



# IYA NEWS

## - The Media Helpline

“An Association Based Community Media Organization”

R.N.I Reg. No.- ODIENG/2017/72682 ; POSTAL REGD. NO. BN/301/23-25, R/U R.N.I, Ministry of I&B, Govt. of India

VOLUME - VII | ISSUE - X | BHUBANESWAR, ODISHA | DECEMBER, 2023 | Pages - 20 | Rs. 10/-

## Grand Shreemandira Parikrama Project

Pradeep Kumar Panda, Economist, Bhubaneswar

Shree Jagannatha, is the "Aradhya Devata" of Odias & millions of Hindus across India & the world. He is worshiped as Brahmadar at his Mula peetha at Puri. The divinity & worship of Shree Jagannatha, as the "Lord of Universe" is as timeless and as infinite as the cosmos itself.

The Shreemandira Parikrama will be a 75-meter corridor around Shree Jagannatha Temple at Puri. The intent of the project is to provide expansive, unobstructed corridors around the Meghanada Pacheri for giving an opportunity to devotees and pilgrims to have visual connect with the Temple, Neelchakra and Meghanada Pacheri. Shreemandira Parikrama will also serve the function of providing amenities for pilgrims and for strengthening safety & security of the temple and devotees.

The dream project of Chief Minister Naveen Patnaik is almost complete and will be inaugurated on 17th January 2024. According to one source the Lokarpan Yajna for the project is scheduled to be performed from January 15th to 17th, 2024, with Vedic recitations at the four gates of the temple. Rigveda for the eastern gate, Yajurveda for the southern,

Samaveda for the western, and Atharvaveda for the northern gate have been finalized. Uniform painting is underway for prominent structures along the three-kilometer-long Grand Road connecting the Jagannath Temple and Mausima Temple. Vibrant lighting will adorn all temples and subsidiary shrines.

The Puri Shree Jagannath Temple Administration (SJTA) and Puri district administration are leaving no stone unturned to make the inauguration ceremony of the much-awaited Srimandir Parikrama (Heritage Corridor) Project a grand success.

About 30 teams comprising servitors and SJTA officials have left for various parts of the country to distribute invitation cards. Among others the invitation cards will be handed over to religious heads of various shrines across the country.

The Shreemandira Parikrama is a 75-meter corridor around Shree Jagannatha Temple at Puri. It will ensure expansive, unobstructed corridors around the Meghanada Pacheri of the temple for giving an opportunity to devotees and pilgrims to have an excellent visual connect with the 12th century shrine. It will also provide amenities for pilgrims and strengthen the safety and security of the temple



and devotees.

Taken up at a cost of ₹1,000 crore, the project includes a seven-metre green buffer zone, 10-metre Antar (inner) Pradakshina – pedestrian-only path round the year. It will be used by the general public for parikrama (circumambulation) of the temple. The eight-metre outer circumambulation path would be covered by trees on either side. There will be a 10-metre public convenience zone.

The main project includes 36 major projects including development of a security zone around the temple, creation of parking space for vehicles, flyover and Jagannath Ballav Math Pilgrim Center (JBMPC). The JBMPC is a unique infrastructure that will have meditation space (10,000 square metres), pilgrim amenities (5,000 sq. m.), commercial space (8,000 sq. m.) and multi-level car parking for 1,000 vehicles over 35,000 sq. m.

The project also proposes a queue management facility that can handle 6,000 people, along with security checking facility. Efforts are also being made to redevelop 'matha' temples within the 75-metre Shree Jagannath Heritage Corridor. These 'matha' temples will be redeveloped in the Kalingan style in general and specific 'matha' traditions.

### Components of Heritage Corridor

The 75 meters of the Shree Jagannath Heritage Corridor (SJHC) abutting Meghanada Pacheri is broadly divided into nine (9) zones on the northern, southern and western side. These include:

**7-meter Green Buffer Zone (adjacent to Meghanada**

**Pacheri):** This consists of a 2-meter hardscape area abutting Meghanada Pacheri for access by staff and for maintenance purposes. The remainder 5-meter is a 1-foot high terraced landscape green.

**10-meter Antar (Inner) Pradakshina :** For ceremonial procession of deities year-round and use by general public for parikrama of Shree Mandira complex.

**14-meter Landscape Zone :** These gardens have been designed through meticulous research of the local arboriculture practices. Local varieties of trees and shrub used in Jagannatha Culture will be planted here.

**8-meter Bahya (Outer) Pradakshina :** Covered by trees on either side, this will act as a shaded pathway for visitors / pilgrims.

**10-meter Public Convenience Zone :** Along with plantation of tall trees and shrubs, this zone will have facilities such as restrooms, drinking water fountains, information-cum-donation kiosks, and shelter pavilions for shade and rest.

**4.5-meter service lane:** For access by service vehicles and maintenance of the corridor.

4.5-meter-wide dedicated shuttle cum emergency lane for any kind of emergency and disaster management.

7.5-meter mixed traffic lane to aid in movement of vehicles around the Heritage Corridor and to ensure access to properties abutting the outer access road as well as the lanes from the neighbouring Sahis meeting this outer access road.

7-meter wide shaded footpath with trees is designed

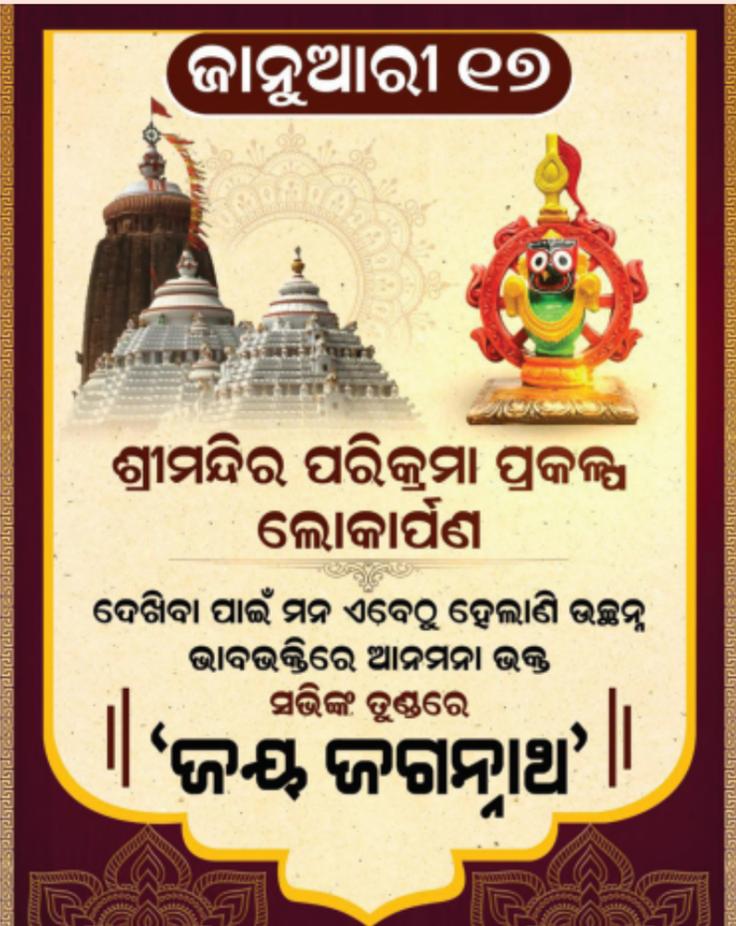
adjacent to the mixed traffic lane for a smoother pedestrian flow around the corridor and neighbouring area for people to commute. This will be equipped with parking bays for Sevaks and temple officials. It will also have provision for waste bins, street furniture, drinking water fountain etc.

The eastern plaza of the heritage corridor is proposed as a large open space as many festivals of Shree Mandira including the Rath Yatra starts from here. This will allow large congregation of devotees to take place in a safe and secure environment.

Efforts have been made to redevelop Matha temples existing within 75-meter Shree Jagannath Heritage Corridor (SJHC). These matha temples will be redeveloped by keeping in mind Kalingan style of architecture in general and specific traditions of the concerned matha. Further, this redevelopment will also provide for Garbha Griha, Jagamohana, & Nata Mandapa for all such temples.

The Shree Mandir Parikrama Project is one component of a massive ₹4,224.22 crore project which seeks to transform Puri into a World Heritage City. The ongoing transformation is being described as a once-in-a-century temple development project with which Chief Minister Naveen Patnaik seeks to leave a lasting legacy.

Shree Jagannath cult has the biggest influence on the minds of the Odias. Nothing can impact the minds of the people of Odisha more than the sanctity of the 12th century temple and things attached with lord Jagannath who is considered to be a living god.



# CINE EXPRESS

## 54th International Film Festival of India

### India Becoming Popular film shooting Destination

The 54th International Film Festival of India (IFFI), held in Goa, took on a new look this year, departing from its traditional format. Infused with the art of storytelling through creativity and cinematic brilliance, IFFI, one of Asia's most prestigious film festivals, saw a slew of Indian and international films this year. IFFI's reputation as an ideal platform for collaborations, productions, and cutting-edge technology grows year after year. This festival, which ran from 20-28 November had many glimpses of cinematic journey.

The 54th International Film Festival of India became a celebration of unity in diversity, bringing together creative talents, filmmakers, cinema lovers, and cultural enthusiasts from all over the world. Furthermore, it became a symbol of the spirit of 'Vasudhaiva Kutumbakam'. The international premiere of British filmmaker Stuart Gat's film, *Catching Dust*, kicked off the nine-day film festival.

The country's media and entertainment industry is rapidly expanding. The Indian government has also taken significant steps in this direction. As a result, the media and entertainment industry in India is growing at a rate of 20% per year. We are now one of the world's five largest markets. India's film market is one of the largest in the world, not just in Southeast Asia. The post-production work coming here and the films being produced here demonstrate that the world is interested in them. India is becoming a content hub, with regional films going global. Speaking at the programme's launch, Union Minister for Information and Broadcasting and Youth Affairs & Sports Anurag Singh Thakur said Prime Minister Narendra Modi wants to make India the most sought-after location for filming and post-

production based on the strength of talent among our youth and children and the innovation of our industry stalwarts. He said both the Lok Sabha and the Rajya Sabha have approved the Cinematograph (Amendment) Bill, 2023.

#### Satyajit Ray Lifetime Achievement Award given to Michael Douglas

At the 54th IFFI closing ceremony in Goa, Hollywood actor and producer Michael Douglas received the prestigious Satyajit Ray Lifetime Achievement Award 2023. Michael Douglas stated that, under the leadership of Prime Minister Narendra Modi and Union Information and Broadcasting Minister Anurag Singh Thakur, India has invested more money in film production in recent years. This is an exciting time for the Indian film industry. The presence of over 78 countries at the 54th IFFI demonstrates its strength. He expressed his delight at receiving the Lifetime Achievement Award.

Douglas, a two-time Academy Award winner, stated that in college, he studied Satyajit Ray's works, such as *Pather Panchali* and *Charulata*. Catherine Zeta Jones, Michael Douglas' wife and multi-award-winning actress, also interacted with media. Catherine stated that India is very special to her and her family. She spoke about a personal connection to India, telling how an Indian doctor saved her life when she was 18 months old.

#### Madhuri Dixit is recognised for her contributions to Indian cinema.

Madhuri Dixit was awarded for her contributions to Indian cinema. During her four-decade career, she left an indelible imprint on the Indian film

industry. Her ability to bring diverse characters to life has captivated audiences of all ages. She has received six Filmfare Awards and has been nominated for Best Actress a record fourteen times. She began her film career with *Abodh* (1984) and rose to prominence with *Tezaab* (1988). In 2014, she was appointed U N I C E F Goodwill Ambassador to India.

#### Three times more entries received

This year, IFFI received 2926 international entries from 105 countries, which is more than three times the previous year. The nine-day festival screened more than 270 films across four venues. The festival saw 13 world premieres, 18 international premieres, 62 Asia premieres, and 89 India premieres. 32 entries in 10 languages from 15 OTT platforms were received for the Best Web Series (OTT) award. This year, 15 feature films (12 international and 3 Indian films) competed for the prestigious Golden Peacock Award.

#### Incentives announced for foreign film production

The incentive outlay for film production in India has been increased from 30 percent to 40 percent. The incentive amount for foreign film production in the country is 40 percent of the expenditure incurred, with an increased limit of Rs 30 crore (over USD 3.5 million) and an

additional 5 percent bonus for significant Indian content. The move will further strengthen India's efforts to attract medium- and big-budget international film projects to the country.

#### 75 Creative Minds of Tomorrow

The 75 Creative Minds of Tomorrow initiative was

IFFI social media accounts (X, Facebook, and Instagram), and on the social media handles of PIB Goa.

#### 'Panchayat Season 2' wins Best Web Series (OTT)

The best web series (OTT) award was given to *Panchayat Season 2*, directed by Deepak Kumar Mishra. The award was instituted recently. The plot revolves



launched to help young people excel in the field of filmmaking and become tomorrow's leading filmmakers and artists. It began two years ago, in 2021. It is expected that this will provide limitless opportunities for emerging talent to shape their careers. Around 600 people applied for the positions, and 75 were chosen. These 75 young filmmakers and artists came from a variety of backgrounds and locations, including Bishnupur in Manipur, Jagatsinghpur in Odisha, and Sadarpur in Madhya Pradesh. The participants came from India's 19 states and union territories. A selection jury and a grand jury panel of distinguished individuals chose them. All 75 participants were under the age of 35.

**Cine Mela:** This year, for the first time, a film festival was organised. It showcased an extraordinary celebration of India's rich diversity through regional films, food, music, culture, and more.

#### IFFI: One of Asia's leading film festivals

The International Film Festival of India (IFFI), established in 1952, is one of the most prominent film festivals in Asia. The Ministry of Information and Broadcasting, Government of India hold the festival every year in the host state of Goa. The best films from India and around the world are screened here. All relevant information related to the 54th IFFI was shared on the festival website, PIB website,

around a young man who works as a panchayat secretary in the remote fictional village of Phulera in Uttar Pradesh. In the series, Abhishek Tripathi plays Jitendra Kumar.

- Indian filmmaker Rishabh Shetty won the Special Jury Award. He was given this award for the critically acclaimed film *Kantara*.
- Regar Azad Kaya, a promising Syrian Arab Republic filmmaker, won Best Debut Feature Film for his film *When the Seedlings Grow*.
- Anthony Chen's *Drift*, a French, British, and Greek co-production, was honoured with the prestigious ICFT-UNESCO Gandhi Medal.

#### Golden Peacock and Silver Peacock Awards

- The Persian film *Endless Borders*, directed by Abbas Amini, won the Golden Peacock Award for Best Film.
- Bulgarian director Stefan Komandarev won the Silver Peacock for Best Director.
- Pouria Rahimi Sam was awarded the Silver Peacock Award for Best Actor (Male).
- French actress Melanie Thierry was awarded the Silver Peacock for Best Actor (Female) for her brilliant role in the film *Party of Fools*.



Coming together is a beginning; keeping together is progress; working together is success.

# SCIENCE & TECHNOLOGY

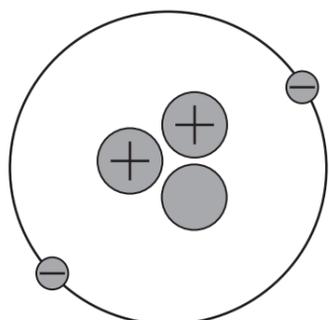
## Moon Race for Helium-3

India launched Chandrayaan - 3 on 14 July, 2023 and its lander along with the rover made soft landing near the lunar South Pole on 23 August, 2023. Russia had also launched its Luna-25 space vehicle on 10 August, 2023 for landing near the south pole of the Moon, but it crashed instead of soft landing. The Pragyan rover of Chandrayaan - 3 has discovered the presence of aluminium, sulphur, calcium, iron, chromium, titanium, manganese, silicon and oxygen on the Moon.

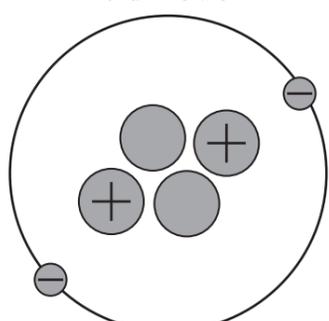
The USA has already started its Artemis mission for lunar exploration. It has planned to send four astronauts including a woman to the lunar surface in 2025. China has planned to send its astronauts to the Moon in 2030. Indian Prime Minister has ordered ISRO to send Indian astronauts to the Moon by 2070. Japan, South Korea, United Arab Emirates and the USA have planned lunar missions in 2023 and 2024. India has planned to launch Chandrayaan - 4 in association with Japan. In total, eleven countries have succeeded to send spacecrafts to the Moon. After 70s, the USA and Russia had stopped lunar missions. But suddenly they along with China and some other countries have become very serious for lunar explorations. Dominated by the growing competition between the USA and China, the return to the Moon is now motivated by a desire to study and possibly exploit resources that can be found there. Of these, Helium - 3, a very rare material in the Earth represents the most significant potential in the field of energy.

### What is Helium-3?

Helium-3 (He3) is an isotope of Helium. The normal helium atom



Helium - 3 atom



Helium - 4 atom

which is sometimes written as Helium-4 (He4) has two protons and two neutrons in its nucleus. But He3 has two protons and one neutron in its nucleus. Although it is very rare in Earth, there is plenty of this material in Moon. The existence of He3 was first proposed in 1934 by the Australian physicist Mark Oliphant while he was working at Cavendish Laboratory of University of Cambridge. The American scientists Luis Alvarez and Robert Cornog first isolated it in 1939.

### How did Helium Come to Moon?

It is believed that when a celestial body named Thea collided with the early Earth, some mass of the Earth were separated to form the Moon. Then why is He3 available in Moon and not in Earth? Sun produces vast quantities of Helium by thermonuclear fusion process. In this process hydrogen atoms are combined to form Helium and the Sun gets lot of energy from this. A small amount of He3 is also produced in this reaction. Both types of Helium travel toward the Earth as part of the solar wind. But the Earth's magnetic field pushes them away and so He3 does not reach Earth.

The solar wind containing He3 also travels to the Moon. But the Moon has negligible amount of magnetic field and so He3 easily passes to lunar surface. For billions of years, the action of solar wind has caused accumulation of He3 on the Moon. It gets accumulated in lunar dust and rock. It has been estimated that about 1.1 million metric tons of He3 have been deposited in lunar soil. In comparison, Earth is estimated to have only 300 kg of He3. Even this small amount has not come from solar wind. It is the by-product of the maintenance of nuclear weapons. Every year

### Mayadhar Swain

about 15 kg of He3 comes out from this maintenance.

### Why is He3 Important?

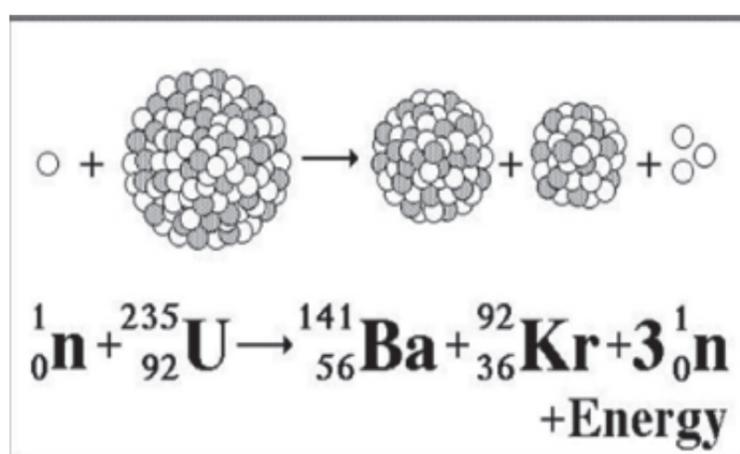
He3 can provide safer nuclear energy by nuclear fusion process. It is not radioactive and does not produce any dangerous by-products. This isotope is also useful for other applications including cryogenics, quantum computers and MRI machines. Moon seems to be its main reservoir.

### Nuclear Fission Reactor

At present, we are producing atomic power from Uranium-235 (U-235) by nuclear fission process. In this process the U-235 is split by bombardment of a fast neutron with it thereby splitting it into two smaller atoms. In this process large amount of heat energy is released which is used to make steam from water and drive the turbine-generator set to produce electricity. But U-235 is a radioactive substance and in case of any accidents the radiation may harm many people. Further, the management of radioactive nuclear waste is a problem.

### Nuclear Fusion Reactor

In nuclear fusion reaction, two smaller atoms are combined to form a larger atom and in this process a lot of energy is released. Mainly deuterium (containing one proton and one neutron in its nucleus) and tritium (containing one proton and two neutrons in its nucleus), the two isotopes of hydrogen are considered suitable for this reaction. But this process requires high temperature (over 100 million degrees Celsius). There are several such reactors under experimentation now, the most famous being the International Thermonuclear Experimental Reactor ITER) under construction in France



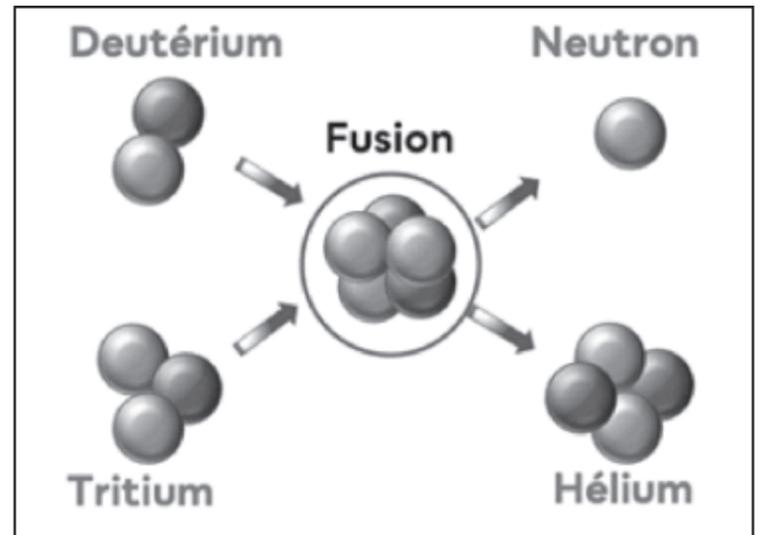
Nuclear Fission Reaction

which is expected to be commissioned in 2030.

### He3 in Fusion Reaction

In the fusion reaction with deuterium and tritium, along

alternative suggestion is to establish nuclear plant on lunar surface and then transmit the produced energy by converting it to microwaves. Although it seems like fiction now, it will not be impossible in future

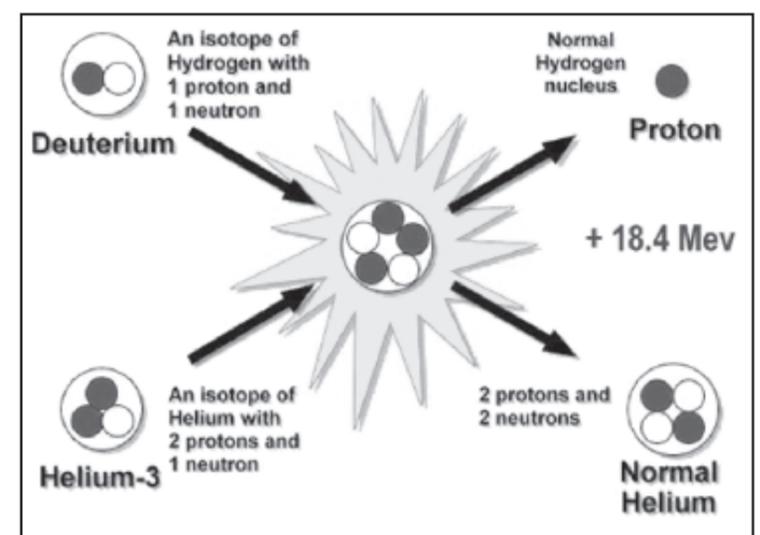


Nuclear fusion reactor

with energy helium and a fast neutron are released. This fast neutron causes significant energy loss and also is extremely difficult to contain an automatic runaway process. If He3 is used in the fusion reactor, it will create

considering the rate at which science and technology is progressing.

Russia and China have already announced their intentions for mining the Moon. China's Chang'e 4 (2018) and



Nuclear fusion reactor using He3

a normal helium atom and a proton, which wastes less energy and is easier to contain. Hence, He3 can provide efficient nuclear power with no waste and no radiation problem.

### Conclusion

Using the He3 of the Moon is very attractive, but its extraction for practical use is very difficult. The amount of He3 is 50 parts per billion in lunar soil and hence it requires lot of refining. It is estimated that about one million tons of the soil will have to be mined for production of 70 tons of He3. So to carry so much of soil to the Earth will be a tedious job. Even if we refine it on Moon and carry only the He3, still it may pose many problems. One

Chang'e 5 (2020) missions have made significant progress in the study of the topography and composition of lunar soil. One of the objectives of these trips is to determine the exact amount of He3 present. Even the Beijing Research Institute of Uranium Geology is measuring the content of He3 in the lunar soil, evaluating its extraction parameters, and studying the ground fixation of this isotope, other countries may desire it also. But it needs much scientific and technological innovation. Let us hope that we may succeed.

**Editor, Science Horizon**  
Plot No. 70, Laxmi Vihar Phase-1  
Bhubaneswar - 751018  
Phone : 9438693724

# FOOD & PUBLIC DISTRIBUTION

## India Is Likely to Miss its Ethanol Blending Target

Pradeep Kumar Panda, Economist, Bhubaneswar

From the recent spate of policy actions centred on agricultural crops, two things (among many others) come out clear: (i) domestic food security is central to the government of India, even above other priorities including energy security; and that (ii) two years of consecutive shocks from climate (high temperatures and sub-optimal rains) have turned tables of a food surplus nation into one which is scratching to achieve self-sufficiency. In this brief article, we analyse recent government decision on ethanol and how El Niño and high temperatures may have derailed country's E20 action plans, hopefully for a short period only.

In a letter to Indian sugar mills and distilleries, the Department of Food and Public Distribution (DFPD), which is the nodal agency for sugar policies in India, invoked provisions of the Essential Commodities Act, 1955 (ECA) to direct two changes: (i) ban use of sugarcane juice and syrup for ethanol production; and (ii) restrict ethanol produced from B-heavy molasses to already contracted quantities. These apply to ethanol supply year (ESY) 2023-24 (i.e., November 2023 to October 2024). Among other things, we deduce two things from this: (i) apart from grains, ethanol is mainly to come from the C-heavy molasses route in ESY 2023-24, and (ii) with smaller cane-based feedstock, ethanol blending performance this year is likely to fall below the levels of E12 in ESY 2022-23.

In case of B-heavy, the government has permitted the quantities already contracted by oil companies to continue to be supplied. In 2021-22, 2.36 billion litres of B-heavy based ethanol was supplied to oil companies. In 2022-23, this fell to 2.27 billion litres. In 2023-24, in light of a smaller sugarcane crop, quantities contracted by oil companies have fallen to 1.3 billion litres. The government has pegged the annual supplies from B-heavy to this quantity now.

To reduce country's imported crude oil dependence, in 2018 the government released its national policy on biofuels. Later in 2021, NITI Aayog followed it up with a roadmap for achieving targets under the policy. Through the ensuing journeys of the two documents, as it stands today, the country aims to achieve 20% blending in its fuel oil by year 2025-26. This target is referred to as E20, which implies that by 2025, a litre of fuel oil we would buy for our vehicles is likely to have 200 ml of ethanol and 800 ml of petroleum in it.

As per NITI Aayog, to achieve E20, country is likely to need about 10.16 billion litres of ethanol annually. It projected that close to 50% of this ethanol is to be produced from sugarcane derivatives and the remaining half is to come from grains like rice released by the Food Corporation of India (FCI), broken rice from the open market, and maize. In ESY 2022-23, the country achieved

E12 (12% blending) which was the target for the year.

India produced about 4.94 billion litres of ethanol of which about 75% came from sugarcane-based sources, 15% from rice released by FCI, 4% from maize and the remaining 5% came from damaged food grains, including broken rice from open market. Within cane-based sources, 63% came from B-heavy molasses and 35% from juice. Sugarcane based ethanol production was projected to remain the mainstay of the ethanol production in the country. It was also envisaged that grain-based ethanol production would rise.

### Rate of ethanol blending in India

Indian sugarcane crop in 2023-24 has suffered on account of volatile monsoon rains. Parts of Maharashtra and Karnataka have suffered significant losses in cane

lower availability of molasses-based feedstock, and poorer availability of crops like rice and maize, maintaining current year's E12 also appears to be a challenge in ESY 2023-24.

However, the ethanol blending program is important in the larger scheme of things. While the country works to develop its crop's resilience to droughts and pests, the need for improvement in crop yields, especially for maize, is absolutely urgent. The commercial production of second generation ethanol at viable rates is yet to be tested. If it is successful it can reduce stubble burning incidents.

Every litre of ethanol needs 2,860 litres of water. And yet, India wants to produce a lot more of it. While India is making a push for ethanol-blended petrol, by incentivising sugarcane-derived ethanol, concerns remain

containing materials (sugar beet, sweet sorghum) and starch-containing materials (corn, cassava, damaged food grains such as wheat, broken rice, rotten potatoes) that are unfit for human consumption. Currently, India has reached a 10% blending target, with 450 crore (4.5 billion) litres of ethanol already being produced. It aspires to reach a 20% by 2025, for which it will need to produce 1,000 crore litres of ethanol.

In addition, India's consumer affairs, food and public distribution ministry has prioritised the availability of 275 lakh metric tonnes of sugar for domestic consumption, over 50 lakh metric tonnes of sugar for diversion to ethanol production, and over 60 lakh metric tonnes for exports.

Earlier in September, in an interview with the Indian publication, the Economic Times, Atul Chaturvedi, chairman of Shree Renuka Sugars, said that India is now a "sugar surplus" country, and "cyclicality is a thing of the past". Shree Renuka Sugars is one of the largest sugar producers and refiners in the country. This means that the sugarcane crop has a growth cycle of 12-14 months, followed by five-six months of crushing in factories. However, with a focus on ethanol production, factories will be able to run the entire year.

India is one of the largest producers of sugarcane in the world, with Maharashtra, Uttar Pradesh and Karnataka being the major sugar-producing states. There are over 700 sugar mills in the country, with a capacity to crush 340 lakh metric tonnes of sugar and an annual turnover of Rs 80,000 crore. The sugar industry provides livelihood for nearly five crore (50 million) people.

This year, Maharashtra, which has over 200 sugar mills, lent 14.8 lakh hectares of its land to sugarcane farming, Shekar Gaikwad, the state's sugar commissioner, told Mongabay-India, adding that Maharashtra, by itself is the third largest producer of sugarcane in the world, after India and Brazil. "As a stand-alone state, it is way ahead of Thailand, Australia, and all the countries of the European Union." Gaikwad also said that last year, India exported 110 lakh metric tonnes of sugar, of which, 70 lakh metric tonnes came from Maharashtra. This year, Maharashtra is slated to produce 138 lakh tonnes of sugar, of which 12 lakh tonnes will be diverted towards ethanol production, he said.

Sugarcane is also a water guzzler. According to a March 2020 report by Niti Aayog, one kg of sugar needs 1,500 kg-2,000 kg of water. A large part of Maharashtra, however, falls under a drought-prone, rain shadow area.

The cash crop's growth cycle lasts for 12-15 months, from the time the saplings are sown till the

time the crop is harvested. Farmers in Maharashtra told Mongabay-India that, on average, one acre of land produces 60 tonnes-80 tonnes of sugarcane and needs nine lakh litres of water twice a month. This monthly irrigation cycle depends on the region, the topography, the soil, and the availability of water and electricity. So, if the entire growth cycle of sugarcane is 12-15 months, then one acre of land would need nearly 216 lakh litres of water per annual growth cycle. In effect, a tonne of sugarcane could soak up 300,000 (3 lakh) litres of water in a growth cycle.

The harvested cane is taken to the factory, where it is crushed and separated into sugarcane juice, molasses, filter cake, and bagasse. Sugarcane juice is used to make sugar, bagasse is used in electricity generation and filter cake is used as a fertiliser. Molasses, a by-product of sugarcane, is usually used in ethanol production. Two types of molasses are used for ethanol production: molasses-C and molasses-B. Molasses-C is a final by-product from sugar processing with no economically extractable sugar remaining, and molasses-B is an intermediate by-product with some extractable sugar remaining.

NITI Aayog's report explains that a litre of ethanol produced from sugarcane consumes at least 2,860 litres of water in the process. A July 2020 research paper titled "Water-food-energy challenges in India: political economy of the sugar industry" published in Environmental Research Letters, states that India's aspiration of 20% ethanol blending by 2025, if dependent on molasses, will require 1320 million tonnes of sugarcane, 19 million hectares of additional land and 348 billion cubic metres of additional water. With the increased production of sugarcane, there would be 161 million tonnes of extra sugar production. The paper, by researchers at Stanford University in the United States, recommends using only sugarcane juice for ethanol production (versus directly from molasses), which would not require additional water and land resources.

Despite the water-guzzling nature of the crop, farmers prefer to grow sugarcane. One of the main reasons for it is that it is the only crop that offers a guaranteed Fair and Remunerative Price. Fair and Remunerative Price is a price set by the state government that sugar mills are mandated to pay the farmers for the cane obtained from them. The Sugar Control Order of 1966 regulates the payment of Fair and Remunerative Price across the nation. It also requires the mills to pay the farmers within 14 days of the cane's delivery. Earlier in February, the Maharashtra government allowed sugar mills to pay farmers in two instalments – the first instalment within 14 days of delivery, and the second based on the final recovery of the product. However, the farmers are not happy with this latest decision.



Source: MOPNG. Data for 2022-23 is till mid-October 2023.

yields and acreages. As per the government, sugarcane production in 2023-24 is estimated at 435 million metric tonnes (MMTs) which is about 56 MMTs lower than last year's 491 MMTs. This implies that compared to last year, country's sucrose production is likely to fall by 6 MMTs (at 11% recovery rate).

In the current year, opening stocks of sugar on October 1, 2023 were about 5.7 MMTs and with production shortfall of 6 MMTs, the supply is likely to fall short of demand (about 29 MMTs) by about 2 MMTs in the current year, 2023-24. Not surprisingly, the government banned sugar exports early in the year. By manoeuvring the ethanol production away from sugarcane-derivatives, the government has been able to reduce sucrose diversion to ethanol by about 2 MMTs (calculated as back-of-envelope calculations). This may imply that the country could see through the next year with similar levels of inter-year stocks.

For ESY 2023-24, the country had aimed to achieve ethanol blending target of E15. It appears inevitable that the performance will fall short of this target. With

about the water-guzzling nature of the sugarcane and fair remuneration for farmers.

On November 2, the Centre, as part of its Ethanol Blending Programme, approved a higher price for ethanol that is derived from different sugarcane-based raw materials. This was done for the ethanol supply year from December 1 to October 31, 2023, which coincides with the current sugar season. The Centre, in a press release, stated that the higher price of sugarcane-derived ethanol for oil marketing companies is a bid to benefit distilleries and will "help in early payment to cane farmers". The central government's Cabinet committee on economic affairs approved this higher price.

India is keen to reduce its dependence on imported crude oil, and ethanol-blended petrol is part of its strategy. In addition, ethanol, a biofuel, is a cleaner alternative to fossil fuels. Also, as it is derived from sugar and starch-rich agricultural byproducts, it helps provide an additional use of these products and boosts incomes for farmers.

The National Biofuel Policy of 2018 gives impetus to increase ethanol production from sugar molasses, sugarcane juice, sugar-

## CRIME STATISTICS

# Terrible State of Affairs of Crimes and Deaths in India

Pradeep Kumar Panda, Economist, Bhubaneswar

The long-awaited annual report of the National Crime Records Bureau (NCRB), titled "Crime in India 2022," has finally been released in December 2023. Published in three volumes, it provides comprehensive statistics on various categories of crime registered in India in 2022. The annual NCRB publications provide useful and actionable data on crimes and preventable deaths.

The first volume of the NCRB report includes data on violent crimes, murder, kidnapping and abduction, crimes against women, crimes against children, and crimes committed by juvenile children. The second volume of the report includes data on crimes against senior citizens, crimes/atrocities against Scheduled Castes (SCs) and Scheduled Tribes (STs), economic offences, corruption offences, cyber crimes, offences against the state, crimes committed by extremists/insurgents/terrorists, and offences related to the environment. The third volume covers crimes in railways, crimes against foreigners, crimes committed by foreigners, and data about human trafficking, custodial crimes, injuries and casualties caused by police firing/lathicharge, arrests, convictions, acquittals, stolen and recovered property, etc. All data in the NCRB report is helpfully categorised for 36 states/union territories and 19 metropolitan cities.

In a cautionary note at the very beginning of the annual report, the NCRB states that "crime is [a] manifestation of myriad complex factors." It also notes that the report merely captures the number of crimes reported to the police in 2022, and thus, it is not wholly representative of the actual number of crimes committed in India. It also notes that in certain areas, especially in

metropolitan cities, an increase in the cases of reported crime may actually occur due to better civic awareness and police behaviour, and may not be indicative of an actual increase in the incidents of crime. In spite of these admitted limitations, the NCRB report is useful for studying regional patterns and variations and in identifying the problem areas in Indian society and its law-and-order machinery.

The report shows that a total of 58,24,946 cognisable crimes were registered in India in 2022, including crimes reported under both the Indian Penal Code (IPC) and Special and Local Laws. Interestingly, the total number of crimes saw a decline of 4.5% as compared to 2021. Similarly, the crime rate (incidence of crimes per 1,00,000 of the population) dropped to 422.2 in 2022, while it was 445.9 in 2021.

One of the central takeaways from the NCRB report, among many other salient points, is the increase in the number of crimes reported against the marginalised and vulnerable sections of the Indian population. Crimes against women, children, senior citizens, SCs, and STs all reported an increase in 2022 as compared to 2021 by 4%, 8.7%, 9.3%, 13.1%, and 14.3%, respectively. These are extremely disturbing trends. An analysis of the spatial concentration and possible socio-economic correlates of crimes would be more revealing. Most crimes against women under the IPC were due to cruelty by their husbands or relatives (31.4%), kidnapping and abduction (19.2%), assault with an intent to outrage her modesty (18.7%), and rape (7.1%). The data pertaining to women and the marginalised and vulnerable sections further emphasises the NCRB's caution about the difference between reported crimes and the actual numbers of

crimes committed in India. While an increase in the numbers of reported crimes against these sections may be attributable to increased civic awareness, it is also a fact that marginalised groups face the highest amount of structural barriers and institutional indifference for as much as filing a first information report in a police station, let alone accessing subsequent levels of legal aid and justice.

Another major takeaway is the staggering increase in the reported instances of cyber crimes in 2022, which registered a 24.4% increase as compared to 2021. Telangana reported the highest number of cyber crimes in India, followed by Karnataka and Uttar Pradesh. Cyber crimes include a wide array of crimes related to tampering with documents, identity theft, personation, violation of privacy, cyber terrorism, publication and transmission of obscene material, data theft, cyber stalking and bullying, online banking frauds, dissemination of fake news, etc. The dramatic increase in cyber crimes highlights that the internet has emerged as one of the most intractable mediums for exploiting unsuspecting groups of people, where the identification and investigation of the crime proves to be exceedingly difficult due to the continuously evolving nature of sophisticated internet technologies.

Along with its flagship "Crime in India" report, the NCRB also released the "Accidental Deaths & Suicides in India 2022" (ADSI) report in December 2023. The term "accidental deaths" refers to deaths caused due to traffic accidents, fire accidents, deaths caused due to forces of nature, etc. The ADSI report also shows a distressing increase in the number of reported accidental deaths,

which rose from 3,97,530 in 2021 to 4,30,504 in 2022. The maximum number of casualties under accidental deaths was reported in the age group of 30-45 years.

and 6.6% of the reported deaths by suicides, respectively. Another grim finding about suicides in the ADSI report is that the majority of suicide victims (64.3%) in 2022 had an annual



The number of suicides also increased from 1,64,033 in 2021 to 1,70,924 in 2022. Maharashtra recorded the highest number of suicides, followed by Tamil Nadu, Madhya Pradesh, Karnataka, and West Bengal. These five states comprised nearly half of all reported suicides in India. The trend of daily wage earners reporting the highest number of suicides at 26.4% continued in 2022 as well, with housewives, unemployed persons, students, and farmers comprising 14.8%, 9.2%, 7.6%,

income of less than Rs. 1 lakh, revealing an insidious relation between suicides and adverse socio-economic conditions.

Since the publications of the NCRB are the main and official sources of crime statistics for various stakeholders, it is hoped that this data would generate a comprehensive debate and research into the causes of the rise in crimes against, and suicides among, women and other marginalised and vulnerable groups in Indian society.

### From Page 09 (From conquering...)

I did not have the money to afford speech therapy. I didn't have any friends who could help me with notes or projects. So, I would get tired after studying, making notes till late nights at the hostel," she said.

Jeetu secured a Master's degree in Public Policy, Law & Governance from Central University of Rajasthan, Ajmer. It was altogether a new challenge to shift to a new city but her determination helped her earn a gold medal in the subject in 2015, which was awarded to her by former ISRO chairman and vice-chancellor K Kasturirangan during the University's convocation.

"It was the first time I invited my parents to come and witness my achievement. I had never called them for any prizes or awards I won before this. My parents were super happy, kept applauding me even after I got down from the stage. Tears of joy trickled down their cheeks as they shared their pride about their disabled daughter. That is the most cherished moment of my life," Jeetu recalled.

Jeetu is now a research scholar at Jawahar Lal Nehru University in Delhi pursuing a PhD in Public Health at the Centre of Social Medicine & Community Health in JNU.

Repeated problems with her mobility forced Jeetu to consult doctors at All India Institute of Medical Sciences (AIIMS). And thus began her sporting career in 2015-2016.

"I was unable to walk even 400 m from hostel to classroom at JNU. That's when I consulted someone at AIIMS. The doctor told me to immediately start physiotherapy and get into physical activity for at least 2-3 hours daily. Around the same time, I heard about the Rio Olympics and I felt it will be a big thing to represent India one day. My classmate was Neha Yadav, who was a trained physio, and she used to help me overcome the stiffness in my limbs and muscles," she said.

Since then, Jeetu hasn't looked back and went on to win the 100m gold medal thrice in National Para Athletics Championships, jointly organised by Cerebral Palsy Sports Federation of India (CPSFI) and the Paralympic Committee of India. She also won the gold in 200m at the same meet along with silver in long jump.



But man is not made for defeat. A man can be destroyed but not defeated.

# NATION

## World - G-20 Presidency

**Towards a brighter future: India's G20 presidency and the beginning of a new multilateralism**

India completed 365 days as G-20 Chair on November 30. The G-20 grouping, which is considered the world's economic forum, has now become a truly people-centric G-20 under India's chairmanship, and the summit's New Delhi Declaration has become an important milestone. During its presidency, India introduced the world to Indianness and transformed it into a massive festival of public participation, with over 200 events in over 50 cities. Here is a special article by Prime Minister Narendra Modi outlining how India, as the G-20 President, has shown the world a new human-centered path.

Today marks 365 days since

opportunities.

The first-of-its-kind "Voice of the Global South Summit," convened by India in two editions, heralded a new dawn of multilateralism. India mainstreamed the Global South's concerns in international discourse and has ushered in an era where developing countries take their rightful place in shaping the global narrative. Inclusivity also infused India's domestic approach to the G20, making it a people's presidency that befits the world's largest democracy. Through "Jan Bhagidari (people's participation) events, the G20 reached 1.4 billion citizens, involving all states and Union

Biofuels Alliance and a concerted push for green hydrogen, the G20's ambition to build a cleaner, greener world is undeniable. This has always been India's ethos, and through Lifestyle for Environment (LiFE), the world can benefit from our age-old sustainable traditions.

Further, the Declaration underscores our commitment to climate justice and equity, urging substantial financial and technological support from the Global North. For the first time, there was a recognition of the quantum jump needed in the magnitude of development financing, moving from billions to trillions of dollars. The G20 acknowledged that developing countries require \$5.9 trillion to fulfil their Nationally Determined Contributions (NDCs) by 2030. Given the monumental resources required, the G20 emphasised the importance of better, larger, and more effective multilateral development banks. Concurrently, India is taking a leading role in UN reforms, especially in the restructuring of principal organs like the UN Security Council, that will ensure a more equitable global order.

Gender equality took centre stage in the Declaration, culminating in the formation of a dedicated Working Group on the Empowerment of Women next year. India's Women's Reservation Bill 2023, reserving one-third of India's Parliament and state legislative assembly seats for women, epitomises our commitment to women-led development.

The New Delhi Declaration embodies a renewed spirit of collaboration across these key priorities, focusing on policy coherence, reliable trade, and ambitious climate action. It is a matter of pride that during our presidency, the G20 achieved 87 outcomes and adopted 18 documents, a marked rise from the past.

During our G20 presidency, India led deliberations on geopolitical issues and their impact on economic growth and development. Terrorism and the senseless killing of civilians are unacceptable, and we must address them with a policy of zero tolerance. We must embody humanitarianism over hostility and reiterate that this is not an era of war.

I am delighted that during our Presidency, India achieved the extraordinary: it revitalised multilateralism, amplified the voice of the Global South, championed development, and fought for the empowerment of women everywhere.

As we hand over the G20 Presidency to Brazil, we do so with the conviction that our collective steps for people, planet, peace, and prosperity will resonate for years to come.

It is a matter of great pride that during India's chairmanship, the G20 achieved 87 outcomes and adopted 118 documents, which is significantly higher than in the past.

## Indigenous fighter aircraft Tejas

**Growing Trust and confidence in Swadeshi**

Prime Minister Narendra Modi's visionary thinking has provided the people of India with another reason to be proud. India's rapid transition to self-sufficiency has boosted its faith in its own capabilities to new heights. Prime Minister Modi not only witnessed the moment but also became the first Prime Minister of the country to



fly in the indigenously designed and developed two-seater fighter aircraft Tejas in Bengaluru on November 25. PM Modi expressed his admiration for the abilities of Indian scientists and engineers and described this experience as memorable.

"Successfully completed a sortie on the Tejas. The experience was incredibly enriching, significantly bolstering my confidence in our country's indigenous capabilities, and leaving me with a renewed sense of pride and optimism about our national potential," Prime Minister Modi posted on X.

Tejas, a two-seater state-of-the-art fighter aircraft, has been designed with contemporary concepts and technologies such as quadplex digital fly-by-wire flight control system, advanced glass cockpit, integrated digital avionics system and advanced composite materials for the airframe. This fighter aircraft has given a further boost to the country's defence capabilities and preparedness.

IAF test crew have been involved with the Tejas project right from conceptual stage until prototype testing. The first version of the aircraft was inducted into the IAF in 2016. Hindustan Aeronautics Limited (HAL) currently has the capacity to manufacture 8 LCA aircraft per year. This is being extended to 16 aircraft per year until 2025, and then an additional production line is being set up that will produce up to 24 aircraft per year on commissioning. In the coming years, Tejas will be the largest fleet of fighter aircraft operated by the Indian Air Force.

Prime Minister Modi visited HAL's units and appreciated its growing capabilities and production facilities. Defence Minister Rajnath Singh said India's defence manufacturing is growing at a rapid pace under the guidance of Prime Minister Narendra Modi.

The Prime Minister took stock of the production facilities for LCA Tejas aircraft in Bengaluru. On this occasion, he was briefed about the technology-related work being done in HAL towards realising the vision of 'Aatmanirbhar Bharat.' Prime Minister Modi inspected the production line of LCA Tejas and interacted with engineers on various features of the aircraft.

Prime Minister Modi was informed that HAL is striving to take the level of indigenous content in aircraft beyond 70 percent and take India towards self-reliance in defence and aerospace in the next 3-4 years under the indigenization drive as part of the Atmanirbhar Bharat vision. PM Modi was also shown various indigenous helicopters, like the Light Combat Helicopter (LCH) Prachanda, the Advanced Light Helicopter (WSI Rudra), and the Light Utility Helicopter.

HAL briefed PM Modi about the combat and demonstration capabilities of Prachanda, with an emphasis on high-altitude deployments in Leh, Ladakh, and the Eastern Himalayan regions. The helicopter can fly up to an altitude of six kilometres. The defence forces need 156 additional Prachanda helicopters to augment the nation's defence preparedness and efforts towards self-reliance.

Flying in Tejas today, I can say with utmost pride that, due to our hard work and dedication, we are no less than anyone in the world in the field of self-reliance. Heartiest congratulations to the Indian Air Force, DRDO, and HAL, as well as all the people of India.



India assumed the G20 presidency. It is a moment to reflect, recommit, and rejuvenate the spirit of "Vasudhaiva Kutumbakam" (one earth, one family, one future). As we undertook this responsibility last year, the global landscape grappled with multifaceted challenges—recovery from the COVID-19 pandemic, looming climate threats, financial instability, and debt distress in developing nations—all amid declining multilateralism. In the midst of conflicts and competition, development cooperation suffered, impeding progress.

Assuming the G20 Chair, India sought to offer the world an alternative to the status quo, a shift from GDP-centric to human-centric progress. India aimed to remind the world of what unites us, rather than what divides us. Finally, the global conversation had to evolve. The interests of the few had to give way to the aspirations of the many. This required a fundamental reform of multilateralism, as we knew it.

Inclusive, ambitious, action-oriented, and decisive—these four words define our approach as G20 president, and the New Delhi Leaders' Declaration (NDLD), unanimously adopted by all G20 members, is testimony to our commitment to deliver on these principles. Inclusivity has been at the heart of our presidency. The inclusion of the African Union (AU) as a permanent member of the G20 integrated 55 African nations into the forum, expanding it to encompass 80% of the global population. This proactive stance has fostered a more comprehensive dialogue on global challenges and

Territories (UTs) as partners. On substantive elements, India ensured that international attention was directed to broader developmental aims, aligning with the G20's mandate.

At the critical midpoint of the 2030 Agenda, India delivered the G20 2023 Action Plan to Accelerate Progress on the Sustainable Development Goals (SDGs), taking a cross-cutting, action-oriented approach to interconnected issues, including health, education, gender equality, and environmental sustainability. A key area driving this progress is robust digital public infrastructure (DPI). Here, India was decisive in its recommendations, having witnessed the revolutionary impact of digital innovations like Aadhaar, UPI, and Digilocker firsthand. Through the G20, we completed the Digital Public Infrastructure Repository, a significant stride in global technological collaboration. This repository, featuring over 50 DPIs from 16 countries, will help the Global South build, adopt, and scale DPIs to unlock the power of inclusive growth.

For our One Earth, we introduced ambitious and inclusive aims to create urgent, lasting, and equitable change. The Declaration's "Green Development Act" addresses the challenges of choosing between combating hunger and protecting the planet by outlining a comprehensive roadmap where employment and ecosystems are complimentary, consumption is climate-conscious, and production is planet-friendly. In tandem, the G20 Declaration calls for an ambitious tripling of global renewable energy capacity by 2030. Coupled with the establishment of the Global

## PERSONALITY

# Param Vir Albert Ekka: 1971 war hero

**Born : 27 December 1942 | died : 3 December 1971**

Lance Naik Albert Ekka's bravery helped him defeat the enemy army in the 1971 India-Pakistan war. Despite the fact that he was in danger of being killed, Ekka continued to strive for victory. He attained martyrdom on the battlefield while fighting with unwavering



courage. His bravery helped India win the Battle of Gangasagar. Ekka was posthumously awarded the Param Vir Chakra. His sacrifice for the sake of the motherland continues to inspire his countrymen even today.

During the 1971 Indo-Pakistan war, an Indian soldier stationed at Gangasagar noticed that his company was suffering heavy losses due to enemy machine gun fire. It was the evening of December 3, 1971. Without caring for his own safety, the jawan stormed the enemy bunker and silenced the light machine gun by bayoneting two enemy soldiers. Suddenly, a medium-machine gun started firing from a building. Despite his injuries, he

crawled forward and killed an enemy soldier with a grenade. Even though the light machine gun was still firing, the jawan showed incredible bravery by breaking into the bunker and killing the enemy.

In this way, he foiled the enemy army's attack and attained martyrdom while ensuring his victory for his side. This young martyr was none other than Lance Naik Albert Ekka, who was posthumously awarded the Param Vir Chakra for his outstanding bravery, determination, and bravery of the highest order. This medal was important because, for the first time, a soldier from Bihar (now Jharkhand) and the Brigade of Guards received it. It was also the first Param Vir Chakra to be awarded to a jawan posted in the eastern sector.

Albert Ekka was born on December 27, 1942, into a tribal family in Zari village of Gumla district in undivided state of Bihar. His father's name was Julius Ekka, and his mother's name was Mariam Ekka. Being of a courageous nature, he cherished the dream of joining the Indian Army. On his 20th birthday, his dream came true when he joined the army and joined the Bihar Regiment. Later, when the 14 Guards was formed, Albert and some of his comrades were transferred there. Albert was a skilled warrior as

well as a skilled hockey player.



His skill of hunting with bow and arrow in the forest proved beneficial to the army. He used to

be remembered for a long time. Despite the fact that the war was fought between India and Pakistan, it resulted in the formation of a new country, Bangladesh. Many soldiers sacrificed their lives to give freedom to Bangladesh. One of those soldiers was Albert Ekka. When the war began in 1971, the Indian Army was fighting on both the eastern and western fronts. The Indian squads had to make their way to their main target in Bangladesh. The Battle of



aim his gun accurately.

The 1971 India-Pakistan war will

Gangasagar was crucial in this regard. Lance Naik Albert Ekka's contribution to the Indian Army's victory in this war was unprecedented.

Albert's daring attacks saved his comrades' lives and helped in achieving the goal. The enemy was forced to abandon 'Akhaura' after their defeat at Gangasagar. Soon, the Indian troops were on their way to 'Dhaka' on their victory march. This 29-year-old young soldier sacrificed his life for the country with full dedication.

On December 3, 1978, the Army Postal Service issued a special postal cover to honour Albert Ekka. A major roundabout in Ranchi has been named after Albert Ekka, and a massive statue of him has been erected there. On the country's 50th Republic Day in 2000, the

Government of India issued a postage stamp in his honour. Albert Ekka Block has been named after him in his home district of Gumla.

Prime Minister Narendra Modi had remembered Albert Ekka on Janjatiya Gaurav Diwas on November 15 this year in Khunti, Jharkhand. He had said that every corner of Jharkhand is associated with such great personalities, their courage, and their relentless efforts. Figures like Tilka Manjhi, Sidhu Kanhu, Chand Bhairav, Phulo Jhano, Nilambar, Pitambar, Jatra Tana

Bhagat, and Albert Ekka have enhanced the glory of this land.

On January 23, 2023, Prime Minister Narendra Modi named 21 islands in the Andaman and Nicobar Islands after Param Vir Chakra awardees. One of these islands is also named after Albert Ekka. "Just as the sea connects different islands, the spirit of 'Ek Bharat, Shreshtha Bharat' unites every child of Mother India," PM Modi said. All 21 Param Vir Chakra awardees had one resolve: nation first, India first. Their resolve has now been immortalised forever in the name of these islands.

On the country's 50th Republic Day in 2000, the Government of India issued a postage stamp in his memory. Albert Ekka Block was also named after him in his home district of Gumla.



Put your heart, mind, and soul into even your smallest acts. This is the secret of success.

# IPL 2024

## Dhoni's Earning in IPL 2024

Under MS Dhoni's leadership, Chennai Super Kings (CSK) got the better of Gujarat Titans (GT) in the final of Indian Premier League (IPL) 2023 to win a record-fifth IPL title.

Now with the auction for IPL 2024 taking place, all the attention has been shifted to the

player like Dhoni, who has been serving CSK for many years, will be getting for IPL 2024?

Dhoni was bought for a whopping \$1.5 million (INR 6 Crore) by CSK in the inaugural edition of the mega event after an intense bidding with their arch-rivals Mumbai Indians (MI).

retention list confirmed that Dhoni will be donning the famous yellow jersey for at least another season.

As mentioned earlier, CSK signed Dhoni for \$1.5 million (INR 6 Crore). With his price surpassing the salary paid for the icon players, the Captain Cool



MS Dhoni Chennai Super Kings (CSK)

upcoming edition of the cash-rich league with the former Indian captain all set to lead CSK.

With many franchises spending crores of rupees for the player in the action, many fans are intrigued by the question that how much amount a superstar

Barring the two seasons when Dhoni played for Rising Pune Supergiants (RPS) in 2016 and 2017 - when CSK were suspended - 'Thala' has been the face of the Yellow Brigade in the cash-rich league.

MSD has been among the highest-paid players in the cash-rich league over the years. CSK's

was the highest-paid player in the 2008 IPL auction. As per sources, Dhoni will be paid INR 12 Crore in IPL 2024.

By the end of IPL 2024, Dhoni's 17th season, he will have earned a total IPL salary of INR 188.84 Crores, averaging a salary of INR 11.11 Crore per season.

## Costliest players in IPL

Australian left-arm speedster Mitchell Starc became the most expensive player in the history of the cash-rich Indian Premier League (IPL).

Starc was bought by Kolkata Knight Riders (KKR) for a

Patel, who was bought for ₹11.75 crore. CSK got stuck in with the all-rounders, picking Shardul Thakur (₹4 crore) and Rachin Ravindra (1.8 crore).

West Indies T20 captain Rovman Powell was sold for a whopping

whose base price was ₹2 crore, was sold for Rs. 6.8 crore to SRH.

However, there were no takers for Steve Smith, Karun Nair and Manish Pandey.

Most expensive players in the history of IPL Auctions

- Mitchell Starc – ₹ 24.75 Cr. – Kolkata Knight Riders (2024)
- Pat Cummins – ₹ 20.5 Cr. – Sunrisers Hyderabad (2024)
- Sam Curran – ₹ 18.50 Cr. – Punjab Kings (2023)
- Cameron Green – ₹ 17.50 Cr. – Mumbai Indians (2023)
- Ben Stokes – ₹ 16.25 Cr. – Chennai Super Kings (2023)
- Chris Morris – ₹ 16.25 Cr. – Rajasthan Royals (2021)
- Nicholas Pooran – ₹ 16.00 Cr. – Lucknow Super Giants (2023)
- Yuvraj Singh – ₹ 16 Cr. – Delhi Daredevils (2015)
- Pat Cummins – ₹ 15.50 Cr. – Kolkata Knight Riders (2020)
- Ishan Kishan – ₹ 15.25 Cr. – Mumbai Indians (2022)
- Kyle Jamieson – ₹ 15 Cr. – Royal Challengers Bangalore (2021)



Mitchell Starc

record amount of ₹ 24.75 crore at the IPL 2024 auction in Dubai.

Starc edged past his compatriot and World Cup winning captain Pat Cummins. Cummins was bought by Sunrisers Hyderabad (SRH) for ₹ 20.5 crore earlier in the day.

New Zealand's aggressive all-rounder Daryl Mitchell came close with ₹14 crore. He was picked up CSK. PBKS broke the bank for all-rounder Harshal

₹7.40 crore to RR after a fierce bidding war between Rajasthan Royals and Kolkata Knight Riders. Powell, who had a base price of ₹1 crore, was the first player to be sold in IPL 2024 auction. There were no takers for Rilee Rossouw but Harry Brook was snapped up by DC for ₹4 Crore. There was another bidding war for Australia's Travis Head between Chennai Super Kings and Sunrisers Hyderabad. Finally, the World Cup final hero,

## Dhoni's promise to father of 'Ranchi's Gayle'

Jharkhand wicketkeeper-batsman Robin Minz is often compared with West Indian explosive batter Chris Gayle for his six hitting abilities. Minz hit the jackpot at the Indian Premier League (IPL) 2024 auction as he was bought by Gujarat Titans (GT) for Rs 3.6 crore.



MS Dhoni

Robin Minz

The 21-year-old, who had a base price of Rs 20 lakh, garnered significant attention from various franchises, leading to a bidding war that ultimately saw him joining GT.

Following the development, Robin's father Francis Xavier Minz, who works as a security guard at Ranchi airport, has narrated a story involving Chennai Super Kings (CSK) captain MS Dhoni.

Francis revealed during a recent interview that Dhoni had promised him if other franchises don't show interest in buying Robin, CSK will go for the promising wicketkeeper-batter.

"I had met Dhoni at the airport recently. He told me Francisji koi nahi lega toh hum le lenge (If no one picks him, we will)," said Francis.

"A CISF jawan came to me, hugged me saying, 'Arrey Francis sir, aap toh crorepati ban gaye' (You have become a millionaire)," he added.

## Next Dhoni in offing !

Jharkhand's uncapped aggressive wicketkeeper-batsman Kumar Kushagra emerged as a star attraction in the Indian Premier League (IPL) 2024 auction held in Dubai.



Kumar Kushagra

MS Dhoni

Following a fierce bidding war, Delhi Capitals bought the young talent for a whopping Rs 7.20 crore. At just 19 years of age, Kumar Kushagra has already drawn comparisons with the legendary wicketkeeper-batsman MS Dhoni.

Right-handed Kushagra's adeptness at power-hitting and sound technique caught the eye of scouts of many franchises. It led to an intense bidding tussle among them.

Kushagra hogged the limelight after a standout performance in the Syed Mushtaq Ali T20 tournament earlier this year. He amassed 111 runs in six matches for Jharkhand in the domestic tournament. His consistent performances across formats, including the Vijay Hazare Trophy, further solidified his reputation as a promising young talent.

He has scored 275 and 164 runs in the Vijay Hazare Trophy seasons of 2022-23 and 2023-24 respectively. Moreover, his ability to adapt his innings based on match conditions showcases not only his cricketing skill but also a maturity beyond his years.

Former India captain Sourav Ganguly was so impressed with Kushagra during trial camps that he promised to secure the young talent, bidding up to Rs 10 crore if necessary.

## SPORTS AFFAIR

### From conquering cerebral palsy to excel both in academics and sports.

Every athlete in the recently-concluded Khelo India Para Games in Delhi was unique. Their ability to rise above physical and mental challenges exposed their God-gifted special qualities that able-bodied sportspersons can never fathom. Jeetu Kanwar is perhaps extra special. Her life story is simply surreal and just unbelievable.

“She has seen a very difficult phase early in life and that has made her a very strong woman today. She has faced all the challenges all by herself and today, she is a self-made woman and an inspiration to the society,” said Kavita Suresh, the general secretary of the Cerebral Palsy Sports Federation of India (CPSFI).

A spastic quadriplegic cerebral palsy patient, Jeetu Kanwar, now 29, has been facing life's odds ever since she was in her mother's womb. Her form of spastic CP is the severest and it affects the movement of all four limbs, the trunk and the face.

Jeetu's grit and determination was seen at the Jawaharlal Nehru Stadium last week when she sprinted to the 100m bronze medal in T-35 class. Now she wants to win a medal at the 2024 Paris Paralympics.

Jeetu Kanwar was born on June 26, 1994 in a humble family in Khudiyala dhani under Shergarh block of Jodhpur district. The first signs of cerebral palsy were discovered within three hours of Jeetu's birth after she didn't cry even once in the entire period.

Her father Ladu Singh, a senior nursing officer at Primary Health Centre, Nathrau, was as clueless as her mother Rukam Kanwar. Lack of adequate Oxygen in Jeetu's developing brain during her mother's pregnancy resulted in problems with all her limb and muscle movements.

“My parents were not well educated. We were also very



poor. My parents and grandparents visited hospitals in Jodhpur but there weren't facilities to treat cerebral palsy. They also went to all sacred places in and around Rajasthan to seek divine intervention but nothing helped,” Jeetu said.

Being the first among five siblings, Jeetu took three years to start walking. When her younger sister Nenu walked in a year's time, neighbours and the larger family started to look down upon her. The Kanwars were also discriminated because their first kids were both daughters!

Stunted growth and problems with all body part movements made her life miserable. However, Jeetu wasn't the one to become depressed but resolved to fight back. When she was put in the local government school, kids tormented Jeetu. Life was a nightmare.

To be able to focus on studies, Jeetu changed many primary schools before she was sent to a school meant for persons with physical disabilities 20 kilometres outside Jodhpur. Jeetu excelled by emerging topper in each class from 6 to 12 at the Sucheta Kripalani Shiksha Niketan, established by then Rajya Sabha MP Narayan Singh Manaklao.

“It was a different world

altogether. What is easy for a normal person, it was a huge struggle for me. Tying shoe laces, brushing one's teeth, taking a bath, changing clothes and holding a pen or even writing down class notes or exams used to be very difficult. But the challenge only made me stronger. I resolved not to give up,” she explained.

Jeetu received the Indira Priyadarshini Award from Rajasthan Culture Minister Chandresh Kumari in 2010 for being the topper in the state among cerebral palsy kids. This came as a huge motivation and her interest in academics grew. A scholarship from a US-based NGO Polio Children followed only helping Jeetu pursue higher education.

Jeetu got admission in graduation in Kamala Nehru College under Jai Narain Vyas University in Jodhpur. Since it was a college for general students, she had to face discrimination and humiliation at the hands of her classmates once again. Still, she graduated with flying colours in 2013.

“I used to struggle asking questions in the class and everyone used to make fun of me. Asking the professor to repeat something also became a big task.

*Continued Page 5*

### Batting with an Aluminium Bat !

The game of cricket is always has its share of unusual happenings and controversies. A weird thing happened on cricket ground in 1979.

Australian fast bowling legend Dennis Lillee was not known as a great batsman. However, it did not deter him from making unique



Dennis Lillee

headlines with his bat. He decided to walk out with an aluminum bat in the middle of a Test against England at Perth.

However, the clunk-clunk sound from the bat irritated everyone on the ground and it could not be tolerated any longer.

The aluminum bat straightaway started playing some tricks, as the English bowlers were getting hit for a couple of boundaries.

Lillee's famous cover drive with the bat was part of folklore in the Ashes test. The England captain was furious seeing all this. Subsequently, he complained to the umpires.

The umpires Max O Connell and Doug Weser asked Lillee that he cannot use the bat anymore. Lillee objected to the decision and was looked livid on the cricket field. In anger, he even threw away the bat wildly in the air. The commentators at that time, Tony Greig and Tony Cozier described Lillee's behaviour as violent and disgraceful.

### De Villiers back Rohit & Virat

After Team India's heartbreaking loss in the final of the ICC ODI World Cup 2023, several fans and experts feel that captain Rohit Sharma and Virat Kohli might not play the shortest format of the game again.

However, legendary South African cricketer AB de Villiers backed both the Indian batting stars to feature at the upcoming T20 World Cup 2024.



Rohit Sharma and Virat Kohli

“We just have to see Rohit Sharma and Virat Kohli in T20 World Cup 2024. It's all about their hunger. Do they have the hunger to go there and win the T20 World Cup? I think so. I cannot speak on their behalf but I think they will want to go there and win. T20 World Cup is a short tournament and you do set yourselves up to have another chance of winning a World Cup. So I do see them going there,” said De Villiers on his official YouTube channel.

Meanwhile, reports have been published in some sections of the media that Rohit might be given the mantle of the Indian team for the T20 World Cup 2024.

Notably, in absence of injured star all-rounder Hardik Pandya, India appointed Suryakumar Yadav as the captain of the Men in Blue for the Australia and South Africa T20 series.

### Gavaskar's huge statement on Pant

Aggressive wicketkeeper batsman Rishabh Pant is out of the Indian team for a long time after facing a tragic car accident. However, former India great and legendry batsman Sunil Gavaskar has backed Pant to stake a claim for a spot in the upcoming T20 World Cup 2024 squad.

Pant is expected to play for Delhi Capitals (DC) in the cash-rich Indian Premier League (IPL) 2024.

In a recent interview, Gavaskar said that Pant is an impact player for the Indian cricket team and



Rishabh Pant

irrespective of his form in the IPL, he will surely be a major contender for a spot in the T20 World Cup squad if he is completely fit.

“Yeah, Pant should walk back into the team. He is an impact player. He shows his fitness in the IPL. Four months to go for the IPL. He plays the IPL. Whatever he does at the IPL. If he plays the whole IPL without any injury setback, then he walks into the team.

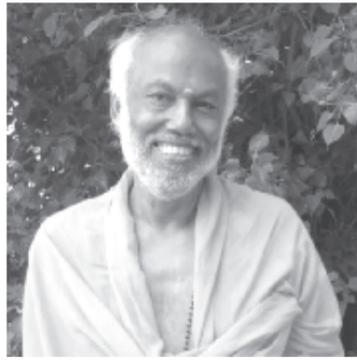
Whether he scores one run or no runs at all in the IPL. I think he is a game-changer. He would be one of the first couple of picks if I was a selector,” said Gavaskar.

Notably, Pant has been missing in action since late 2022 after he was involved in an accident.

# SELF KNOWLEDGE

## The Ultimate Self-Definition

Swami Suddhananda



enlightened, the 'I' must be initiated or introduced to him 'self' and not into another subject or a field of experience.

That is why in spite of the explosions in the field of knowledge where the horizons are receding to the unknown, the people are still confused, conflict ridden and empty as they are not introduced to themselves. The secular sciences, arts or average religious scriptures are busy initiating the individual 'into' some thing or the other except to 'himself/herself\*.

That initiation is initiation where there is joy, bliss, fulfilment right in the beginning as well as it is never ending. Body and mind will come to an

end, but the Truth shall never end. Because of the body, the mind and the identification born of ignorance there see to be an apparent beginning in the awakening to one's own self. There the identification with the body and mind comes to an end but the identification with 'the Self' does not begin as there is nobody left out to identify with the Self, the Awareness. The 'I' thought itself disappears but nothing else is touched by it as everything is beautiful, serene and immortal as they are. It can be the creation, the material universe, the body, the mind, the subtle universe or the Awareness, the Self. Nothing needs a name 'to be' and nothing identifies with anything.

The whole scenario of confusion begins and ends with the 'I' thought.

Therefore it becomes difficult to answer somebody's question as to how do 'I' feel; when I am the very bliss, the infinite existence itself! This is a language that can be shared only by those who have learnt it in themselves. This language has no script, no names, no words, nobody to speak and nothing to be spoken about. This is the language of total Silence, where the communication takes place in total stillness. Two people need not utter a single syllable yet the communication is absolutely complete.

That is where the mind and body become the greatest blessing as they are the instruments through which the universe of name and form can be experienced. A vehicle does not enjoy the destination but without the vehicle the destination cannot be reached. The plane or the car does not enjoy either the beginning point or the end point. The car has no sense of starting point or the destination. But without the car, there is no travel possible. But the need to travel is not triggered by the car. The person is responsible for it.

Similarly the body has no sense of beginning or end. It is a growing vehicle until twenty or twenty five but always it is a changing, dying vehicle. It has no destination. The need to travel around the world is not triggered by the body, but the minimum movements for sustenance, satisfying the hunger or

procreation can be triggered by the mind where the mind will have the ultimate say whether to succumb or not.

For an average man, at the level of any plant or a beast, the needs appear to be 'his' and not that of the body. The identification is complete and the man lives like a beast with moments of viciousness. But because of 'the individuality' the man becomes infinitely more vicious than the animal as his affections too either trigger or are triggered by the vicious emotions.

If we observe and analyse the crude behaviour of man, we can see that the body as an instrument is infinitely more sophisticated than a car but is as innocent, as harmless as that of a car. The driver has a destination. The body is like a car within a car - the car is an extension of the body. To provide intelligence to the car, we may have to equip it with a sophisticated computer and that becomes the extension of the mind. But to ignite the car, to activate the computer we shall need the body and the mind within.

The mind thus becomes another instrument. Again, for any average man without any insight into the mind, the thoughts of the mind are like natural forces to helplessly surrender to or to fall victim to. We must understand that the computerised commandment to a car, a plane or a missile is the work of "an individual" behind the sophisticated computer called mind. Cars, planes, missiles will not move out by themselves however sophisticated they are.

Somebody has to push a button, operate a switch to trigger a movement or activate a command

Similarly for the body to move, for the minds to be communicative the corresponding thoughts must be within and these thoughts by

themselves cannot trigger any movement either without the awareful or unawareful sanction of the 'I' thought. When the sanctions are unconscious or unawareful the man behaves like an animal or a tree but more dangerous as no animal can justify or defend his actions to make an unacceptable experience acceptable. That is where a lot of complications are triggered in the human world.

Then comes a person, a little more evolved who provides a rare moment of awareful sanction to his action in the midst of a near total unawarefulness. He is branded as intelligent,

conscious, awareful and such a person can be more dangerous, more deceptive though he enjoys the potential to be more loving, kind or sensitive. But he will not like to be kind and loving as he is surrounded by a larger percentage of humanity who behave unawareful and therefore like animals. Then he will justify his greater viciousness as he is afraid to be devoured or overwhelmed by the majority. Naturally he will exploit his relative strength of awareful behaviour to manipulate everybody. His 'little' knowledge gives him a strong sense of individuality and that individuality is manipulated by his own little knowledge. The 'I', the individuality, the product of the knowledge, experience or education invokes in him a separate identity and that identity - the individuality, falls as the first victim of that knowledge. Manipulated thus by his own knowledge/ experience, the man moves out into the world to experience and to conquer. But when there are more educated people, it is no more easy to come to see and to conquer, but too often the person too is conquered and enslaved.

That is why, the world of the educated has more groaning and moaning than the world of the average uneducated man who like animals are resigned to their fate or condition.

When a smaller section of the educated exploited the larger section of the world, the world was idyllic for the educated as there was a vast field of humanity to be exploited and the hunters were few.

Now, with more and more education, when the number of the hunters is increasing at an 'alarming' speed, 'animals' of men are becoming scarce and the hunters are to be hunted down by the more sophisticated hunters. So, the educational field now is full of specialisation, super specialisation to create 'dogs of war' or to make it a 'day of the jackal'. No wonder, the graph of disintegration, demoralisation, degeneration are diving the fastest and everybody among the educated ones are looking back to the good old days. The uneducated and the helpless had or have no good old days as they were and are the victims all the time. Even at that level also there is mutual exploitation but that is for a little more or less grass. They have their harmless horns to fight with. They have still not developed the canines and the cunning of the educated, the tigers.

When the deer is transformed into a tiger, the tiger happily preys on forgetting his days of being preyed upon as a deer. When a deer locks the horn with another, the forest is quiet. When the tiger hunts a deer, the herd is disturbed, but when two tigers fight and roar the jungle reverberates and the deers tremble.

Educated and more awareful, there are many tigers roaming the jungle.

Soon, the uneducated will disappear or convert themselves to prowling

tigers. The world has not heard the real rumblings. The more educated, the more sophisticated will create the inhuman tragic scenes. It is not only the secular education which perpetuates this disastrous consequence, but also the religious beliefs and ideas which separate and empower the individual to persecute others while being persecuted by his own religious beliefs. He forgets that he began his life, his first day, his first year or first decade without being religious. He was just an innocent human child.

Therefore, both the secular and religious instructions must have in them the potential to introduce the man to himself. At no time the man must be condemned to a machine in the name of a body, a mind, a thought, a belief, an idea or concept.

He must be 'himself'. Everybody cannot be educated or uneducated, religious or irreligious, believers or agnostics, rich or poor, healthy or unhealthy but everybody can be themselves, and in that neither there is a choice nor any difficulty. Going beyond the pair of opposites, they will enjoy every aspect of the opposite emotions.

Happy with themselves, no more shall they use the limited information to exploit others, but shall feel too comfortable with themselves even to consider the pranks of the ignorance as worth of reaction or retaliation. There shall be the recognition of the situation, but the fullness of being is magnanimous enough to appreciate somebody's innocence or arrogance born of ignorance. They may know a few things about the world but that will not make them arrogant as they are humbled by the awareness of infinite knowledge in the finite or infinite worlds. And that perception helps to maintain a primaevial innocence in spite of being touched by relative knowledge of every sort. To find the jewel in the mine, we have to stand within the mud to dig the mud. It is the mud that holds the jewel. So do we have to stand in the body and the mind to dig the mind to find the jewel that is our own nature. As long as we are diggers we shall be tired and suspicious of others. We discover that we are the 'jewel' and that is what everybody is, the earth that holds the precious jewel also becomes precious. The mind and the body are really precious as they not only hold the Absolute but help us in the discovery of the Absolute.

So, how do I feel now? Absolutely terrific! With the vision that 'I am' everywhere, yet I have a wonderful mind and a body with which to look at a splendid universe, more for a fantastic outing, sightseeing. That simply thrills me to bits! And that is everybody's destiny and the ultimate self-definition! If there is the ignorance of the Self, can the knowledge of the Self be far behind! It is always here and now. I wish my friend sees that too! And everybody is my friend!

# PSYCHOLOGICAL SCIENCE

## Jajan – To Exalt Oneself with Pious Worship

A Yaaji or Hota is he – who has made One the 'call' of life and growth; he is the man, the impartor of life and growth, invoker and sanctifier of existence. He, in whom, the glimpses of the Lord flash through an un-repelling love and glowing character – is a Ritwik or clergyman – the vanguard of prosperity. Jajan (self-actualization of the principles with attachment to the Guru i.e. Living Ideal) is one of the clue to a healthy and progressive life of individual and environment.

Knowing something is the easy part. Actually, putting it into action is an entirely different story. We all know we should eat healthy, exercise, work hard and be disciplined. But how many of us live the principles we espouse? The knowing and doing gap is the disconnect between knowledge and action. We admire people who have merely gathered facts and data. Rare are the wise who have transformed themselves from within. The ancient Indian sages emphasized wisdom and prescribed a clear pathway by which this knowing-doing gap could be bridged.

There are three stages of gaining wisdom. The first is shravana (Listen/observe), the intake of knowledge. The second stage, manana, is reflection, thinking, viewing the same thing from different angles, and experimenting with it. You then integrate it into your system, live it. You are now the wiser for it.

You may perform thousands of acts of worship, practice the repetition of the Holy Name thousands of times, and meditate thousands of times, but as long as you can not **become attached to your Desired One or Ideal in such a way that he comes to be your interest in all respects**, that, worship, repetition of Name and meditation can not be installed in your life, glory and growth so as to completely fulfill your necessities and direct your character in actuality. – Chalar Sathi, Page-92.

He who does anything with every successful administration, loving intelligence and honest compassionate control in every devout spirit – is the man of devoutness with active bloom.

To perform perfectly that which one ought to do to fulfill the interest of gracious love with tenacious endurance, skillful active intelligence and devout honesty – is the characteristic of a Saint or Sadhu.

**In Gita it is reflected in Verse 10 of Chapter-10 that –**

**“Tesam satata yuktanam bhajatam priti purvakam Dadami buddhi yogam tam yena mam upayanti te”.**

To those who are constantly devoted to serving Me with love, I give the understanding by which they can come to Me. He should perform some sort of work and that work should be with love and devotion render all kinds of services.

Doing, adherence, observation and following, - these few establish perception, knowledge, skill and attainment (Siddhi). If a devotee is not intelligent enough to make progress on the path of self-realization but is sincere and devoted to the activities of devotional service, the Lord gives him a chance to make

progress and ultimately attain to Him.

He out of whom your Japa is produced is the objective of your Japa; and if this objective is ignored, then the mental exercise – which is to create an enkindlement in you – instead calls in deterioration, not becoming coherent through centering on some objective, but if that mental exercise or churning achieves coherence with the one who is your objective and is set in him, then, by illuminating nature with normal perception, feeling and wisdom, it makes the character overflowing and thus expansive that is why success comes from japa, success comes from japa; and there is no doubt about it. –

**Prabhu Prasad Gadnayak**

offering worship, yet your normal perception and wisdom have not been enkindled, nor has their tendency to be of benefit, - know for sure – you are little engaged in the thought of him whom you are repeating, and he whom you are worshipping has not at all become your interest ! That is why you have not been made anxious by the concern or necessity to render beneficial your own and your environment's life, glory, nourishment, pleasure and expansion – as well as his – by nurturing and satisfying his welfare and your environment with him in it; this being the case, what can this form of Japa and worship do for you ? – Chalar

Bhakti-yoga, then just try to work for Me, because by working for Me you will come to the perfect stage. If, however, you are unable to work in this consciousness of Me, then try to act giving up all results of your work and try to be self-situated. It is advised that he sacrifice the accumulated result of his activities to some good cause. If you can not take to this practice, then engage yourself in the cultivation of knowledge. Better than knowledge, however, is meditation, and better than meditation is renunciation of the fruits of action, for by such renunciation one can attain peace of mind.

One who is not envious but is a kind friend to all living entities, who does not think himself a

activity that accords with so doing; furthermore, give no indulgence whatsoever to whatever things are against it; from this form of thought and conduct you will see how your love rolls on like a flood, swift and overflowing with activity; you will be satisfied – no doubt. Chalar Sathi - 167

**Yoga-yukto visuddhatma vijitatma jitendriyah**

**Sarva-bhutatma-bhutatma kurvann api n lipyate – 5.7 of Gita.**

One who works in devotion, who is a pure soul, and who controls his mind and senses is dear to everyone, and everyone is dear to him. Though always working, such a man is never entangled.

One who is on the path of liberation is very dear to every living being and every living being is dear to Him (Lord). A man of controlled senses can not be offensive to anyone. Such a person can not think of any living being as separate from Him, just as theleaves and branches of a tree are not separate from the tree. There is no chance of his being deviated from Him. Nor is there a chance that he will engage his senses in matters other than the service of the Lord. He does not like to hear anything except topics relating to Lord, he does not like to eat anything which is not offered to Lord and he does not like to go anywhere if his Lords is not involved.

**Kayena manasa buddhya kevalair indriyair api**

**Yoginah karma kurvanti sangam tyaktvatma-suddhaye – 6.11, Gita.**

The yogis, abandoning attachment, act with body, mind, intelligence and even with the senses, only for the purpose of purification. Any action, whether the body, mind, intelligence or even the senses, is purified of material contamination. There are no material reactions resulting from the activities of a devoted conscious person. Therefore purified activities, which are generally called sada-acara, can be easily performed by acting in Lord's consciousness.

A person acting in Lord's consciousness with his body, mind, intelligence and words is a liberated person even within the material world, although he may be engaged in many so-called material activities.

**Sarva-karmani manasa sannyasyaste sukham vasi**

**Nava-dvare pure dehi naiva kurvan na karayan – 5.13, Gita**

When the embodied living being controls his nature and mentally renounces all actions, he resides happily in the city of nine gates (the material body), neither working nor causing work to be done.

The activities of the body, or the figurative city of body, are conducted automatically by its particular modes of nature. The soul, although subjecting himself to the conditions of the body, can be beyond those conditions, if he so desires. Owing only to forgetfulness of his superior nature, he identifies with the material body, and therefore suffers. A controlled life, in which his deliberations are changed, he lives happily within the city of nine gates (two eyes, two nostrils, two ears, one mouth, the anus and the genitals).



Chalar Sathi, Page-93.

The significance of repetition of the Holy Name lies in mentally churning over the subject of repetition and whatever concerns that and awakening perception with thought and pursuit; so if you have not adjusted your repetition of the Holy Name in this way, how much can it do anything for you?

Meditation is nothing else than the way in which a person, by thinking of his Beloved, becomes awakened and ecstatic, - that is, to feel the one who is the object of meditation, to think about him and talk things over in the mind about him, as he is seen, with whatever there is in him, and whatever constitutes him, and with his doings and speaking, moods and gestures, and thus arrive at perception, meaningfulness, and the means of accomplishment, and to be awakened, overflowing, and whole-heartedly dedicated to him, and thus to become extremely eager and indomitable in making him successful! Again, uninterruptedness in this kind of feeling, thinking and doing for anyone makes Him beloved to the one who so thinks of Him, and when by doing in this way the object of meditation or the Beloved becomes the one and only within you or eternally emancipated within you, then you also, becoming solely in Him or eternally emancipated in Him will be wholly absorbed, and this condition of absorption will invite Samadhi; again, through this normal perception will flourish in the brain and normal feeling will flourish in the mind! – Chalar Sathi, Page-95.

You are practicing Japa and

Sathi, Page-96

Those who worship the Supreme Lord directly by devotional services are called personalists. Those who engage themselves in mediation on the impersonal Brahman are called impersonalists. But, bhakti-yoga in Chapter 12 of Gita prescribes prescribe at Verse-1 that the devotional service to Him, is the highest of all. It is the most direct, and it is the easiest means for association with the Godhead and at Verse-2 that those who fix their mind on My personal form and are always engaged in worshipping Me with great and transcendental faith are considered by Me to be most perfect.

A pure devotee is constantly engaged. Sometimes he chants, sometimes he hears or reads prasadas or goes to marketplace to purchase something for Lord, or sometimes he washes the temple or the dishes – whatever he does, he does not let a single moment pass without devoting his activities to Lord. His growing and living, personality and family, education and works are for fulfilling his Lord. Such action is in full Samadhi.

In order to perceive the Supersoul within the individual soul, one has to cease the sensual activities of seeing, hearing, tasting, working etc. He has to control the senses, render service to everyone and engage in the welfare of all beings. Then one comes to understand that the Supreme Soul is present everywhere.

The Verse-10 in Chapter-12 of Gita prescribes, if you can not practice the regulations of

proprietor and is free from false ego, who is equal in both happiness and distress, who is tolerant, always satisfied, self-controlled, and engaged in devotional service with determination, his mind and intelligence fixed on Me – such a devotee of Mine is very dear to Me.

He by whom no one is put into difficulty and who is not disturbed by anyone, who is equipoised in happiness and distress, fear and anxiety, is very dear to Me.

My devotee who is not dependent on the ordinary course of activities, who is pure, expert, without cares, free from all pains, and not striving for some result, is very dear to Me.

One who neither rejoices nor grieves, who neither laments nor desires, and who renounces both auspicious and inauspicious things – such a devotee is very dear to Me.

One who is equal to friends and enemies, who is equipoised in honour and dishonor, heat and cold, happiness and distress, fame and infamy, who is always free from contaminating association, always silent and satisfied with anything, who doesn't care for any residence, who is fixed in knowledge and who is engaged in devotional service – such a person is very dear to Me.

Those who follow this imperishable path of devotional service and who completely engage themselves with faith, making Me the supreme goal, are very, very dear to Me.

If you want to love anything or anyone, then love him, think of him only, and engage yourself in

## TOURISM

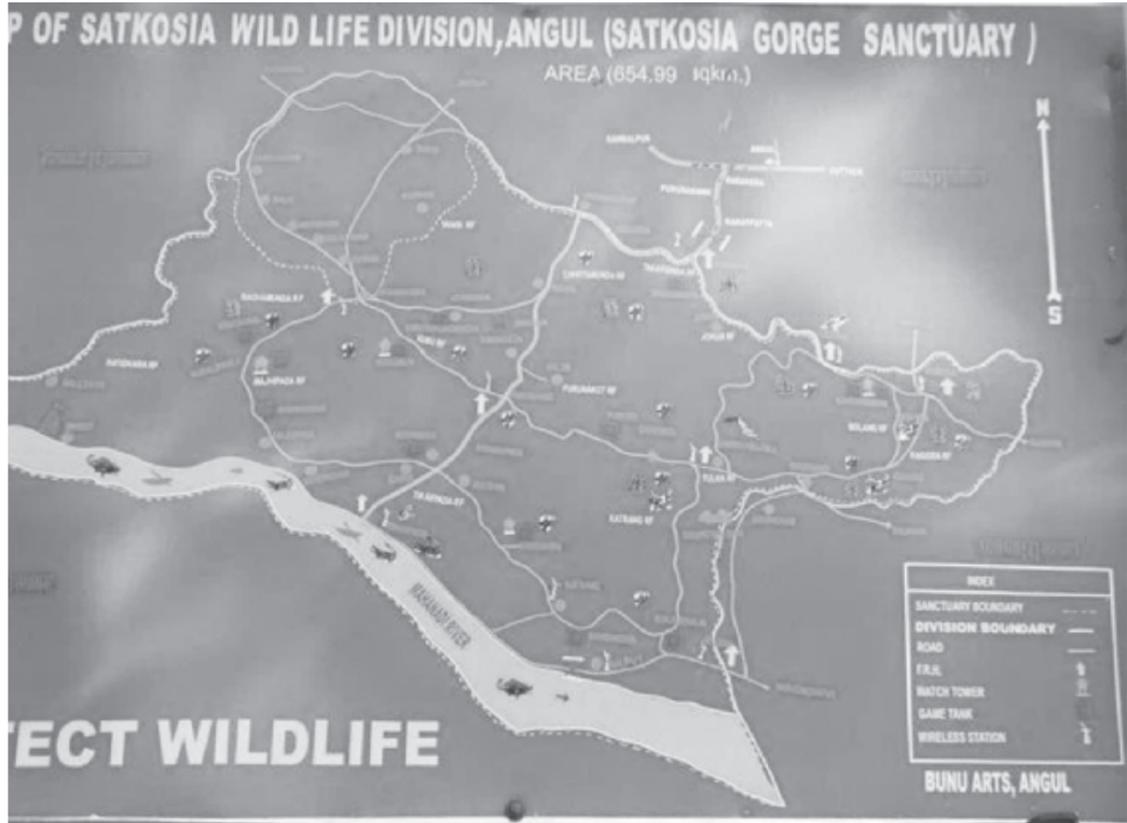
# This Gorgeous Gorge Is A Must-See Hidden Gem In Odisha

Rising from its headwater in Chhattisgarh, the Mahanadi River flows into Odisha through its western border. Passing in a series of rapids, it forces its way

India). A gharial research and conservation unit was opened in Tikarpada in 1975.

In 2007, the Satkosia Gorge

as you look for birds. In the evening, sit beneath the starlit sky, enjoying the silence of the forest occasionally broken by the call of a night bird or the wind



overlooking the gorge, is one of the best places to stay.

On the southern side of the tiger reserve you may opt for the Satkosia Sands resort in Badamul, managed by the Mahanadi Wildlife Division of Satkosia Tiger Reserve. With luck favouring, you may catch sight of a gaur (Indian bison) and sambar in the Badamul area. Other places where you can go camping are Chhotkei, Tarava, Bhagamunda forest (once known as the abode of tigers) and Baliput (you can stay in tent pitched on the sandbar).

will have to leave the forest by the stipulated time. Tikarpada is about half an hour's drive through the forest from Pampasar. You can take a detour to Puranakote hill top, about 15 minutes' drive from Tikarpada.

Chhotkei is another half an hour's drive from here. The drives through the forest offer a unique experience, but remember you have to exit the Pampasar gate by 6 pm or penalties may apply for breaking the rules.

You may also combine a visit to Kuanria dam and deer park, and the Kantilo Neelamadhav

Temple while visiting Satkosia.

### Getting There

Angul, 61 km from Cuttack and 130 km from Bhubaneswar (the nearest airport), is the most convenient gateway for Satkosia gorge. From Angul, Tikarpada is about 60 km via Pampasar forest gate. Nayagarh, 90 km from Bhubaneswar by road, is the gateway to Badamul, another entrance to the gorge. Local transport connects

the various points, but having your own transport is more comfortable. The best time to visit is between November and April. Carrying mosquito and insect repellents is a must.

through the Eastern Ghat hills, giving rise to one of the most picturesque gorges in India, the Satkosia gorge.

The name of the gorge originates from the old local measurement of its length, 'saat kros' or 14 miles (22 km). Hardly known beyond the state, Satkosia in Odisha can be your next stop if you are looking for an outdoorsy holiday in a lesser-known destination.

Tikarpada, about 130 km from

Sanctuary and its adjoining Baisipalli Wildlife Sanctuary, covering a little over 900 square km in all, was earmarked Satkosia Tiger Reserve in 2007. According to experts, the tiger reserve, lying in a transitional zone extending between the Chhota Nagpur Plateau and the Deccan Plateau, exhibits endemic life forms of both biotic provinces.

Although sighting big animals in the forest is rare, the birds and the

blowing through the trees.



The eco-tourism division of Odisha Forest Development Corporation (OFDC) has set up several camps to stay in the Satkosia gorge area. Tikarpada Nature Camp, in the northern part of the tiger reserve,

### A Drive Through The Forest

Day visitors to the tiger reserve are allowed inside but with rules and conditions. They have to obtain permission from the Pampasar forest check gate and



Bhubaneswar, is one of the best places to see the almost 12 metres (40 feet) deep gorge.

The mixed deciduous forests covering the hills along the gorge, once home to a pristine forest which sheltered tigers, elephants, herbivores, birds and other animals, were declared a wildlife sanctuary in 1976. The river is home to crocodiles and gharial (fish-eating crocodile found in the northern part of

crocodiles as well as the gharials almost never disappoint. Boating through the gorge, you will see them basking in the sun among the foothills or floating in the river.

### Be One With Nature

With prior permission and accompanied by a forest guard, you can go trekking through select parts of the forest. Walk softly on the carpet of Sal and other leaves that cover the trails



## SPECIAL REPORTS

### From being declared 'dead' to Emerge Champion

In 2009, Gadadhar Sahu's life changed forever. He was traveling from Odisha to meet his brother in Surat, Gujarat when he met with a mishap while deboarding the train. His injuries were so grievous that he was declared 'dead' by the first responders. It was only when he was being moved to the morgue

living, he helped his brother run a fast-food kiosk in his hometown Narendrapur, a small village located in the Ganjam District of Odisha. It was only after pursuing bodybuilding as a hobby, did he find solace and a new identity.

His first triumph was a gold medal in wheelchair category of

his gold medal at the Khelo India Para Games, the most significant triumph of his journey, Sahu said, "I have been training very hard to be the best version of myself. I have been training for two hours in the day and two hours in the evening every day, while helping my brother in his business as well."



Gadadhar Sahu

that the medical team realised he was still alive and needed his legs to be amputated. Sahu was only studying in 7th standard when this accident happened.

Fourteen years since the fateful day, 29-year-old Gadadhar Sahu has emerged from adversity to bag a gold medal for Odisha in powerlifting following an impressive 140kg lift in the 58kg category.

Sahu who had already seen fair share of struggle—due to poverty, refused to give up easily. In the aftermath of the tragic accident, most doors of a conventional life were closed for Sahu. To make a

the Mr Odisha Junior Bodybuilding Competition in 2016. But the financial burden of the required supplements and nutrition proved too much, and he was eventually enticed by the discipline of para powerlifting.

"I was inspired by para-athletes when I read about them in the newspaper. I knew it would not be easy as a para-athlete, but I had the belief and motivation to do it. Because I had the background in bodybuilding it was a natural fit for me, and I have been focused ever since," he said.

On his preparation leading up to

"It is hard to train in my hometown as facilities are not easily accessible. Fortunately, the Government of Odisha had invited us to train at the Kalinga Stadium for a ten-day camp ahead of the Khelo India Para Games, this was also a very crucial part of my preparation, and I don't think I would have won the gold without it."

Elaborating on his aspirations as a para athlete, Sahu said, "It is a truly special feeling to be on the podium, to win a gold medal while representing Odisha is an honour. My next aim is to be on the podium with the Indian Flag. I want to win medals for India."

### Dog bite cases double in Bhubaneswar

Dog menace in the Capital City has increased to an alarming proportion. Daily on average, more than 60 dog bite cases are being reported at the Capital Hospital. The number of such cases was around 30-35 a month ago.

As per the Director of Capital Hospital Dr Laxmidhar Sahu, the number of dog bite cases has increased in the last one month and special care will be taken in this regard soon.

"As many as 60-70 dog bite cases are being reported at the Capital Hospital daily. Around 300 patients are currently being treated at the hospital after being bitten by dogs. The number of dog bite cases has witnessed an



unprecedented rise in Bhubaneswar and peripheral areas for the last one month. We are also witnessing an increase in the number of stray dogs on our hospital premises. Though we are trying to drive away the animals, they are not moving

outside," said Dr Laxmidhar Sahu.

"We are keeping a watchful eye on the situation. If the situation doesn't improve in 15 days, we will be forced to write to BMC to take necessary steps to curb the menace," he added.

### Land Mafias on Prowl

Some land mafias are reportedly encroaching on government lands illegally in Bhubaneswar. Moreover, they are looting gullible people by selling those encroached lands for lakhs of rupees.

Such practice was recently reported from the Shyampur area which is located on the outskirts of the State capital. Some mafias allegedly encroached on acres of land in the area and illegally sold it to many private individuals for lakhs of rupees. Plotting of those lands has been done and many private individuals have constructed buildings on those lands after buying it from the land mafias.

Individuals, who bought those lands from the mafias, have admitted that they paid lakhs of rupees to purchase the lands. They also admitted that no documentation for the land transaction has been done yet.

"I don't know whether it is government land or not. I was told by some real estate brokers that I could buy the land from them. I paid them Rs 35,000 and took possession of the land. However, the BDA has issued me a notice terming it as encroachment. I am clueless and helpless now," said a person, who claims to have been cheated by a land mafia.

Moreover, amid the prevailing perception that government land is available freely, people residing near the area have encroached on many more government lands by covering those with ropes, bamboo, and clothes. Even, people have encroached forests and open fields in the area.

"We have been living in rented houses in slums for years. We didn't get any land under the Jaga Mission. So, we will live wherever we will find a piece of land," said a person in the Shyampur area.

"We are poor people. We don't have enough money to buy a piece of land and build a house of our own. We saw several people encroaching on land by ring-fencing the area with ropes. We also followed them. We request the government to provide us a piece of land to build a house of our own," said a woman.

Now questions are being raised as to who is behind the encroachment of government lands on the outskirts of the Capital City. Though the



illegal proceedings are continuing for a long time, the Odisha government seems to be clueless about it.

As per the officials, BDA has more than 60 acres of land in the Shyampur area. However, most of those lands have been encroached upon. Illegal construction work has been undertaken on most of those lands.

BDA has reportedly issued notices to as many as 18 persons in this connection.

"The State government has allotted 60 acres of land to the BDA for an affordable housing project in the Shyampur area. However, some people have illegally encroached on lands there. We have issued notices to 18 people in the first phase. Some more people are involved in the land encroachment. We will start an inquiry into the incident and proper action will be taken against them as per the inquiry report," said BDA Secretary, Kabindra Sahoo.

Meanwhile, politics has intensified in the State over the land encroachment issue. Opposition BJP and Congress slammed the State government over the development.

"It is quite unfortunate that poor people are being looted by the land mafias who have encroached acres of government land. Only giving responsibilities to the BDA and the BMC is not enough. It's a criminal act to cheat poor people by selling them land illegally for huge sums. The mafia raaj encouraged by the State government should be stopped immediately," said Congress leader, Bijay Patnaik.

"In the name of slum dwellers, so many land mafias have encroached on government lands. The issue may snowball into a major controversy and lead to disturbances in the near future," rued BJP leader, Babu Singh.

# HEALTH & WELLNESS

## 9 Realistic Fitness and Wellness Goals for Your Health in the New Year 2024

As New Year 2024 approaches, it is very important to keep our fitness and wellness goals in mind amidst all the festivities. Late night partying, eating, can affect our overall well-being. Let's explore why it is important to prioritize health during this time.

The holiday season often brings temptations that can compromise our well-being. Balancing the joy of the holidays with health-conscious choices is key to a fulfilling and sustainable lifestyle.

New Year's resolutions are more than just promises; That's a strong commitment to self-improvement and a healthy life. Adopting these resolutions increases discipline, stability and a sense of achievement, paving the way for success in various aspects of our fitness and wellness goals.



Resolutions symbolise a dedication to becoming the best version of ourselves. By keeping these commitments, we not only increase our growth but also set the stage for a successful year ahead.

### Goals 1: Early dinner Adopting the habit of eating an early dinner for better Fitness and Wellness Goals

An early dinner offers a variety of benefits, from improved digestion and metabolism. Eating early gives our bodies enough time to process food before bed, reducing bloating and promoting nutrient absorption. This time aligns with our body's natural circadian rhythm and contributes to better sleep quality. Better digestion is a major benefit. Giving our bodies more time to digest food before bed prevents problems like acid reflux and indigestion. These healthy eating habits promote a deeper and more restorative sleep.

### The body's natural music for quality sleep

Aligning our dinner time with the body's circadian rhythm is a simple and powerful way to improve sleep quality. This alignment minimizes the risk of acid reflux and

indigestion, common disruptors of restful sleep. By respecting our body's natural clock, we contribute to a more restful night's sleep.

### Importance of sleep quality

Quality sleep is crucial to overall well-being, affecting our physical and mental health. Making an early dinner a habit supports our body's natural processes. It contributes to a healthy lifestyle and maintain fitness and wellness goals.

### Goals 2: Mindful breakfast for Eating mindfully for optimal metabolism

When it comes to breakfast, syncing with your body's natural clock sets the tone for a day of optimized metabolism. Eating in harmony with your body's internal music encourages your metabolism to use energy efficiently throughout the

day. This simple practice supports overall well-being and sets a positive tone for the day ahead.

### The importance of timing at breakfast

Eating breakfast at the right time aligns with your body's natural circadian rhythm, contributing to more balanced and sustained energy levels. This way of thinking increases the body's overall ability to metabolize nutrients effectively.

### An important step for increased nutrient absorption

The importance of paying attention to hunger. Mindful eating involves tuning in to your body's signals, eating when you're hungry, and recognizing when you're full. This practice increases the absorption of nutrients. Because your body takes in more nutrients when you eat in response to true hunger.

### The mental benefits of breakfast

By acknowledging your body's cues, you not only optimize nutrient absorption but also develop a healthy relationship with food. This mindfulness practice helps you get off to a more balanced and nutritious start to your day. It promotes overall well-being.

### Goals 3: Chew well

### Chew well, feel well: The important role of good chewing in digestion

Good chewing plays a key role in aiding digestion and optimizing nutrient absorption. When you chew your food thoroughly, it breaks down into smaller particles. This makes it easier for your digestive system to extract essential nutrients. This simple yet effective practice eases digestion and reduces strain on the stomach.

### Nutritional processes

Proper chewing ensures that nutrients are more readily available for absorption in the digestive system. By breaking down food into smaller components, your body can efficiently extract and use the nutrients it needs for overall health.

### Promoting satiety to prevent obesity and manage weight

Clever chewing is a powerful tool in preventing blindness. Chewing your food well reduces the risk of absorption by promoting smooth and efficient breakdown of nutrients. This practice also reduces acidity by stimulating saliva production. Fruit helps to neutralize stomach acid.

### Weight management through satiety

Smart chewing contributes to feelings of fullness and satiety. By saving each bite and giving your body time to register fullness, you naturally control portion sizes. Supports weight management efforts.

### The overall benefits of mental chewing

Adopting this simple yet effective practice not only aids digestion but promotes a healthy relationship with eating. It also promotes a mindful approach to contributing to your overall well-being.

### Goals 4: Schedule regular meals

### The importance of timing meals in alignment with your body's internal clock

Aligning your body clock with your body's internal clock has significant benefits for overall well-being. Eating at regular intervals supports the body's natural circadian rhythm. Optimizes digestion and nutrient absorption. This practice contributes to a more efficient metabolism. This ensures that your body processes nutrients.

### How meal times affect digestion

A regular meal schedule improves digestion by synchronizing with the body's internal clock. This alignment promotes digestion. Reduces the risk of digestive problems. Optimizes overall gut health.

### Control of hunger hormones to control increased appetite

Effect of regular meal schedule on hunger hormones. Frequent mealtimes regulate hunger hormones. Helps to stabilize appetite and control food intake. This hormone balance plays an important role in potential weight management. Because it reduces the likelihood of overeating and promotes healthier eating habits.

### Supporting weight management through routine

Establishing a regular meal schedule contributes to a more balanced and controlled approach to eating. By regulating hunger hormones, this practice supports weight management efforts and promotes a sustainable and health-conscious lifestyle.

### Overall benefits of regular meal plans

Beyond appetite control, meal timing supports overall metabolic health and provides a foundation for sustained energy levels throughout

the day, contributing to your journey to better health.

### Goals 5: Rainbow Plate

### Color your plate: Nourish health with salads

Adding salad to your meals will increase your fiber intake. Promote a



healthy heart. Salads filled with a variety of vegetables provide fiber that supports digestion and regular bowel movements. This simple practice increases the overall fiber content of your diet. Better at least helps with function.

### Role of salad in digestive health

The fiber in the salad acts as a natural regulator. Prevents constipation and soothes the bowels. By including a variety of colorful vegetables, you introduce a variety of fiber that nourishes the beneficial bacteria in your gut.

Benefits of salad in managing blood sugar levels and facilitating weight management

Salad plays an important role in managing blood sugar levels. The fiber in lettuce helps slow down the absorption of sugar. Stabilizes blood sugar levels. It can be especially beneficial for diabetics. Helps in good blood sugar control.

### Weight management through salad consumption

Salads are low in calories and packed with nutrients. Ideal for those on a weight management journey, it's a stellar option. Packed with fiber, it fosters a satisfying sense of fullness. Reduces the likelihood of overeating and supports weight management goals. Embracing the rainbow plate for overall wellness. Incorporating salad into your meals not only adds color and flavor but also brings many nutritional benefits. From supporting gut health to helping with blood sugar management and weight control, the Rainbow Plate is a delicious and nutritious addition to your journey to better overall wellness.

### Goals 6: Movement and Activity

### Embrace the benefits of regular exercise, walking and regular activity

Regular physical activity, whether through workouts, walking, or stationary activity, offers many benefits to your overall well-being. Engaging in regular exercise supports weight management by building muscle. Simple activities like walking contribute to higher energy levels and a better overall quality of life.

### Effect of movement on metabolism

Exercise boosts metabolism. Facilitates more efficient calorie utilization by the body. This metabolic boost is beneficial for those aiming to maintain or lose weight. Promotes a healthy balance between calorie intake and expenditure.

### Empower Your Life:

Increase your energy levels through movement. Partaking in physical activity amplifies the delivery of oxygen and essential nutrients, enriching the body's vital processes. This increased circulation contributes to higher energy levels.

Combats fatigue and promotes a more vibrant lifestyle

### Enhancing morale through sustained activity

Exercise releases endorphins, feel-good hormones that boost mood and reduce stress. Regular physical activity has a positive effect on

mental well-being, which contributes to a positive and stable mindset. Cardiovascular health benefits of regular exercise. Physical activity, especially cardio, supports heart health by improving exercise and reducing the risk of heart disease. Incorporating regular movement into your routine contributes to a stronger heart and overall better health. Overall, the simple act of moving your body has far-reaching benefits, from increased energy levels and mood boosts to improved cardiovascular health. Whether it's a structured workout or a leisurely walk, consistent activity is a powerful tool on your journey toward a healthier and more active lifestyle.

### Goals 7: Stay away from light

### Prioritize sleep

Cleaning light-emitting gadgets before bed is important for your sleep quality and overall well-being. Blue light emitted by screens disrupts your body's natural sleep cycle. Which in turn interferes with the production of sleep-inducing hormones like melatonin. Establishing the habit of staying away from such devices helps create an environment conducive to sleep.

### The Role of Blue Light in Sleep Disorders:

Blue light suppresses melatonin production, making it harder for your body to relax and go to sleep. By minimizing screen exposure before bed, you promote the natural release of sleep-inducing hormones, and help you get a more restorative night's sleep.

### Improve sleep quality and overall well-being for better sleep

Disconnecting from screens after waking up is equally important for your overall well-being. By staying away from light-emitting gadgets, you allow your body to maintain its natural circadian rhythm. Optimize hormone balance. This practice sets a positive tone for the day. Promotes alertness and productivity. Creating a screen-free pre-sleep and post-wake period. Establishing a routine that supports good sleep quality and overall well-being at least one hour before bed and after waking up. This simple yet effective practice contributes to a fresh and energetic start to your day and improves your overall sleep pattern. Ultimately, avoiding light-emitting gadgets during certain times of your day is a conscious choice that positively affects your sleep quality and contributes to your overall well-being. Making these small adjustments to your routine can have significant benefits for a more rejuvenated and balanced lifestyle.

### Goals 8: Get up early

### Embrace the benefits of morning sunlight

Waking up early allows you to reap the benefits of morning sunlight by positively affecting your hormone balance and mood.

Continued Page 17

## SPECIAL STORIES

### Demand for Srimandir Museum goes Shriller

A museum is a gateway to the history, culture, and tradition of a state. However, it is a matter of concern that Srimandir in Puri, which forms the central identity of Odisha, doesn't have a museum.

Though the Srimandir Heritage Corridor Project is being constructed with a budget of crores of rupees, no conception of a museum in the project has left several devotees of Lord Jagannath disappointed.

Several Jagannath culture lovers and intellectuals across the State have demanded the construction of a museum as part of the project. As per their demand, many sacred articles used in the services of the Holy Trinity should be exhibited in the museum, so that it attracts several devotees and tourists from across the globe.

Moreover, many others have also demanded to exhibit the 'Parswa Deva-Devis' (side Gods and Goddess) and 'Sarathis' (charioteer) of the three chariots used during the famous Rath Yatra (car festival) in Puri in the museum.

After it was reported in some



sections of the media that the 'Parswa Deva-Devis' and 'Sarathis' were left deserted, the Srimandir Temple Administration has kept only the images of 'Parswa Deva-Devis' inside its office building in an organised manner. However, the images of 'Sarathis' are still lying outside the Emar mutt.

"The 'Sarathis' of the chariots have been kept there for the time being. There is a proposal to build a museum. The 'Sarathis', horses and other sacred articles of the Holy Trinity will be kept inside the museum shortly," said Srimandir Management Committee member, Durga

Prasad Das Mohapatra.

"Museum is the identity of any historical and religious place. Whenever tourists come to a place from abroad, they generally don't have any knowledge about that place. A museum will go a long way to enlighten the tourists about the special significance of the place," said Prafulla Kumar Mishra, Vice-Chancellor of Rajendra Agriculture University.

Currently, the Srimandir Heritage Corridor Project is being constructed with a budget of Rs 331 crore. However, the proposed Sri Jagannath reception center and Ragunandan library are yet to be built as part of the project. Devotees of Lord Jagannath have expressed their dissatisfaction over the development. Apart from this, they have also demanded for the construction of the museum.

Responding to the demands, the Chief Administration of Srimandir Ranjan Kumar Das said, "There is a proposal for the construction of the museum. It will be certainly built either in the Srimandir Heritage Corridor Project or on the premises of Jagannatha Vallabha Garden."

### Irregularities Alleged

Though many people in Odisha are forced to move outside the State to work as migrant labourers, massive irregularities under MGNREGA scheme have allegedly surfaced in some villages of Muribahal block in Odisha's Bolangir district.

As per reports, huge funds released under the scheme have allegedly been siphoned off. Even works under the scheme have allegedly not often been executed on the ground, and merely shown on the papers.

Though the government is providing 200 days of work under MGNREGA per year, many labourers including a divyang in the block have not received their wages despite working under the scheme. Even funds under the scheme have been allegedly siphoned off by the block authorities and employees in the name of the gram sathi and ghost labourers.

Take the case of divyang labourer Bidyadhar Sahu from Kandhenjhula village. Bidyadhar can neither speak nor hear properly. Though under compulsion he worked under MGNREGA scheme to



make his living, he is yet to get a single penny for his work. However, as per the allegations by his family members, it has been falsely mentioned in the documents that Bidyadhar, his father Kasta Sahu and three others have received wages of Rs 1,50,000 in three phases.

However, as per the allegation by Bidyadhar's family members, gram sathi Mamata Behera and her husband Laba Behera went to their home and took their fingerprints with the assurance of depositing the money in their account. But the amount is yet to be deposited.

Following the development, Bidyadhar's family members lodged a complaint at Muribahal police station in this regard. However, no steps were allegedly taken by the police following which they had to lodge their complaint before the SP.

"Gram sathi Mamata Behera and her husband Laba Behera siphoned off Rs 1.5 lakh under MGNREGA scheme by taking our fingerprints. We requested them a lot to return our money, but they didn't pay any heed to our plea," said Bidyadhar's mother, Meena Sahu.

Meanwhile, the employees of Jana Seva Kendra in the village admitted that money has been withdrawn without taking the signature of the beneficiaries. "Earlier money has been withdrawn under MGNREGA scheme without taking signatures from the beneficiaries. Now, we have become careful after the row," said Phakir Behera, an employee of Jana Seva Kendra in the village.

Even allegations have been made that money has been siphoned off under the scheme in the name of a divyang person who can't walk properly. Money has been allegedly withdrawn in the name of Sukru Chhura by mentioning that the divyang person has worked in the village pond project under MGNREGA.

"I was not doing any work under MGNREGA as I am unable to work. My wife was working under the scheme," said Sukru Chhura.

Though as per the rule, gram sathis are given the responsibility only to execute the work and they can't work as labourer under the scheme, gram sathi Mamata's name has been mentioned as a labourer in the MGNREGA portal.

However, Mamata brushed aside the allegations against her. "The allegations about irregularities under the scheme in the village are false and baseless. Some persons are alleging that I have siphoned off their money. However, they have actually received their amount," said Mamata.

Meanwhile, responding to the allegations, Kantabanjhi SDPO Gourang Charan Sahu said that they are aware of the complaints and steps are being taken in this regard. "Proper action will be taken after an investigation into the incident," said Sahu.

### Tribals' Woes

In the last few years, some of the moves of the Odisha government seem to have created an ambiguous atmosphere for tribals who are no longer able to trust any of the developmental schemes or projects of the State government.

The tribals consider natural resources like water bodies, lands and forests as their Gods. Those are their sources of lives and livelihoods. They are known as the real conservators of natural resources. However, their development has taken a back seat even though many companies have been set up in Odisha.

The State Cabinet's November 14 decision on Odisha Schedule Areas Transfer of Immovable Property (OSATIP) Regulations and its subsequent withhold and referral to the Tribes Advisory Council (TAC) to reconsider the matter has raised questions whether the Odisha government is really concerned about the development of tribals. The matter has now snowballed into a political controversy.

Why the regulation was withheld just 48 hours after the Cabinet decision? The main reason behind the move is the criticism that the Odisha government faced at national level. Several reports in this regard were published in various national level newspapers. Many tribal organisations and eminent individuals were also up in arms against the State government's decision.

Responding to the State government's move, tribal activist Gladson Dungdung took to his social media account X (earlier known as Twitter) and wrote, "To end the existence of tribals, Odisha Chief Minister had amended the Tribals Land Transfer Regulation. Land is our identity, culture, heritage, history and existence. The tribal society will not exist without land. Hence, stag strong protest against the move."

"Preparation is underway to snatch away lands from the tribals by amending laws during the British

rule which was protecting the lands of the tribals," tweeted adivasi.com.

"It was the purpose behind making a tribal woman as the President of India," tweeted PK Oran.

Following massive flak against the move, Odisha's Revenue and Disaster Management Minister Sudam Marndi took to X to announce that the regulation has been withheld.

As per sources, the government didn't want to take any risk eyeing the upcoming election as the state



has 22 per cent tribals. When many political parties and tribal organisations raised their voices for the complete withdrawal of the regulation, the Chief Minister decided through a virtual cabinet meeting to send it to the Tribes Advisory Council (TAC) for referral. However, the development has triggered massive controversy.

Though complete withdrawal of the regulation has been demanded from various quarters, the ruling party slammed the Opposition parties by calling them 'anti tribals' on their social media posts.

However, to divert the attention of the people from the issue, ruling BJD has presented a tribal leader as the Deputy Speaker of Odisha Assembly. With this move, the party wants to prove that they are

giving much importance to the tribals. Amid the development, National Human Rights Commission (NHRC) has sent an order to the State government which is a matter of concern.

In its order, NHRC mentioned that due to the neglect by the Health Department of the State government, as many as nine Juanga tribals at Jantari village under Bansapala block in Keonjhar district have lost their lives in the last five months. NHRC has ordered the Health Department Secretary of the State government

to take necessary steps in this regard. While the Primary Health Centre is located at Gonasika which is 15 km away from Jantari, the Community Health Centre is located 40 kms away at Banshapal. As per reports, many tribals are having untimely death as the hospitals are situated far away from their villages. There was also a six-year-old child among the deceased. Many more tribals are still suffering from fever. Under the circumstances, NHRC has ordered the Secretary of the Health Department to submit a detailed report in this regard within eight months. Considering all the above incidents, the government's priority for the tribals is a matter of concern.

# INEQUALITIES

## 2023 : A Year of Nine Growing Inequality

Pradeep Kumar Panda, Economist, Bhubaneswar

If 2022 was a year of uncertainty, 2023 is the year of inequality. For countries hoping to bounce back from the devastating losses of the COVID-19 pandemic, the battle has been made tougher by the compounding threats of climate change, fragility, conflict and violence, or food insecurity, to

won gains faced a huge setback with the COVID-19 pandemic, which brought with it not just loss of lives and devastation, but the onslaught of shocks and crises that have resulted in about three years of lost progress in

the face of elevated inflation, higher interest rates, reduced investment, and disruptions caused by Russia's invasion of Ukraine. The global economy was projected to grow by 1.7% in 2023 and 2.7% in 2024, with the sharp downturn in growth expected to be widespread. Forecasts in 2023 were revised down for 95% of advanced economies and nearly 70% of emerging market and developing economies. The economic outlook for developing economies has darkened in 2023. The first four years of the 2020s have proved to be among the weakest in three decades. As the New Year dawns, the world is at the halfway point of what was meant to be a critical decade for development. The World Bank's upcoming Global Economic Prospects report—out January 9—will provide a crucial glimpse into the challenges that lie ahead.

challenge and of building a livable planet. High-income countries comprise 16% of the global population, but produce 31% of GHG emissions. UAE (with 26 tonnes CO<sub>2</sub>e) and Australia (with 23 tonnes CO<sub>2</sub>e) are two among the highest GHG emissions per capita. This means, on average, every person in UAE produces about 26 tonnes CO<sub>2</sub>e of GHG emissions. In terms of total greenhouse gas emission, China topped the list producing 26.4% of global greenhouse gas emissions (with 18% of global population),

### 6. Commodity Markets

According to the latest Commodity Markets Outlook report, an escalation of the current conflict in the Middle East—coming on top of disruptions caused by the Russian invasion of Ukraine—could push global commodity markets into uncharted waters. Global commodity prices declined by almost 25% in 2023 relative to 2022, the sharpest drop since the pandemic. The start of the conflict in the Middle East in

legal rights that men do. This year's report has found that the global pace of reforms toward equal rights for women has fallen to a 20-year low, with only 34 gender-related legal reforms across 18 countries in 2022—the lowest number since 2001. This marks quite the roadblock for women's economic growth and empowerment at a time the global economy is already suffering setbacks. At this current pace, women entering the workforce today will retire before they're ever able to gain the same rights as their male counterparts.

### 8. Migration

Migration is one of our pressing development challenges. About 184 million people—2.3% of the world's population—live outside of their country of nationality, and almost half of them are in low- and middle-income countries. How we address migration and protect migrants as they move from their origin to host communities is key to ensuring their economic growth and success. The World Development Report 2023 finds that better migration policies can help boost prosperity in all



name a few—that make it difficult for economies across the board to fully recover.

As with most crises, it's the world's poorest countries that are getting hit the hardest. Many of these countries, already in debt distress, find themselves even more squeezed for resources. Online gig work is a vital aspect of the labour market and a source of income—but only for those who can access it. And let's not forget today's refugee crisis. Better migration policies can not only help alleviate the crisis—they can also help boost economic growth and prosperity.

These polycrises have made development work more complicated. As we end the year shifting our focus to our new mission and vision and how we can best address the concerns facing people, planet, prosperity, digital, and infrastructure, let's look back and see how we fared in addressing some of our most pressing development concerns and priorities.

### 1. Poverty

While extreme poverty in middle-income countries has decreased, poverty in the poorest

poverty reduction. This means, we have lost three years in the fight against poverty.

### 2. Debt

The World Bank's yearly International Debt Report (IDR), formerly International Debt Statistics (IDS), is celebrating fifty years of being the most comprehensive and transparent source of external debt data and analysis for the 121 low- and middle-income countries that report to the World Bank Debt Reporting System (DRS). Last year's IDR highlighted rising debt-related risks for all developing economies—low as well as middle-income economies—but the strain was intensifying for the world's poorest countries, which were squeezed by surging debt service payments. The pressure continues this year. According to this year's IDR, developing countries spent a record \$443.5 billion to service their external public and publicly guaranteed debt in 2022. The poorest countries eligible to borrow from the World Bank's International Development Association (IDA) paid a record \$88.9 billion in debt-servicing costs in 2022,

### 4. Falling Long-Term Growth Prospects

The World Bank's report, Falling Long-Term Growth Prospects: Trends, Expectations, and Policies, offers the first comprehensive assessment of long-term potential output growth rates in the aftermath of the COVID-19 pandemic and the Russian invasion of Ukraine. These rates can be thought of as the global economy's "speed limit," and the findings from this year are concerning. At current trends, the maximum long-term rate at which the global economy can grow without sparking inflation—is expected to fall to a three-decade low over the remainder of the 2020s. That's because most of the forces that have powered prosperity since the early 1990s have weakened—including a growing working-age population.

### 5. Climate Change

Climate change leaves no person and no economy unscathed. It could drive 216 million people to migrate within their own countries by 2050. It could increase water stress and cut crop yields, especially in the world's most food-insecure regions. Agrifood systems are also responsible for one third of all emissions. Scaling up renewables and energy efficiency, and investing in electrification at scale, while avoiding new coal plant construction and retiring old ones, is critical to providing clean energy to power homes, schools, hospitals, and businesses. Reducing emissions and boosting resilience is possible, but will require significant social, economic, and technological changes. Just this month during COP28 in Dubai, the World Bank announced bold actions to increase climate financing, broaden the scope of climate resilient debt clauses, enhance efforts on carbon markets, and to "decisively bend the methane emissions curve," and much more. In a world where the world's poorest face the brunt of shocks, climate change is no different. Tackling it is at the heart of the development



early October led to an initial uptick in prices, though the impact so far has been small. Prices of most commodities remain above their 2015-19 average. Oil prices are expected to average \$90 a barrel in the current quarter before declining to an average of \$81 a barrel next year as global economic growth slows, and overall commodity prices are projected to fall 4.1% next year. Prices of agricultural commodities are expected to decline next year as supplies rise, and prices of base metals are also projected to drop 5% in 2024. Commodity prices are expected to stabilize in 2025.

### 7. Gender Inequality

Around the world, nearly 2.4 billion women of working age still do not have the same rights as men. The 2023 Women, Business and the Law (WBL) report measures the laws and regulations affecting women's economic opportunity in 190 economies—the barriers women face for economic participation as well as how to go about creating reform of discriminatory laws that may hold them back. In 2022, the global average score on the World Bank's WBL index rose just half a point to 77.1—indicating women, on average, enjoy barely 77% of the

countries. According to this year's report, as populations age at an unprecedented pace across the globe, countries are increasingly reliant on migration for long-term growth potential. We can use this as an opportunity to find better ways to make migration work for people and societies. Nearly half of all migrants reside in low- and middle-income economies.

### 9. Working Without Borders

Online gig work is a growing part of many labour markets, accounting for up to 12% of the global labour force. It is a growing source of income for millions of people. The demand for online gig workers is rising faster in developing countries than in industrialized countries. It also offers flexibility and potential for extra income as two important motivators. Local gig platforms play a vital role in the local labour market, but they face challenges in establishing a viable business model. Online gig work can support inclusion by providing work opportunities for youth, women and low-skilled workers. The gig economy can help governments build digital skills, increase income-earning opportunities, and expand social protection coverage of informal workers.



countries and countries affected by fragility, conflict, or violence is still worse than before the pandemic. The persistence of poverty in these countries makes other key global development goals much harder to achieve. Nearly 700 million people around the world today live in extreme poverty, meaning they live on less than \$2.15 per day. Between 2010 and 2019, this number fell by 40%. Though we have made strides in global poverty reduction, those hard-

4.8% more than in 2021. The world's poorest face the risk of debt crises as borrowing costs surge. The increase in costs shifted scarce resources away from critical needs such as health, education, and the environment.

### 3. Gloomy Global Economic Prospects

January 2023's edition of the Global Economic Prospects report highlighted that global growth was slowing sharply in

# MISCELLANEOUS

## Amazing Scientific Facts

We only know a small fraction of the interesting and completely wired facts that scientists have uncovered so far. Let's explore some amazing scientific facts....

### Strange abilities of animals

Lost land animals may not be able to find their way home, but



sea animals might. According to the U.S. Geological Survey (USGS), "there is evidence that some animals, like sea turtles and salmon, have the ability to sense the Earth's magnetic field and can use this sense for navigation." Though that may sound like science fiction, it's actually science fact—unlike these animal "facts" that are actually false.

### Weight of a cloud

Your childhood dreams of floating on a weightless cloud may not withstand this science fact: The average cumulus cloud can weigh up to a million pounds, according to the USGS. That's



about as heavy as the world's largest jet when it's completely full of cargo and passengers. Learn more about clouds and why they're so heavy by familiarizing yourself with these facts about rain.

### Rats laugh!

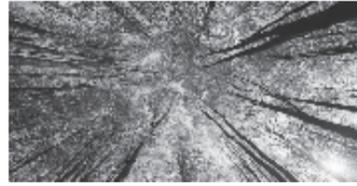
These creatures are more dynamic than we think. Rats have the ability to "laugh" when tickled. A video from National



Geographic demonstrates that rats respond positively to tickling, and they even chase after the researcher's hand in a playful manner. We wonder what would happen if they saw these funny animal memes.

### More trees than stars

Here's a cool space fact (and an Earth fact) we bet you didn't know: NASA experts believe



there could be anywhere from 100 billion to 400 billion stars in the Milky Way. However, a 2015 paper published in the journal Nature estimated that the number of trees around the world is much higher: 3.04 trillion.

### Genes from other species

We like to think of humans as being superior to other living creatures, but the reality is, our genome consists of as many as



145 genes that have jumped from bacteria, fungi, other single-celled organisms, and viruses, according to a study published in the journal Genome Biology.

## Struggle

Those humans who struggle become more powerful; their strength to survive and to change the course of their own lives becomes so evident that the people around witness in them a massive shift of both character and inner wisdom. Then why do thousands of humans complain and feel sad that they are struggling, which is perhaps a part of their own illusions? What we see in our lives or in the society around us, we think them to be true. But is it because we want to believe that or are we part of an illusion that makes us believe in things?

Why is struggling bad? And why can we not leave behind the memories of our struggles and work for our own betterment? If we start believing that all the pains that we get in this world - betrayals, insults, heartbreaks, losing loved ones, death, loneliness, ignored by family members - are perhaps nothing but ways to realise that these are energies, which enter our lives to create our own evolved versions.

Once wisdom shows us the futility of such pains, we become peaceful



and guide others to heal themselves. This is a truth that exists too in this dimension where we are breathing at this moment; however, if this is a truth then why do people repeat the same mistakes like a cyclic event?

Humans had created the concept of society to build communities and to live together, united and in a safe environment. The strange thing about this is that in contemporary times, society becomes the first entity that questions or raises a finger immediately when a human being struggles or takes a decision that may break some conventional rules. Now the question that lingers is that 'is society an entity or is it our own illusionary world' which we created to check our own limitations?

In this world, there are humans who are not limited to what can be seen, there are many who are either blessed or born with the knowledge of past lives or perhaps the wisdom that 'life is transient, and so we must not collapse until death calls us back'. Sometimes we focus on ourselves and believe that our inner forces are powerful, sincere and pure; and suddenly things begin to change around us, and we call it 'luck'. It can be anything and we must explore to understand life itself; however, in our lifetime we do meet people who can bring the balance of energies in us. The significant fact is that we must realise it, otherwise 'time' will take away the opportunity from us and that chance will be lost.

I met her suddenly one day in a cafe. She did not begin to guide me, but her energies did calm me and I could feel the essence of life inside my body. I realised very naturally that I was being healed while I was talking to her about simple things in life. When we began our conversation, there was no pressure of what to speak about or who would say what; it was like the rains - sudden, natural, peaceful. And after some time I learnt that she knows about life and she is a born healer. It might sound mystical or a science-fiction tale, but it is not. It is a very simple truth that we need to embrace and acknowledge. She can heal, she can create a different space for us, she can make us see the value of life and the most important truth that 'we are born and we are alive.'

Shoheli Biswas is not just a name, it is a revelation that the universe blessed me with because I have always believed that my soul is a traveller in space and parallel dimensions. The existence of a multiverse has been established long back by - Hugh Everett III (American physicist who proposed the many-world-interpretation of quantum physics); but the concept and the reality of such a truth had been stated long back by the American philosopher and psychologist William James in 1895, and then appeared in the modern scientific context because of a debate between Boltzmann and Zermelo in 1895; but the idea of many worlds, dimensions and cyclical time had been the central truths in Hindu cosmology in which the universes undergo a series of destruction and creation; thus, the repetitions of 'Kalpa' illustrates the rising of eternal and ever-changing multiverses. Thousands of years ago ancient Hindu scriptures had mentioned the mutual existence of multiverses, and Lord Krishna had passed the knowledge to Brahma - 'there are other infinite Universes each with its own creator (Brahma), and cycle of birth and death...'

We are already enlightened, yet we question and exist in the illusions that we have created but how long can we deny our own collective consciousness?

### From Page 14 (9 Realistic Fitness and Wellness Goals for ...)

Getting some morning sunlight can assist in syncing your internal clock for better regulation. Optimizes hormonal balance. This simple practice creates a sense of alertness to set a positive tone for the day and boost overall mood. Effects of sunlight on hormones. Morning sunlight exposure affects the production of hormones like serotonin, which contribute to a more upbeat and positive mood. This hormonal balance plays a major role in regulating various bodily functions including sleep-wake cycles and overall well-being.

### The role of early morning sunlight in providing essential vitamin D

Morning sunlight is a natural source of vitamin D for bone health and immunity. Sunlight stimulates the synthesis of vitamin D in your skin. Supports calcium absorption for strong and healthy bones. Adequate vitamin D levels also play an important role in boosting your immune system, overall health and stability. Benefits of a balanced circadian rhythm. Waking up early supports a balanced hormonal system that aligns with your body's natural circadian rhythm. This alignment not only boosts mood and hormonal balance but also ensures that you receive the best benefits of morning sunlight for better bone health and a stronger immune system.

Getting up early gives you the rejuvenating effect of sunlight, your hormonal balance, and positive effects on mood. Provides vitamin D essential for overall health. This simple morning ritual sets the stage for a vibrant and well-balanced lifestyle.

### Goals 9: Avoid the snooze button and deep breathing

#### Wake up with purpose

Avoiding the snooze button is crucial, as its consequences extend to delaying your morning routine. Hitting snooze disrupts your sleep cycle, leading to a fragmented and less restorative sleep. The resulting grogginess and fatigue affects your overall energy level and mood throughout the day. The importance of uninterrupted sleep. Quality sleep is essential for overall well-being. Avoiding the snooze button helps ensure a more restful and refreshing sleep experience. By waking up promptly, you set a positive tone for the day and optimize your energy levels.

#### Incorporate deep breathing for relaxation

Deep breathing is a powerful tool for increased lifestyle, stress reduction, and weight management. Deep, purposeful breathing optimizes oxygen intake. Revitalizes cells and gradually increases energy levels. This practice also affects hormone balance. Reduces stress hormones and promotes a more relaxed and focused mindset.

#### Role of deep breathing in reducing stress:

Deep breathing reduces the effects of stress on the body and mind, creating a relaxation response. This simple trick promotes a sense of calm thereby helping you navigate everyday challenges with resilience. Weight management through mindful breathing. Deep breathing helps in weight management by influencing hormonal balance. By reducing stress hormones, it indirectly supports healthy eating habits and metabolic processes, helping with weight management. Ultimately, avoiding the snooze button and incorporating deep breathing into your morning routine is a lifestyle enhancement. It is a valuable practice for managing stress and promoting overall well-being. These small yet effective habits can positively shape the course of your day. This will contribute to a more balanced and fulfilling lifestyle.

#### Summary

#### A lifestyle change for overall health

As we complete our journey through these wellness goals, it's clear that each step is a building block for a transformative lifestyle change. The collective effect of an early dinner, healthy eating, regular exercise, and other habits creates a foundation for better overall health. Embracing these changes is not just about resolve; It's about a sustainable and positive lifestyle that nurtures your well-being. Small shift forces Change often starts with small, consistent actions. Every goal, from eating an early dinner to avoiding the snooze button, contributes to a holistic approach to health. It lays the foundation for a vibrant and fulfilling life.

#### Excited to take on challenges for the new year

The wellness challenges presented are not fleeting resolutions but are meant to make a lasting commitment to your health. By committing to these goals, you're investing in your well-being and setting the stage for a new year ahead. Consistency and dedication to these practices will lead to significant improvements in many aspects of your life. Wishing you a Happy, Healthy and Prosperous New Year. As you begin this journey, remember that your health is a gift to yourself. May the year ahead be filled with positive change, renewed energy and joy that comes with making your health a priority. Cheers to a lively and fulfilling year!

# AGRICULTURE

## Homegrown benefit: Why 'desi' should be the catchword for India's dairy sector

A shift from exotic and crossbred cattle to indigenous breeds that are better adapted to changing climate and resistant to diseases will help the sector stay profitable and sustainable.

Arvind Kumar's hopes were high when he bought two Jersey cows in 2019 by taking a loan of Rs 1 lakh from his relative. "Despite constant care, the cows would often fall sick. Milk production would reduce in summers because of heat stress. Impregnating the cows, which is essential for lactation, was also difficult," says the farmer from Durgapura village in Etawah district of Uttar Pradesh. Last year, he sold off the cows and bought three indigenous cows for Rs 32,000.

Surender Sahoo, a farmer from Patapur village in Cuttack district of Odisha, narrates a similar story. "We make every effort to provide them cool interiors, but in summers exotic cows always foam at the mouth and wheeze. Their milking capacity also reduces drastically," says Sahoo. Two years ago, he sold one of his two Jersey cows and now plans to sell the other one as well. He also has two indigenous cows, which he says are better accustomed to heat stress and diseases.

There appears to be a reversal in the dairy farmers' preference for exotic or foreign breeds. Since 1970, the Union government has promoted high-yielding breeds, such as Holstein-Friesian, Jersey, Brown Swiss and Red Dane, under the dairy development programme Operation Flood. India's milk production surged from a deficit of 110 g per capita in 1973 to a surplus of 433 g per capita in 2022, according to a March 2023 white paper by the Centre's think tank NITI Aayog. Today, India is the world leader in milk production and contributes 24 per cent to global output. Though indigenous and nondescript cattle, which are a mix of native breeds, still outnumber exotic breeds in the country, an analysis of Livestock Census data from 2007, 2012 and 2019 shows that the number of indigenous and nondescript cows have increased by a measly 10 per cent, as against a 76 per cent rise in exotic or crossbred cows.

A quick field survey and analysis of research by the Centre for Science and Environment (CSE), Delhi, shows that in a warming world, dairy farmers no longer find the upkeep of exotic or foreign breeds cost-effective. CSE spoke to more than 20 dairy farmers from eight states, and almost all of them said that the exotic breeds, adapted to temperate regions, struggle in heat and humidity. In contrast, indigenous breeds, be it the Gir from Gujarat, which is known for its potential for milk production, or Lakhimi from Assam, which is used both as a milch and draught animal, are more adaptable to weather changes as they have been an integral part of Indian agriculture for centuries.

### Better adaptability

"In my childhood, we had only desi (indigenous) nondescript cows. In the 1990s, my father decided to introduce Jersey cows into our herd. They did

provide more milk, but soon started falling sick and had difficulty conceiving," recalls Sudhakar Rajput, a farmer from Jaitpura village in Etawah. Now, he has only nondescript cattle and one Sahiwal cow—a native breed known for high yield and heat tolerance. "Desi cows rarely get sick and can easily be treated with traditional home remedies," Rajput adds.

R K Tripathi, veterinary officer at the District Veterinary Hospital in Etawah, says, "Almost 15-16 of the cows he treats in a day are exotic or crossbred, and only two to four are indigenous."

"Native animals exhibit heat tolerance, disease resistance and ability to thrive in extreme climates," says D K Sadana, former head of animal genetic resources at the Indian Council of Agricultural Research's (ICAR's) National Bureau of Animal Genetic Resources. They have smaller bodies, more sweat glands, and well-developed dewlaps, which help dissipate heat more effectively. "Tharparkar (found mainly in Rajasthan and used as a dual purpose animal) is a great example of indigenous cattle's adaptability to local climate. It becomes darker in winter to absorb more heat," adds Ravinder Kumar, principal scientist, ICAR-Central Institute for Research on Cattle.

A 2023 study by researchers in Uttar Pradesh, published in the Asian Journal of Dairy and Food Research, says that indigenous breeds are renowned for their resistance to illnesses including the vector-borne trypanosomiasis, and tick-borne babesiosis and theileriosis. For instance, tropical theileriosis is more severe in European breeds, with a mortality rate of 40-90 per cent, while the mortality rate in indigenous breeds from endemic areas can be 3 per cent, says a 2021 study by researchers from Tamil Nadu Veterinary and Animal Sciences University, Chennai.

### Long-term gains

Exotic and crossbred cattle were introduced to boost milk production. But unlike indigenous breeds, production drops quickly for crossbreds as they lose hybrid vigour (improved function due to cross-breeding).

According to a 2020 study conducted by ICAR-National Dairy Research Institute (NDRI), Karnal, Karan Swiss, a cross of Brown Swiss and Sahiwal developed at the institute, excelled in milk production by 56 per cent in the first generation but this dropped by 24.5 per cent in the second.

Also, unlike indigenous cattle, purchase and maintenance of exotic or crossbred cattle is expensive. They need a richer diet, regular baths, fans and separate enclosures. "In the absence of adequate nutrition, they (exotic and crossbred cattle) not only become more disease-prone but also barren," says Ravinder Kumar. But indigenous cattle thrive on grazing and need no special care or enclosure.

### Mitigation potential

As the world moves towards climate mitigation and adaptation, all sectors including agriculture are being targeted for emission reduction. A major constituent of agricultural emissions is enteric fermentation, in which ruminants such as cattle, sheep and goats release the potent greenhouse gas, methane. The Union Ministry of Environment, Forest and Climate Change's Third Biennial Update Report (BUR) to the UN Framework Convention on Climate Change says that in 2016, the Indian agriculture sector emitted 407.8 million tonnes of carbon dioxide-equivalent, of which 54.7 per cent was from enteric fermentation.

The country's large cattle numbers are often painted as the problem for these emissions. However, according to BUR, indigenous dairy cattle account for only 28±5 kg of methane emissions a head per year, whereas a crossbred dairy cattle releases 43±5 kg of methane in a year. Ashutosh, principal scientist at NDRI's National Innovation in Climate Resilient Agriculture Centre, says indigenous cattle account for fewer emissions due to their smaller size and efficient metabolism. They thrive in domestic, small-holder and pastoral systems, which further reduces their carbon footprint.

### Conservation drive

India regards emissions from cattle as "survival emissions" due to the crucial role of farming and cattle rearing in providing food, sustenance and livelihood. Indigenous cattle breeds can no doubt help India reduce its greenhouse gas emissions, support farmers economically and help rural communities adapt to and mitigate climate change impacts. The country has some initiatives that focus on conservation of indigenous cattle. The Union government's Rashtriya Gokul Mission, launched in December 2014 at an outlay of Rs 2,025 crore, has several components. These include ensuring availability of germplasm with high genetic merit, accelerated breed improvement through artificial insemination, in vitro fertilisation (IVF), sex sorted semen centres, farmer awareness and skill development. The scheme is continued for 2021-26 at an outlay of Rs 2,400 crore.

However, India faces a shortage of semen of indigenous cattle breeds. As of 2019-20, the country has 56 semen stations. But most semen stations cater to the demand for buffalo semen and the germplasm of exotic or crossbred cattle. Of the 37 indigenous cattle breeds known for milk production, the semen stations provide germplasm for only nine breeds that are in demand under state breeding policies. On average, each station produce limited semen doses for two to three indigenous breeds. The lack of quality semen for most indigenous breeds also makes breeders dependent on scrub bulls or those of unknown genetic potential.

In the first phase of the Rashtriya Gokul Mission, the number of high genetic merit bulls being targeted for artificial insemination was set at 5,417. But by 2019, only 1,841 bulls were inducted, says a 2019 assessment of the Mission done under the Centre's Transformation of Aspirational District Programme. Similarly, while the mission aimed for 50 embryo transfer technology and IVF laboratories and 10 sex sorted semen stations, only 19 laboratories are sanctioned and four stations working so far, as per the 49th report of the Parliamentary Standing Committee on Agriculture, Animal Husbandry and Food Processing.

There are also challenges in building infrastructure and in facilitating breeding under the Mission. An official with the Department of Animal Husbandry and Dairying says, on the condition of anonymity, that adoption of IVF faces reluctance among farmers. The predominantly non-intensive and small herd structure of India's dairy sector also poses challenges for effective implementation of organised breeding.

Some states have taken initiatives to address these challenges. Uttar Pradesh, Haryana and Bihar are

providing incentives to farmers for purchasing and rearing indigenous cows not only for milk but also their use in natural and organic farming. Himachal Pradesh is promoting indigenous cows not only for milk but also their use in natural and organic farming.

Apart from improving population, focus is also needed to improve the demand for indigenous cattle milk. Urban commercial dairies in particular are driven by profit and prioritise maximising milk production. Hemant Khurana from Khurana Dairy in Ghaziabad notes that while demand for desi cow's milk is rising, dairies prefer crossbred cattle and buffalos for their milk quantity and fat content. There is an increasing trend of upscale boutique dairies that only sell milk from purebred indigenous cattle. But limited demand and lack of awareness among consumers means they are unable

to reap the benefits of economy of scale and sell at premium prices (Rs 120-

### Better for long haul

Year	Indigenous/Nondescript Females (Million)	Exotic/Crossbred Females (Million)	Buffalo Females (Million)
2007	14.95	5.5	80.25
2012	15.01	13.71	100.73
2019	17.0	137.5	104.50

### Policy push

State	Policy	Impact
Uttar Pradesh	Subsidy on purchase of indigenous cows	Increased demand for indigenous cows
Haryana	Subsidy on purchase of indigenous cows	Increased demand for indigenous cows
Bihar	Subsidy on purchase of indigenous cows	Increased demand for indigenous cows

to reap the benefits of economy of scale and sell at premium prices (Rs 120-170 per litre) to a smaller group of clients. Establishing milk co-operatives to promote desi cow milk could improve demand.

## Horticulture boost: Litchi cultivation has expanded to 19 Indian states, according to officials

Muzaffarpur-based National Research Centre on Litchi is providing technical help, plants and training to farmers with the sole aim of expanding the fruit's cultivation across India.

Litchi, the sweet and juicy fruit of India's hot summers, is no longer restricted to Muzaffarpur in Bihar. It is now being cultivated across 19 Indian states, an official has told.

"It may sound ambitious but is true. Litchi cultivation for commercial purposes is going on in 19 states. We are providing technical help, plants and training to farmers with the sole aim of expanding the fruit's cultivation across India," Muzaffarpur-based National Research Centre on Litchi (NRCL) director Bikash Das said.



He said farmers in other states have been taking the lead to cultivate litchi for commercial production. This was not the case a few years ago. "NRCL scientists are visiting farmers and boosting their confidence to go ahead with litchi cultivation. This is resulting in the expansion of litchi cultivation," Das said.

Litchi cultivation for commercial production has started in Andhra Pradesh, Tamil Nadu, Karnataka, Uttar Pradesh, Himachal Pradesh, Madhya Pradesh, Odisha, Manipur, Assam, Punjab, Maharashtra, Jammu and Kashmir, Gujarat, Arunachal Pradesh, Rajasthan and Mizoram. More than 0.1 million hectares of land are under litchi cultivation in India as per latest official data.

The NRCL is preparing thousands of litchi saplings at its nursery each year. It is doing so to supply them to farmers in different states. The centre provides saplings of its famous Shahi litchi, besides popular varieties like China, Gandki Lalima, Gandki Sampada and Gandki Yogita, to farmers in other states.

Das said the litchi cultivation expansion plan was based on a scientific study that found suitable soil and climate for the fruit's cultivation in other states.

NRCL scientists pointed out that litchi is considered to be a very sensitive



fruit as far as temperature, rainfall and humidity are concerned. Besides, it require soil suitability as well. Variations in temperature and unfriendly climatic conditions have badly hit litchi crops in recent years as the fruit can crack, becoming smaller in size and less sweet and juicy.

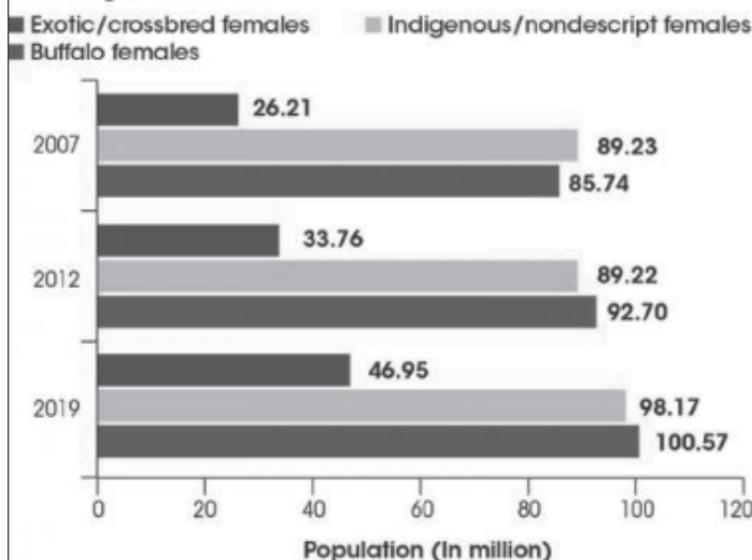
Litchi cultivation may have expanded. But it will take some time for this to transform into fullscale commercial production, Das said. Saplings planted in orchards take a few years to bear fruit.

The fruit mainly grows in the foothills of the Himalayas in Uttarakhand, Bihar, West Bengal and Jharkhand. Litchi cultivation is spread across over 32,000 hectares in Bihar alone. This accounts for nearly 40 per cent of India's litchi production. Bihar is followed by West Bengal (12 per cent of the total) and Jharkhand (10 per cent).

Litchi was sporadically cultivated earlier in Odisha, Chhattishgarh, Madhya Pradesh and Assam. But this was not for commercial production. NRCL scientists introduced litchi cultivation on a small scale in a few pockets of Karnataka and Kerala some years back. But it was not expanded on a large scale. In Karnataka, litchi harvest takes place in the winter, unlike summer in north India.

### Slow growth

Although indigenous cattle outnumber exotic breeds, their population is increasing at a lower rate



Source: Livestock Census 2007, 2012 and 2019

# Horoscope 2024: Annual astrological prediction for each zodiac

## Aries Horoscope 2024



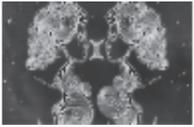
This year, you will get the benefit of planetary compatibility. There may be a lack of focus or concentration in education and career. Efforts will be successful. There will be a need for maintenance and modernization of property functions. There will be business changes. There will be ups and downs after May. There will be desired benefits. There will be transfer and promotion at the desired place in the job. Income from special work will increase. You will get support from senior people. Diseases like gas, bile, blood disorders, diabetes, etc. can occur. There may be tension and differences at home. Children will progress. A separate family business will start. Will be spent on auspicious work at home. There will be religious journeys and charitable works.

## Taurus Horoscope 2024



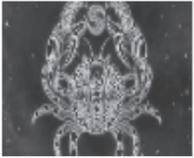
This festival will be beneficial from a business point of view. The work that has been pending for some time will be completed this year. Rivals will compromise. There will be work on expansion, renovation, and modernization of the industry on which expenditure will be incurred. There will be tension in partnership. The situation will change with the help of a senior person. The pending money will come back. There will be some wastage which will not yield any benefit. There may be the purchase of land, buildings, etc. Small auspicious works will happen at home. There will be concerns about children's health, education, etc. There will be struggles in education and career. There will be an impact due to conflict and elevation. Employed people will be successful in getting a favorable situation. Unwanted incidents may occur. Arthritis, eye pain, problems below the waist, or fractures may occur. Avoid diseases caused by gas and bile. There will be interest in occult knowledge and tantra-mantra. A religious journey is possible. Venus is the lord of Taurus, hence there will be natural attraction in your personality. Your height and physical appearance can easily attract people. You may be happy by nature. Your speech will be influential. You will have an amazing ability to learn any subject matter.

## Gemini Horoscope 2024



This year you will have to face a lot of ups and downs. There will be opportunities to get desired study and field in education and career. The desire to go to a big institute outside of higher education will be fulfilled. There will be tension with business partners. There will be progress in business with external support. There will be obstacles in setting up new enterprises. There are chances of buying property and increasing permanent capital in the house. You can get a pending loan. We have to adjust. The employee is likely to be promoted and transferred as per his wish and will have to face some problems. Body pain can cause neck, shoulder, and brain-related problems. Take care of your eating habits. Dust and smoke can cause allergies. This year will be auspicious for the unmarried. Be careful in matters of love. There will be peace in the house.

## Cancer Horoscope 2024



This year, the blessings will remain, and the intellectual level will improve. Will earn profit in business. There will be profit from the share market also. Political obstacles in business will be removed. Plans will be made for new ventures. There will be a promotion in the job and a desired transfer. Land, buildings, shops, etc. will be purchased for commercial use. Auspicious works will take place at home. Money will have to be replenished. A female person may suffer. Old differences will go away and unity will come. Reputation will increase. Obstacles in higher education will be removed. Problems like bone breakage and allergies etc. may occur. Avoid thyroid etc.

## Leo Horoscope 2024



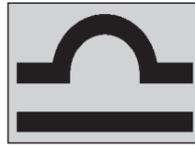
This year will bring growth in business. New ventures can be started. There will be political benefits. There are chances of getting special respect. Harmony has to be maintained in partnership. There are chances of getting the desired work completed through transfer. The economic structure will be strong. There will be profit from the stock market and promotion at the workplace. There will be some obstacles in the field of education and career, but ultimately you will get success. There may be tension in the family. Children will progress. Administrative investigation or some major obstacle may arise, so be careful. You may face injuries, sprains, fractures, and infectious diseases. Avoid dust, sunlight, smoke, and improper eating habits. Be careful while using vehicles and machinery.

## Virgo Horoscope 2024



The work done now will yield benefits. There will be opportunities for business expansion. There will be some obstacles. Problems will be solved with the help of a senior person. You may get political benefits. Any old property will be sold and converted into useful building land. Disagreements will increase at home. The prestige of the family will increase. Fulfilling your desires in education and career will result in success in exams. There will be huge expenditure on utility vehicles etc. and luxury items at home. There is no possibility of transfer, if it happens it will be at the desired place. There is a possibility of stomach-related diseases, diabetes, arthritis, etc. Pay attention to your eating habits. Do not eat tamasic food.

## Libra Horoscope 2024



This year will create hindrances but will not cause harm. Hard work and dedication, especially honest work, will pay off. Higher officials will cooperate. You will be successful in business. A lot of expenditure will be incurred in increasing the utility of land, buildings machinery, etc. Ancestral property may be obtained. The pending money will be received. There will be a desire for promotion and transfer in the job. You will be successful in higher education. Possibilities will increase in education. Auspicious works will take place at home. Some new work may happen at home. There may be stiffness in the shoulders, waist, etc., liver problems, stones, diabetes, indigestion, etc. Pay attention to your eating habits. Health will generally be fine.

## Scorpio Horoscope 2024



This year business will be profitable. Professional responsibility will increase. Will have to work harder. Any side business can also be started. Business expansion will be difficult. Political success can be achieved. Employed people will get the benefits of promotion etc. Holidays may be long. Circumstances will be difficult in the field of education and career. Patience and hard work will be required. The burden of renovation, repair in the house, and expenses on any relative, etc. will increase. There may be problems like vata-pitta disease, lung disease, pain in the left ear, pain in the eyes, etc. Avoid dust, smoke, and improper eating habits. Keep your daily routine organized. Scorpio people have attractive and powerful personalities. Since they work independently, they do not like interference from others. They are humorous and impulsive. They are enthusiastic but traditional in love.

## Sagittarius Horoscope 2024



This year, you will have to face many obstacles, but you will still get benefits. You may also have to handle the work of partner-manager etc. Due to a lack of coordination between demand and supply in business, profit opportunities will be missed. Expenses will increase. Change in the workplace may be against one's wishes and the effect of transfer etc. will reduce profits. You will get success in the field of career and education. There may be a lack of concentration. Children will progress in the family. There will be tension in the family. The influence of another member will increase. Auspicious work will happen. Women are at risk of diabetes, allergies, stomach disorders, and gynaecological diseases. Sagittarius people are spiritual and traditional thinkers. Despite having faith in God, they do not like hypocrisy and show off. Generous and affectionate personality, full of human qualities but quick to anger.

## Capricorn Horoscope 2024



This year will be progressive. Businesses related to communication mediums will give profits. To expand or establish an industry, expenditure will have to exceed the limit. You will get benefits in politics. There may be a trip abroad this year. The business will expand. Your transfer may be away from home. There will be expenditure on luxury items at home. Old disputes will be resolved. Property can be purchased. Children will progress and auspicious work will be accomplished. You will get success in the field of education and career with some obstacles. There may be problems like injuries, fractures, etc. stomach-related disorders, diabetes, etc. Avoid cold. Capricorn people are generous and sympathetic towards others. Are often shy. Adapt themselves according to circumstances. They are hardworking but it takes time to get the desired results.

## Aquarius Horoscope 2024



This year's business is due to the influence. Stuck money can be recovered. There will be expenditure on modernization which will bring profit. There will be obstacles in new ventures. There will be support from partners. Settling old liabilities will bring success in other areas. The transfer would be undesirable. There may be a change in work. There will be expenditure on the health of a member of the household. Children will progress. Auspicious works will take place at home. There are chances of getting ahead of others in the field of career and education. There may be a trip abroad for higher education. Take care of your eating habits. Aquarius people are philosophical and generous. Being charming and well-mannered, he quickly makes friends. But feel shy to express their talent in front of everyone.

## Pisces Horoscope 2024



This year will bring you success in every field. The desired work will be accomplished. The business will expand. The partnership will be successful. Big achievements can be achieved in politics. Work with the help of a business expert, you will get benefits. Building land will be purchased for the house. Do not trust any unknown person. There are chances of promotion in a job and transfer to the desired place. You will get high success in the field of education and career. There may be stomach and urinary infections, lung infections, heart problems, etc. Don't ignore your health in your enthusiasm for work. The health of elderly people at home can also be a cause for concern.

## Andhra horror: Odisha girl gang-raped for days in Vizag, 11 accused arrested

A 17-year-old girl from Odisha, who worked as a house help in Andhra Pradesh's Visakhapatnam, was allegedly gang raped by 13 people, of which 11 have been arrested, the police said on Tuesday.

The arrested accused were sent to judicial custody till January 12 while the police are looking for the remaining two accused.

"A minor girl was gang raped

for questioning, they didn't turn up and the victim didn't reveal any information regarding the incident even after they went to her house. But she came to the station on December 31 along with her parents and disclosed that she went with her friend Imran (from Jharkhand) and his friend Shoaib on her birthday when she was forced to have intercourse with them in a lodge near RK Beach. Later, the duo dropped the girl at her



by her boyfriend and his friend, and when she tried to end her life in RK Beach, she was approached by photographers who raped her for days before dropping her in Odisha. As soon as the incident came to light, the police department arrested all the accused, except two," the Andhra Pradesh Police said in a statement.

According to the police, the girl came to Visakhapatnam nine months ago from Odisha. She went missing on December 17 and a day later, her father filed a missing person's complaint in Visakhapatnam.

On December 23, the girl's father received a call from the Odisha Police about her whereabouts. The police team, along with the father, brought the girl back to Visakhapatnam on December 25.

The girl, grappling with mental trauma, disclosed the incident to her parents on December 31, police said. The police recorded her statement, revealing that 13 people had raped her on different dates at various lodges.

"When the police asked her parents to bring her the next day

workplace in the morning," the Andhra police said in the release.

The girl then went to the beach where she met some photographers, identified as Raju, Harish, Nagendra, and Gopi, who pretended to give her "moral strength". They took her to a lodge and gang raped her, police said.

Police also said that six more accused -- Srinu, Ashok, Naresh, Thambe, Eswar, and Praveen -- joined them in assaulting the girl till December 22.

On December 23, she was dropped off by one of the accused near a police station in Odisha with Rs 200 in hand. She was eventually provided shelter by police personnel who alerted her parents.

The police registered an FIR under the Protection of Children from Sexual Offences (POCSO) Act and other relevant sections. After an operation was launched, with teams deployed to Jharkhand and various locations in Visakhapatnam, the police arrested 11 accused.



**इफको नैनो यूरिया एवं इफको नैनो डीएपी का वादा, उपज अधिक और लाभ ज्यादा**

देश का आविष्कार, देश में बना, देश के किसानों को समर्पित

**इफको नैनो यूरिया तरल**

FCO अभिव्युक्ति दुनिया का पहला नैनो उर्वरक

- एक बोलत एक बोरी यूरिया के बराबर
- उत्पन्न में छुट्टि
- उत्पन्न की गुणवत्ता में सुधार
- सुदृढ़ता एवं क्षमिता
- परिचयन एवं संरक्षण तब तक नहीं खर्ची
- जल, वायु एवं मृदा प्रदूषण में खती
- सभी प्रकार की फसलों के लिए उपयुक्त
- उत्पन्न में अक्षय

**इफको नैनो डीएपी तरल**

FCO अभिव्युक्ति दुनिया का पहला नैनो उर्वरक

- फसल उत्पादना और गुणवत्ता में छुट्टि
- बीजों का संरक्षण बढ़ाए
- मंडरन और परिचयन में अक्षय
- किसान की आय बढ़ाए
- जड़ विकसत में सुधार करता है
- सतवार और फूलों की संख्या एवं फलों की अधिक छुट्टि



**INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED, PARADEEP UNIT**

**ଜେବିଆର୍ ହସ୍ପିଟାଲ ଡରାଫରୁ ନୂତନ ବର୍ଷର ହାର୍ଡିକ୍ ସୁଭେଚ୍ଛା ଓ ସୁଭିକାମନା**



**JBR HOSPITAL**  
THE MOST ADVANCED HOSPITAL

**OUR FACILITIES**

- 50 BEDED HOSPITAL
- VIP CABINS
- ICU
- NICU
- MODULAR OT
- PHYSIOTHERAPY
- CT SCAN
- DIGITAL ULTRASOUND
- GENERAL CHECK-UP
- ECG
- PATHOLOGY
- PHARMACY
- AMBULANCE
- 24X7 EMERGENCY
- ADVANCE DIGITAL X-RAY
- 24X7 DOCTOR CONSULTANCY

**DEPARTMENT**

- SKIN
- MEDICINE
- TB & CHEST
- PAEDIATRIC
- NEUROLOGY
- PULMONARY
- OBSTRACTINE
- ORTHOPAEDIC
- GYNOCOLOGY
- GENERAL SURGERY
- GASTROENTEROLOGY

**FULLY COMPUTERISED PATHOLOGY**

ବିଭିନ୍ନ ସ୍ନାୟୁ କଲ୍ୟାଣ ପୋକନା ବିମା କାର୍ତ୍ତଧାରାଣ ପାର୍ଲ ମାଗଣା ଅନ୍ତୋପଚାର ଓ ଚିକିତ୍ସା ସୁବିଧା ରପଲବ୍ଧ ।



YOUR HEALTH IS OUR PRIORITY

**24 HOUR SERVICE**



**CONTACT US :-** Dera, Talcher, Angul - 759103 | 06760-268199/268299, 7991070796

**ଝରାଜା ନବବର୍ଷର ହାର୍ଡିକ୍ ଅଭିନନ୍ଦନ**

**AAC LIGHT WEIGHT BLOCKS & FLYASH BRICKS AVAILABLE NOW**



**Opening Shortly**

**AZAD FLYASH BRICKS**

**NERA BANKADHARA LEVEL CROSSING, TALABEDA**

**Mob: 9437284494, 9437112478**