trypanosomiasis (sleeping sickness), Leishmaniasis, Leprosy (Hansen's disease), Lymphatic Filariasis, Mycetoma, Chromoblastomycosis and other Deep Mycoses, Onchocerciasis (river blindness), Rabies, Scabies and other Ectoparasitoses, Schistosomiasis, soil-transmitted Helminthiasis, snakebite Envenoming, Taeniasis/Cysticercosis, Trachoma, and Yaws and other endemic Treponematoses.

Formally welcoming all the attendees, Associate Prof Pratap Singhasivanon, Chairman and Secretary, ICTMM2020, highlighted the need to improve the current preventive measures

and treatment regimen. One out of 5 people are suffering with the NTDs worldwide.

Later, talking to reporters from the South-East Asia attending the conference, Singhasivanon stressed on higher investment in the healthcare sector, pointing out that of all the neglected diseases, Dengue is the most neglected one, despite its high rate of infections.

Up to 50-100 million infections are now estimated to occur annually in over 100 endemic countries, putting almost half of the world's population at risk.

"The vector-borne mosquito is highly adaptable. It is predicted that the rise in Earth's temperature, linked to climate change, will fasten viral amplification of the disease. In fact, the mosquito is spreading its wings now even in the USA, European and many other countries. More people are likely to come into its grip," he said in the backdrop of reports of recent Dengue cases emerging from France.

On the sidelines of the event, Kavita Singh, Director, DNDI South Asia, shared the status of Dengue in India with The Pioneer. In India too, the situation is grim. Last year, India reported 1,64,103 cases of Dengue, she said, adding that every year, hundreds of people die due to this mosquito infection.

"As there is no specific treatment that can prevent progression of the infection to severe Dengue, it is critical to find therapeutic solutions to this climate-sensitive disease that spreads at a rapid pace," she said. The DNDI has developed and registered nine new treatments for neglected diseases such as sleeping sickness, visceral and cutaneous leishmaniasis, Chagas, and pediatric HIV since 2003.

The research on cost-effective treatment for Dengue is done by the Transitional Health Science and Technology Institute (THSTI), an autonomous institute of the Department of Biotechnology

in the Union Ministry of Science and Technology. We are also part of the research," Singh said, adding, "However, more needs to be done in the sector."

Prof Dr Prasit Watanapa, former Dean and Consultant at the Faculty of Medicine Siriraj Hospital, Mahidol University, which is working with global bodies to tackle NTDs, especially Dengue fever, echoed similar sentiments. He lamented that NTDs are largely ignored by mainstream medical science because they do not represent clear viable commercial markets for the private sector. "This continues to hinder the progress in medical research and development, and therapeutic solutions."

Filaria disease head (DNDI) Dr Sabine Specht talked about drug development in the Filarial sector. "New drugs enabling reversal of lymphoedema would be highly beneficial. This has also become imperative in view of SDG goal 3.8, which targets individual wellbeing and thus calls for individual cure and not merely epidemiological 'control as a public health problem,' she said.

The second generation of Covid 19 vaccine Dengue vaccines as well as novel drug development was also discussed at the Congress. Another focus was on the discussion on Malaria elimination in Thailand by 2029.

The ICTMM brings together every four years thousands of researchers, experts, like vaccinologists, social scientists, tropical medicine infectious diseases and policy makers in the field of tropical medicine and Malaria. The next ICTMM will be held in Malaysia in 2024.

# India's green energy goals: Pragmatic way forward

Of late, discussions around the greenhouse gases have become very important in the context of climate change and global warming. Several developed and developing nations have already declared or are in the process of firming up the timelines to achieve "net zero" emission with regard to the greenhouse gases.

The term "net zero" indicates a scenario where a balance between the greenhouse gases released into the atmosphere and that removed from the atmosphere by various means (including capture) is achieved. Although such a situation is highly idealistic, wholehearted efforts are needed from all the advanced countries to make meaningful progress. At the same time, it is imperative that different countries firm up different timelines in this regard, based on the current level of preparedness and more importantly the access to the necessary resources.

In the United Nations Climate Change Conference (COP26) held between October 31 and November 12 in Glasgow last year, India promised to reduce its emissions to net zero by 2070. China announced plans to attain carbon neutrality by 2060, while the US and the EU declared their goals aiming to reach net zero by 2050.

India recently updated the first Nationally Determined Contribution (NDC) under Paris Agreement (2021-2030) declared earlier in 2015, and communicated the revised NDCs to the United Nations Framework Convention on Climate Change (UNFCCC) in August 2022. The revised version clearly articulates India's key internal goals towards achieving "net zero". The country aims "to adopt a climate friendly and a cleaner path than the one followed hitherto by others at corresponding



Prime Minister Narendra Modi with UN Secretary General Antonio Guterres, External Affairs Minister S Jaishankar and Gujarat Chief Minister Bhupendra Patel at the launch of Mission Life, where "life" is an acronym for "lifestyle for environment," in Kevadia, Gujarat, on October 20, 2022

level of economic development". India also has committed "to reduce Emissions Intensity of its GDP by 45 per cent by 2030, from 2005 level". Further, the country aspires to achieve "about 50 per cent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030", which will involve transfer of technology from the advanced nations and assistance of low-cost international finance, including Green Climate Fund (GCF).

Since attaining the goal of a global transition such as the net zero is going to be gigantic and will have large-scale impact on the global economy, the sustainable pathways towards achieving the overarching targets need to be

charted out.

Such a transition has many dimensions involving technological, environmental as well as socio-economic nuances which pan out differently in a country-specific manner. Therefore, any country should be cautious and pragmatic before envisaging a disruptive change in the incumbent infrastructure, and a system view approach needs to be adopted to understand the impact of the changes in an integrated manner.

From the latest NDC, it is quite evident that India's approach towards addressing "net zero" is heavily reliant on the "Green Energy", aimed primarily at reducing the CO2 emissions. It is noteworthy that in 2021 the power sector

alone accounted for 49 per cent of the total CO2 emissions in India.

On the other hand, India's transport sector contributes to 13.2 per cent of the country's total CO2 emissions, of which more 90 per cent emissions can be attributed to the road transport sector alone (comprising both passenger and freight transport).

Thus, the country is looking for measures to reduce CO2 emissions from these two sectors. While the renewable energy sources such as solar photovoltaic (PV) and wind energy are being high priority among the various non-fossil energy sources, the electric vehicles (EVs) have been enjoying strong push through several government support schemes

and e-mobility is often touted as the mainstay towards achieving a green and sustainable transport sector.

The key issue that is often overlooked while creating the aspiration-driven larger pictures is the availability of resources. To be more context-specific, the availability of the critical raw materials that go into the manufacture of the critical components for the key "green energy" systems and "green mobility" products needs to be identified as the priorities. The intermittencies in variable renewable energy (VRE) sources necessitate the use of grid-scale storages (batteries).

Batteries are also needed for the EVs. Critical materials that are used in the batteries are

lithium, cobalt and nickel. The price of cobalt increased from approximately \$32,000 per ton to \$70,000 per tonne during January-December in 2021, while the price of lithium increased by more than five times in 2021. The price hikes are expected to continue in the near future.

Therefore, the aspiration for the large-scale green transition needs to be revisited periodically to have relook at the priorities and to chart out the most viable trajectory for the transition to a cleaner future.

Further, the new norms brought forth by the Bureau of Energy Efficiency (BEE) have enforced the heavy consumer durables to become energy-efficient. Two "white goods"

that have great market potential in India are the room air conditioners (RACs) and the laundry washing machines (LWMs), since both of them have a much lower level of market penetration as compared to the refrigerators.

The energy-efficient RACs and LWMs necessitate the use of Rare Earth (RE) permanent magnets in their motor architecture because of their superior performance as compared to the ferrite counterparts. Currently, all the motors and magnets used in the air conditioners, washing machines, and EVs are imported.

The industrial capabilities related to manufacture of RE permanent magnets and customised motors for the "white goods" and EVs are currently absent in India. Creation and sustenance of an industrial ecosystem would require right incentives, uninterrupted availability of the critical RE materials used in the magnets, and demand for the indigenous products.

Availability of critical materials, smooth technology transfer, creation of industry are intricately linked facets of the green energy aspiration of the country. Integration of all these elements will need active intervention from the government and suitable financial arrangements need to be arrived at through close interactions with the industry.

Once the priorities are decided, it would be pragmatic to adopt a business-oriented hybrid model that combines both top-down and bottom-up approaches involving company-level information from relevant segments. Only then the true spirit of "AtmaNirbhar Bharat" and "Make in India" can be realised in a synergistic manner.

(The writer is Assistant Professor, National Institute of Advanced Studies, Bengaluru)

**Availability of critical materials, smooth technology transfer, creation of industry are intricately linked facets of the green energy aspiration of the country. Integration of all these elements will need active intervention from the government and sustainable financial arrangements**



RUDRODIP MAJUMDAR

## OUTLOOK

# Alps in peril! Water woes loom amid climate change

A battle is brewing around Europe's rooftop over the planet's most precious resource.

The crystal-clear waters issuing from the Alps could become increasingly contested as the effects of climate change and glacier melt become more apparent. Italy wants them for crop irrigation in the spring and summer. Swiss authorities want to hold up flows to help hydroelectric plants rev up, when needed.

For the first time in four years, government envoys from eight Alpine countries — big, small and tiny — were meeting under a grouping known as the Alpine Convention, which was set up 30 years ago to help coordinate life, leisure and the limited resources from Europe's most celebrated peaks.

The envoys in Brig, Switzerland, representing pint-sized principality Monaco and small Slovenia as well as powerhouses like France, Germany and Italy, focused attention on October 27 on what's known as the Simplon Alliance. Named after an Alpine pass between Italy and Switzerland, it aims to make transportation in the mountains more eco-friendly, such as by favouring rail over roads, electric vehicles and public transportation over private cars.

But with global warming causing a worrying shrinkage in Alpine glaciers this year, the issue of water frozen up in the mountains, or showered and snowed on them, is growing in importance. Environmental advocates say jockeying for water isn't being addressed with enough urgency; they want the Alpine countries to do more to secure the future of the resource that's been bountiful for centuries.

While many parts of the world have grappled with water woes, well-irrigated and relatively rich Europe has been largely spared so far. Droughts



A man stands in a glacier cave at the Sardona glacier on July 27, 2022, in Vaettis, Switzerland

and wildfires raise seasonal worries, but there typically is enough water for agriculture, hydropower, ski resorts, and human consumption. Swiss children were once taught their country was home to the continent's "water tower," according to Maria Lezzi, head of Switzerland's territorial development office.

However, factors like global warming, the fallout from Russia's war in Ukraine on energy supplies and economic demands have made the issue more pressing.

Last month, Swiss author-

ities authorised a seven-month increase in the amount of water available for electricity generation from 45 of Switzerland's 1,500 hydraulic plants — hoping to churn out up to 150 gigawatts more power. Alluding to the possible knock-on effect, the Swiss said the move could temporarily affect fish migration, "which could make replenishing fish populations more difficult in 2023."

Meanwhile, sparse summer rainfall and a punishing heat wave in northern Italy — which melted snowfields and glaciers in the area — dried up

the Po River, jeopardised drinking water and threatened irrigation in what's known as the Italian food valley.

The "9th report on the State of the Alps" — drafted by the Swiss hosts — notes that water supply is a "particularly pressing issue" because the Alps are a huge reservoir of water, which ultimately flows to the benefit of some 170 million people along some of Europe's most famous rivers, including the Danube, Po, Rhine and Rhone.

A draft of the report, obtained by *The Associated*

*Press*, noted the need for "consistent availability of Alpine water" for industry, agriculture, hydropower and other uses, adding, "Climate change puts these functions under pressure, as glaciers are receding and precipitation regimes are constantly changing."

"Reduced quantities of water and limited reliability of water supply will be a major issue in the coming decades," it added.

Kaspar Schuler, director of CIPRA International, a commission devoted to protecting the Alps based in tiny

Liechtenstein, said governments have done well to put water on the agenda but stopped short of steps to tackle the issue — by setting up working groups, expanding research, or coming up with ways that water can be better shared in the future.

"The description of the difficulties is well done by the Swiss, but they have still no courage to really address the elephant in the room," said Schuler added.

While Alpine resorts and villages rely on water, the major upstream users are

Switzerland's hydropower plants, which want to hold onto the water until it's most needed to power turbines that provide some 60 per cent of the country's electricity.

But the biggest consumers of the water are downstream — industrial areas like Grenoble and Annecy in France, Austria's capital Vienna, and areas around Bolzano in Italy's South Tyrol are likely to feel an impact. The southern Alpine towns, especially in France and Italy with their drier climates, are more likely to undergo water shortage than the northern towns, the report said. "This is particularly true of inner-Alpine dry valleys such as the Aosta Valley in northwestern Italy, already affected by significant water stress."

CIPRA's Schuler suggested that many have become too complacent about the Alps' bountiful waters — and those days may be over soon.

"Until now, all the non-Alpine countries — the lowlands — were happy that the Alps have been providing so much: landscape for leisure and sports, ski resorts, and the water as much as everybody needs," he said. "So far, everybody was happy and the Alps delivered."

"In future it will be a battle... about these resources because especially the lack of water can really harm a lot of people," he said.

Environment Minister Uros Breznan of Slovenia, which is set to take over the Alpine Convention's presidency, said regional authorities were not taking the issue lightly. "I think the member states of the EU and also members of the Alpine Convention are well aware that water scarcity problem cannot be solved only within the national borders, but has to be addressed internationally," he said. AP

YOUR WEEK AHEAD

MADHU KOTIYA



**ARIES** March 21-April 19

Those who are gaining weight may need to change their eating habits. You will comprehend the worth of money and health, and you will make plans to live in harmony with nature in order to keep excellent health. Walking, breathing exercises, and prayers for mental and physical health are all on the agenda. This week, other matters will take precedence over career. You either do not have enough time or are sluggish in your job. Last week's hard work and efforts have not been fruitful. This is a passing phase. On the personal front, something special is likely to be celebrated this week. You are emotionally occupied and have found a healthy connection. You have complete trust in your partner. This is a period of tremendous mutual understanding between the two, and the connection is expected to strengthen.

**Lucky number** 19 | **Lucky colour** Sky Blue  
**Lucky day** Friday



**LEO** July 23-Aug 22

You have a new zest for life and a fresh sense of humor. You will feel healthy and liberated, and your viewpoint may change. Optimism gives way to pessimism. New opportunities are anticipated. You realize the significance of approaching challenges rationally and thoroughly. This is also a good time to channel your creative energy. Professionally, you are pleased with your progress. A promotion or raise is highly likely, which will boost your confidence, security, and status. You are hardworking and enthusiastic. Those in business appreciate and follow your ideas and opinions. This is the time when your knowledge, insight, and experience will pay off handsomely. Your personal relationships are also in terrific shape. Love is in the air because you are a romantic. Other connections in your life are also nourishing and significant.

**Lucky number** 13 | **Lucky colour** Blue  
**Lucky day** Thursday



**SAGITTARIUS** Nov 22-Dec 21

This week's card predicts healing and renewal. Those who have been injured or have other physical problems will heal quickly. There are moments in our life when we must embrace change and allow things to finish naturally. On the professional front, the card has a positive message. A return of an old and trustworthy employee who was meant to be the backbone of your career is predicted. Venues are also available for people looking to grow their business or start a new endeavor. Time spent on academic efforts is now paying off handsomely. This week, love is challenging and confusing. Holding onto old beliefs may harm your relationships. Avoid involving a third party.

**Lucky number** 9 | **Lucky colour** Green  
**Lucky day** Friday



**TAURUS** April 20-May 20

This week, you have control over your body. There is harmony between the mind, body, and soul. You are laying a solid foundation for the health regimen and want to adhere to it completely. You are vivacious, eager, and full of life. Your insight will pay out handsomely. This is the time to eat well and maintain a healthy lifestyle, both emotionally and physically. On the professional front, fresh employment prospects and business opportunities will extend your horizon. If company expansion is on the agenda, now is the moment. Affluent finances, income, and gains from ancestral property are predicted. On the relationship front, people considering marriage may begin looking for a suitable partner. Keep an eye out for temptations and addictions. A spiritual path may prove to be the savior.

**Lucky number** 10 | **Lucky colour** Brown  
**Lucky day** Tuesday



**VIRGO** Aug 23-Sep 22

You can enjoy nature's richness and the Almighty's graces this week. A cure for a very old or long-lasting ailment is on the cards. This week, those in desperate need of encouragement and inspiration to live a healthy and fulfilling life will discover a mentor. You feel empowered and embark on a new adventure that is better, more progressive, and more comfortable. On the job front, now is the moment to start counting your blessings. You may be planning an auspicious celebration at home/work. Your career will thrive, as will your interactions with the outside world. Confusion and misunderstanding with the spouse are probable on the personal front. During this time, you must protect against selfish intentions, hostility, and rash actions. Patience is essential. Midweek, the issue is under control.

**Lucky number** 3 | **Lucky colour** Peach  
**Lucky day** Wednesday



**CAPRICORN** Dec 22-Jan 19

This week, your inner and outward disputes may have a detrimental impact on your healthy lifestyle and everyday job. You have diverse ideas on how to tackle your current situation. Your professional life appears to be difficult this week. This is an excellent opportunity to dispel the haze. This is also an excellent moment to set goals and work on the system. The victory will be earned via hard work. Your keen perception may work in your favor. A breakout triumph is on the way. In terms of relationships, you will follow tradition rather than your heart. Conventions and traditions are overwhelming you, and you seek guidance from a guru or senior individual. You may be spiritually inclined this week, and earthly pleasures, love, and emotions may take a back seat.

**Lucky number** 4 | **Lucky colour** Red  
**Lucky day** Wednesday



**GEMINI** May 21-June 20

Excessive fear, phobia, and concern over a circumstance are on the card this week. Mental strain will persist, which may have an impact on your health. Throughout the week, you may have headaches, insomnia, and sleeplessness. Be wary of colds, coughs, and other seasonal diseases. This is the time to meditate, do yoga, and unwind from your daily routine. On the professional front, a minor indiscretion may jeopardize your reputation, so exercise caution. You may feel unnoticed and neglected at work. This may create stress and hinder your progress. Do not avoid duties and commitments. Do not reveal your working plans until you have completed them. On a personal level, your partner will be brimming with vitality and passion, while you will be demoralized or have low self-esteem.

**Lucky number** 6 | **Lucky colour** Pink  
**Lucky day** Friday



**LIBRA** Sep 23-Oct 22

This week, your happiness and contentment will be crucial to your health. You will spend time experiencing worldly delights, delectable meals, admiring the arts, and relaxation. All that is well provides you a calm mind, satisfaction, a pleasant atmosphere, and a smile on your face. On the job, you have a generous nature and the capacity to persuade others via your speech. You are concerned about your colleagues' and juniors' emotional well-being. They look up to you, admire you, and value your kindness. There is love, laughter, and entertainment in the relationship. You spend time together and give your cherished lover an expensive gift. The time has come to put your love relationships into the light, and your family will respect your decision.

**Lucky number** 12 | **Lucky colour** Golden  
**Lucky day** Sunday



**AQUARIUS** Jan 20-Feb 18

This week, you will have the ability and energy to build a new lifecycle for yourself. You have control over your cravings, such as excessive eating and drinking, and any other addiction that is hazardous to your health. You understand the significance of balancing aspects in life, and your body is in sync with nature's five elements. You may have had enough disappointments in your job to make you sceptical of others. The tipping point will be when you can let go of the past and have a more open attitude towards the future. Now is the moment to think positively and go forward. On the personal front, married people are likely to clash. Do not allow emotion to influence your decisions; instead, establish them on facts and reasoning.

**Lucky number** 11 | **Lucky colour** White  
**Lucky day** Monday



**CANCER** June 21-July 22

You have evolved into a very active and vibrant individual. The keys to success are self-awareness and mastery. You have inner light and consciousness, pure faith, and prior experience, making you a self-sufficient individual willing to educate others. Meditation leads you to a high level of spiritual development and the ability to share this light with others. On the professional front, you may carve out a niche for yourself via your insight and leadership. People will look up to you and follow you. Your plans are now well advanced, and you are beginning to examine further ways to expand your present ideas. On the personal front, your relationships will deepen and develop to an acceptable degree. There is trust and understanding between them.

**Lucky number** 21 | **Lucky colour** Magenta  
**Lucky day** Wednesday



**SCORPIO** Oct 23-Nov 21

Weakness might cost you this week. Domestic or professional issues are bothering you, and you are agitated. You may see the doctor due to restlessness or a blood pressure problem. You may require adequate rest and the assistance of loved ones. A cheerful attitude will serve the purpose and breathe new life into you. On the professional front, nothing has changed; things are proceeding as normal. Though the concern of stalling your job will trouble you, this is a transitory phase, and you will see good effects as the week develops. With your wisdom and experience, you keep on moving ahead and achieve the desired results. You will appreciate your quiet talents in relationships. Diplomatic communication will allow you to persuade your partner.

**Lucky number** 2 | **Lucky colour** Indigo  
**Lucky day** Tuesday



**PISCES** Feb 19-March 20

This week, you are adopting a more balanced approach to life and sticking to your promises. You have realized that if you want to reach your goals, you will need a schedule and a strict regimen. It may not be a very interesting or exciting time. You are not afraid to spend money on a gym, meditation, nutritive diets, and other activities to maintain your health and fitness. These efforts will be rewarded handsomely. On the job front, you will feel secure in your position. Experience and talents will be your strongest assets in achieving your objectives. Advice from a senior individual in a career or business will be quite beneficial. On the personal front, you may get too passionate and possessive in your relationship, causing annoyance and separation. Care and compassion for those close to you are recommended.

**Lucky number** 11 | **Lucky colour** White  
**Lucky day** Monday

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**ASTROTURF**  
BHARAT BHUSHAN PADMADEO

# Live for each other for a happy life



We need to live in accord with the design parameters underlying our existence. Should we lose our mooring, we invite pain and suffering. In nature's scheme of things, as comprehended by Indian philosophy, also vetted by modern theoretical physics, the world is a unified organism in which no existence has a reality independent of the whole. All existences are framed into an interdependent mechanism, where we all need to complement and support each other's efforts to carry on the cycle of life. It applies across the board - be it our personal and societal life and the world at large. For, no individual is capable enough to even service one's existential needs by oneself. We, in fact, have a shared destiny. We owe our sustenance to common pool of resources extended by nature - space, air, fire, water, and earth. In real life also, people engaged in varied creative pursuits, in togetherness generate the provisions of life. That calls for living for each other primarily in a giving mode.

The irony, however, is that our ahankara makes us believe that we are free to conduct the way we wish. Often,

we wish to live in a demanding mode expecting from others to behave, seldom caring for other's sensibilities and concerns. That often leads to uncalled for disputes, pains, and sufferings. We forget that in this complex world, life will not necessarily move to our asking. Even otherwise, no movement or engagements happen without encountering resistance in the way. Caught up in the mills of life, we seem to have lost sight of the realities of life, as if we have moved beyond. Consequently, personal life is in peril, marital discord is rising beyond proportion, societies are in a state of disarray, and the world is in turmoil. Sense of fear and insecurity as well as identity crisis seems to have gripped majority population.

The other day worried parents of their only girl child came seeking guidance: "Sir, my daughter is having issues in her married life. The basic reason is unseemly conduct of my son-in-law. We have tried to mediate but in vain. Suggest me some puja that helps restore their marital happiness and stability." Well, kindly note that your interference will widen the gulf rather than build bridges. As would happen to any ordi-

nary mortal, their positives aside, both have their fault lines also. Ignorant of the realities of life, they try to impose their will on each other, and with obvious consequences. No puja can enter their mind space to correct their attitu-

dinal problems. They themselves could make their life better, if they look within, identify, and acknowledge their fault lines and then consciously address them. That is the most workable mode of puja. It was difficult for belief driven parents to digest my advisory. So, I had to explain their personality traits.

His son-in-law is born in Aries lagna, with its lord Mars in Virgo sign, the 6th house conjunct Rahu. Even mind signifying Moon is tenanted in the nakshatra owned by Mars. That makes him impulsive, aggressive, intolerant, impatient, who wishes to be always at the head of things. Stuck to material concerns, he ignores emotional urges of the partner. Moon is opposite Sun, Mercury, and Saturn. That brings in an inherent sense of fear, insecurity and identify crisis, because he would have come in life a hard way. So, he is keen to prove himself on every count. He has a worrying syndrome. In the process, he invites stress. If that would not be enough, he is conceited, who may not express his feelings and emotions. So, he is misunderstood as being cold who doesn't care for others.

The girl is born in Sagittarius sign, with lord Jupiter and emotion signifying Venus there itself, both opposite Moon occupying Gemini sign. She seems to be fun loving. If she is not appreciated, she becomes too much touchy when she reacts tactlessly and undiplomatically, often inviting displeasure of others. Moon in Gemini sign tempts her to live on her own exclusive terms. So long as you agree to her viewpoints, you remain the best friend, otherwise, she may go wild. Once she gets enraged, she would be keen for a fight to finish, as would Saturn conjunct Mars mean. And the result is there to see.

In fact, both are basically good at heart. It is their habit tendencies that have been playing spoil sport with their marital life. Should they consciously address their inherent tendencies, life may again turn into a pleasant experience.

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