



# IYA NEWS

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## Diwali: Festival of Lights



**D**iwali, or Dipawali, is India's biggest and most important festival of the year. The festival gets its name from the row (awali) of clay lamps (deepa) that Indians light outside their homes to symbolize the inner light that protects from spiritual darkness. This festival is as important to Hindus as the Christmas holiday is to Christians.

### Lakshmi Pujan on Dipawali

An important part of Diwali festival is Lakshmi Puja. This puja is carried out by households and especially by the business community in India. It is also considered New Year by business people so much so that all new accounts are opened on this day after the ritual of praying to the Goddess of wealth, Lakshmi. This Hindu deity

also drawn to indicate the long awaited arrival of Goddess Lakshmi. Oil lamps are kept burning throughout the night to guide Lakshmi after her secret arrival in the nighttime.

### Lakshmi - Ganesh Pooja Sequence

It is considered auspicious to start every Pooja by taking Shri Ganesha's name and so is true with Laxmi Pujan as well. The idols are given a ritual bath and seated on a platform. Devotional song called aarti is sung and prasad is distributed amongst everyone gathered. Every family performs this Puja so as to please the Gods to shower them with prosperity and wellbeing. Fire crackers can be burst only after the pooja completion.

It is to be noted that this Puja is a combined worship of five deities. Lord Ganesha is worshipped first. Ma Lakshmi is worshipped in all her three forms as Mahalakshmi - the Goddess of Wealth and Prosperity, Mahasaraswati - the Goddess of Learning and Mahakali. Another God that is worshipped on Deewali is Lord Kuber - the Treasurer of Gods.

### The Tale of Ramayan

It is said that Diwali is celebrated on the account of Lord Rama's win and return to Ayodhya after 14 years of exile. In fact lighting and decorating of home is done actually to signify welcome of Lord Rama. The tale of Ramayan depicts all in detail.

### Tradition Diyas

The thing that best signifies the festival of lights, Diwali is Traditional Diya. In fact the most important part of Diwali celebration is lighting traditional earthen diyas at home and everywhere around. Thus when Diwali is round the corner, the one thing that is on high demand is beautifully carved Diyas. These days, a lot new varieties Of Diwali Diyas have into the market.

### Colorful Rangoli

Another very beautiful symbol of Diwali festival celebration is Rangoli. It is the name for the beautiful and colorful decoration of floors done with colored powder. Diwali Rangoli is in fact the traditional symbol of Diwali which excel with creativity.

### Delectable Sweets

Like any other festival, sweets sharing with near and dear ones is an important ritual of the

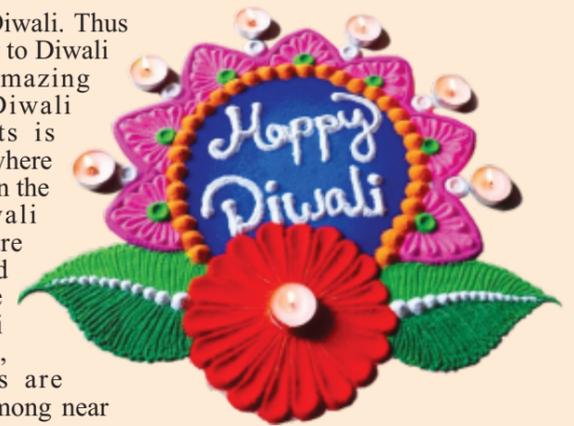
celebration of Diwali. Thus many days prior to Diwali celebration, amazing varieties of Diwali Special sweets is available everywhere around. In fact in the range of Diwali gifts, sweets are much preferred option. Just like Diwali Messages, Diwali sweets are shared by all among near and dear ones.

### The Ritual of Sharing Gifts

On Diwali, the ritual that spreads happiness, love and cheerful moments around is the ritual of gifting which is of great

significance among the people of India during Diwali. Just like every other important Diwali custom, the ritual of Diwali gifts sharing is of great importance among all. It is the way of strengthening the bond of love with near and dear ones, sharing happiness and love. In fact on Diwali, Corporate companies distribute Diwali gifts to staff.

Diwali is one of the cheerful festival celebrations of Indians. So celebrate it with utmost zeal and with utmost safety with family and friends.



Over the centuries, Diwali has become a national festival that's also enjoyed by non-Hindu communities. For instance, in Jainism, Diwali marks the nirvana, or spiritual awakening, of Lord Mahavira on October 15, 527 B.C.; in Sikhism, it honors the day that Guru Hargobind Ji, the Sixth Sikh Guru, was freed from imprisonment. Buddhists in India celebrate Diwali as well.

Deepavali is a festival which has gained its popularity owing to the nature of its celebrations. It has long been considered to have a religious significance which is now lost in the universal feelings of goodness and joy which envelop everyone on this day. Of all traditional Indian festivals, Diwali can be safely said to be the most widely accepted and loved by the people of this country. It is one of those rare occasions which give Indians a unique identity.

represents prosperity, wealth and good fortune.

### Diwali Pooja Preparations

Deepavali Pooja is performed before the sun sets over the dark night of amavasya. The actual time for this Puja is calculated by religious scholars and pundits which is declared in newspapers the day before Dipawali. When preparing for the traditional Pooja, idols of Lakshmi - Ganesh, kalash, roli, mouli, coins, rice grains, kumkum for tilak, betel leaves and betel nuts, incense sticks, camphor, flowers, garlands are required. For offerings and prasad, sweets and fruits are needed.

One essential before the puja is a neat and clean house illuminated with Diyas and candles welcoming Goddess Laxmi and driving away evil spirits. Rangolis are drawn at the entrance and small footprints with rice flour and vermilion are



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# AGRICULTURE

## Two Spices of Odisha : From Kitchen to Clinic

Spice can be defined as a plant or a specific part of it that is valued for providing colour and aromatic flavour along with stimulating odour for use in cooking and in condiments, as well as in candies, cosmetics, fragrances, and medications.

and ginger are the two most essential spice crops grown in Odisha and more than 50% of these crop growers are tribals. With indigenous methods, turmeric and ginger are grown mainly by tribes of the Kandhamal, Koraput, and

consist of leaf sheath, petiole and leaf blade. Leaves are elliptic-oblong or oblong, caudate, acuminate, glabrous both sides, base more or less attenuate. The rhizome, from which the turmeric is derived, is tuberous, with a rough and segmented skin and mature beneath the foliage in the ground. The rhizomes are cylindrical, ovoid and branched in shape and yellow-orange in colour. Flowers are pale yellow in spikes.

### Phytochemistry and Nutrient Composition

The curcuminoids are the main secondary metabolites present in the rhizome, which is considered to be responsible for the bioactivity of the plant, of which curcumin (1,7-bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-Dione), dimethoxycurcumin, and bisdimethoxy-curcumin are the main compounds. Nutritional analysis showed that 100 g of turmeric contains 390 kcal energy, 10 g total fat, 3 g saturated fat, 0 mg cholesterol, 0.2 g calcium, 0.26 g phosphorous, 10 mg sodium,

biscuits, cake icings, and sauces. Recent studies indicate that pairing turmeric with fresh ground black pepper creates faster absorption into the bloodstream and increases the bioavailability of curcumin by over 2,000 times, making it far more beneficial to the body and its healing (Fenster 2014).

### Therapeutic Uses of Haldi

In folk medicine, turmeric has been used in therapeutic preparations over the centuries in different parts of the world. Historically, turmeric has been used as a medicine in Odisha for numerous ailments which continue to be utilized today. In Odisha, turmeric rhizomes are utilized in stomachache, as a blood purifier, relieving gas, dispelling worms, improving digestion, regulating menstruation, dissolving gallstones, relieving rheumatoid arthritis, colic, toothache, chest pain, conjunctivitis, smallpox, chicken pox, wound healing, urinary tract infections, liver ailments and diabetes. It is also used for its anti-inflammatory, choleric, antimicrobial, and carminative properties. Traditionally, it has also been recognized for enhancing the beauty and health of the skin. Turmeric as medicine is taken internally in the form of fresh juice, boiled tea, tinctures, or powder, and topically as creams, lotions, pastes, and ointments.

### Socio-religious Use of Haldi

Haldi is regarded as a substance of purity in Hindu culture. Considered highly auspicious in Odisha, turmeric is used for various socio religious rituals. During the annual marriage festival of Lord Shiva and Parvati, their idols are bathed after applying turmeric paste. This function is called Shital Sasthi prevalent in coastal and western Odisha. The idols of the village God and Goddess also get bathed with turmeric and sandalwood daily and during the festival season. At the time of bratopanayana or upanayana, a ceremony in connection with the wearing of sacred thread by the Brahmins, the sacred thread is washed in water mixed with turmeric paste accompanied with enchanting of mantras. As an auspicious act, even the wedding cards are also anointed with turmeric in different regions of Odisha. In wedding ceremonies, the bride takes a bath in water added with turmeric paste before the bridegroom arrives and puts on Baula Pata which is washed with turmeric solution and from that time onwards the lady is called Badua Kanya. The sister gives a little bit of turmeric in rakhi (an anklet) that is tied by her around the wrist of her brothers at the time of Raksha Bandhan a festival celebrated all over Odisha in the monsoon season. The use of turmeric powder, paste and solution in grihapravesh ceremony, is a

common custom all over Odisha. A similar ceremony is also held when new cows and animals are bought to home. The use of turmeric is also found in death rituals in various parts of Odisha.

### Ginger (*Zingiber officinale* Rosc.)

Ginger, botanically known as *Zingiber officinale* Roscoe, belongs to the Zingiberaceae family. It is a perennial herbaceous monocotyledon, usually grown as annuals, and is utilized worldwide as a spice, food, flavouring agent, and medicine. The rhizome is the main portion of ginger that is consumed. It is believed to have



Spices are also used as preservatives, appetizers, digestives, and aphrodisiacs. The first scientific research on the influence of spices as preservatives was presented in the 1880s and displayed the antimicrobial properties of cinnamon oil against *Bacillus anthracis* spores (Tajkarimi et al., 2010). It is estimated that approximately 400 spices are used around the world, although only about 70 spices are officially recognized. Spices have a long history of both culinary uses and of providing health benefits. Ancient Egyptian Papyri from 1555 BC record the use of coriander, fennel, cumin, and garlic (Bellamy and Pfister 1992). It is reported that the people of Mesopotamia were growing garlic as early as 3000 BC. Dried mint leaves have been found in Egyptian pyramids dating around 1000 BC. (Chevallier 1996). Hippocrates (460–377 BCE) had a repertoire of 300 remedies that included garlic and cinnamon (Bellamy and Pfister 1992). In India, the Ayurveda, the Vedas, Sushruta, and Charaka referenced spices such as cinnamon, cardamom, ginger, turmeric, black pepper, and cumin for healing purposes.

Odisha grows several spices like chillies, ginger, turmeric, coriander, and garlic in an area of 2.37 lakh ha with a production of about 2.17 lakh tonnes. Turmeric

Gajapati districts. These two spice crops are also cultivated in some specific agroclimatic zones of the state.

### *Curcuma longa* L. (Haldi)

*Curcuma longa* L. is commonly known as turmeric in English and Haldi in Odia. The name haldi is derived from the Sanskrit word 'haridra' and the turmeric derives from the Latin word terra merita (meritorious earth), referring to the color of ground turmeric. Even though it is grown in different tropical and subtropical regions around the world, it is originally from India (Amalraj et al. 2017). Evidence indicates that the use of turmeric in India has begun in ancient times in connection with the Shakti worship or the worship of the divine mother or Goddess by the preAryans and later as a commodity of trade as a colouring material and as a condiment. Turmeric reached China by 700 AD, East Africa by 800 AD, West Africa by 1200 AD and started becoming popular throughout the world.



2500 mg potassium, 47.5 mg iron, 0.9 mg thiamine, 0.19 mg riboflavin, 4.8 mg niacin, 50 mg ascorbic acid, 69.9 g total carbohydrates, 21 g dietary fiber, 3 g sugars, and 8 g protein (Balakrishnan 2007). It has been estimated that an adult in India can eat as much as 4 g of turmeric daily, which could provide 80–200 mg/day of the bioactive component curcumin.

### Role of Turmeric in Odishan Food

Turmeric has a long history of use as a spice and food additive, widely used to ameliorate foodstuffs' palatability and storage stability through its specific yellow colour, taste, and antioxidant potential. It is one of the most remarkable ingredients in Odishan cuisine and is widely utilized in household cooking. Turmeric is added during the cooking times depending upon the type of dishes like vegetables, chicken, fish or meat. It is also used in manufactured food products such as canned beverages, dairy products, baked products, ice cream, yellow cakes, yogurt, orange juice,

### Botanical Description

*Curcuma longa* L. is a rhizomatous herbaceous plant belonging to the family Zingiberaceae. Individual plants grow to a height of 1m (Fig.1). The leaves are arranged in alternate manner and arranged in two rows. They



originated from South-East Asia or India (Wakchaure and Ganguly 2018). Ginger's current name comes from the Sanskrit word sringaveram, meaning "horn root," based on the appearance of the rhizome. In Greek, it was called ziggiberis, in Hindi adrak and in Latin, zinziberi. In Odisha, fresh rhizome is commonly called as



'Ada' while dried rhizome is called as 'Sunthi'. *Zingiber officinale* was introduced to northern Europe by the Romans who got it from Arab traders and was one of the most popular spices in the Middle Ages (Kala et al. 2016). In the thirteenth century, it was introduced to East Africa by the Arabs. In West African and other parts of the tropics, it was introduced by the Portuguese in the sixteenth century. The spice was known in Germany and France in the ninth century and in England in the tenth century for its medicinal properties. Ginger was an exceedingly important article of trade and was exported from India to the Roman Empire over 2000 years ago, where it was especially valued for its medicinal properties.

Continued Page 5

# RURAL DEVELOPMENT

## Service Delivery Standards of Panchayat

Pradeep Kumar Panda, Economist, Bhubaneswar

The 73rd Amendment of the Constitution of India has institutionalized the Panchayats to function as units of local self-government enabling inclusiveness both in participation and decision making process at all the levels. The act recognizes panchayat as the most accessible and approachable forms of governments for people living in rural India, and the delivery of basic services required by them.

The 73rd amendment to the Constitution, in the Eleventh Schedule, also lists 29 subjects which need involvement of panchayat. More than 27 years have lapsed after the Constitutional amendment, but wide variations exist across states in the level of powers and functions devolved to Panchayats.

The Fifteenth Finance Commission (XV FC) award has created an enormous opportunity for responsive local governance at the cutting edge institutional level of the panchayats by

sources of revenue, lack of technical expertise, etc. are haunting a majority of panchayats in the country.

However, seriousness of these constraints varies not only across States, but also panchayats within a State. Hence, there is a dire need to understand at the prevailing situation across select States to address these issues.

It is imperative that panchayats must provide quality services to the citizens at an affordable price, and ensure equal access for all while remaining accountable to the panchayats. The issue of setting service delivery standards becomes paramount.

Service delivery standards can be described as the minimum level of expected services the service provider commits to deliver to the community in terms of quality, process, time and cost. These service delivery standards may vary based on the preparedness of the State and local circumstances.

funds for maintenance of common assets, inadequate planning at panchayats level, huge gap between powers given and used, and procedural delays

Many states are yet to enact 'Public Service Delivery Act'. Quality Standards for services delivery as citizens charter is yet to be made in most panchayats.



for many services like certificates are issued involving more than one department.

Problems faced by the citizens in availing public services are poor awareness about the services to be provided by panchayats, service delivery failures, no penalty being imposed on the officials who failed to provide the services sought by the citizens, lengthy procedures, fewer meetings, e-seva kendra location, lack of separate places for dumping refuse, and no formal grievance redressal mechanism at all panchayat level.

Financial resources should consider ensuring minimum per capita allocation and incentives and disincentives for Panchayat staff have to be included in Acts.

Creation of Grievance Redressal System at all panchayat level, adequate Human Resources, synchronizing services (e.g., latrines construction, water connection and electricity supply), upgradation and adoption of technology, and establishment of e-seva or Common Service Centres closer to panchayats will address the issue.

There are large variations in

terms of cost and time for delivery of services across India. These variations may be due to the local conditions for sourcing and providing services like drinking water. There are some services which are free in some States and charged in other States.

Researchers and policy makers have observed that free services are not valued, and hence suggested providing such services recovering at least the operational cost. There are still some services that need to be provided free of cost, and few other services that need to be provided with minimum possible charges being sought by the vulnerable sections of the society.

All the charges need to be revised from time to time using cost of living index. The standards suggested are to be considered as desirable standards, which may be included in the Citizens Charter. There are some states which exceed these standards, and many which are far below from these standards.

All the states may, over a time frame of 3 to 5 years, move towards these standards, and if technology is properly adopted, these standards perhaps can easily be exceeded providing many of these services online on real-time basis.



assuring fiscal transfers to panchayat (Rs. 2,36,805 crore) during the period 2021-22 to 2025-26.

The grant is intended to be used to improve delivery of basic civic services including drinking water supply, sanitation including sewerage and solid waste management, storm water drainage, maintenance of community assets, maintenance of roads, footpaths, street-lights, burial and cremation grounds and other basic functions assigned to them under their respective statutes.

The XV FC also strongly recommended that the panchayats need to improve the quality of services they deliver and strengthen accounting, record keeping and accountability mechanisms.

However, delivery of public services at all level of panchayats continues to be a focus issue for improving efficiencies and effectiveness as they are unable to deliver quality and timely services. Host of constraints such as: lack of adequate staff and hence inability to provide frontline workers, insufficient funds in terms of allocation, inability to raise adequate own

Setting up of such service benchmarks will help the States and panchayats to set their performance requirements and targets related to service delivery and design institutional strengthening and other capacity building initiatives to attain those benchmarks.

Madhya Pradesh, Bihar, Rajasthan, Uttar Pradesh, Karnataka, Kerala, West Bengal, Jharkhand, Himachal Pradesh, Chhattisgarh, Gujarat along with a few other States have already enacted Public Services Delivery Acts or Right to Public Services Acts and notified list of public services to ensure delivery of time bound public services to citizens. However, prominence of panchayats and their respective roles in delivery of specific services featured in those Acts may vary across States.

Problems faced by the panchayats in delivery of public services are irregularity and inadequacy of funds flow, lack of autonomy for revenue generation, tax compliance, inadequate staff and vacancies, sanitation, irregular of power Supply and fluctuation, capacity building of staff and elected representatives, no separate

From Page 09 (Evolution of Mutual....)

**Problems related to the investors:** The success of a mutual fund depends upon the confidence of the investors. UTI has established a marketing network of branches, chief representatives, collection centers and franchise offices through out the country. The marketing network of UTI is its unique strength as compared to other mutual funds. UTI could mobilize Rs.75159 Cr. of investible funds through its 87 schemes due to its well established marketing network. All other mutual funds could not establish such a marketing network and can't compete with UTI in mobilizing public savings from rural and semi-urban areas. All the problems related to the investors are, lack of awareness and poor after sales service to the investors. The investors believed, so far, that the mutual funds promoted by UTI, LIC, and nationalized banks are guaranteed by the Central Govt. The majority of the new investors don't understand the concept, operations and advantages of investment in mutual funds before investing. The researcher had undertaken surveys of individual investors and members of Ahmedabad Stock Exchange to analyse the awareness of investors about the mutual fund schemes. It was observed that small businessmen, farmers and persons belonging to rural and semi-urban areas in low income group had no awareness about the mutual funds. The queries received from the investors are promptly attended by all the private sector mutual funds. There are delays in attending queries by the transfer agents in case of UTI due to large number of queries received by them.

**Problems related to working:** The investible funds of the mutual funds increase when sales are more than the redemptions and decrease when the redemptions are more than sales creating the problems of maintaining liquidity. The investors prefer to invest in equity funds during boom period and shift their investments to debt funds during the recession period. The most profitable and high income & appreciation potential stocks during the boom period or at the time of investing funds in such stocks may become illiquid over a period of time. The investors can't take decisions of investment due to unavailability of track records of working. HDFC and Standard Chartered Mutual Funds started their operations in 2000, all other mutual funds except UTI have the track record of 3 to 5 years. Unless the track records of working of mutual funds is available covering the several stock market booms and crashes, the investors can't judge which schemes or mutual funds are better alternatives for investments. There are several problems related to UTI such as non-disclosure of portfolio, inter scheme transfer of funds, lack of professional fund managers, sale & repurchase of units of US-64 at prices not related to its NAV, bureaucratic working, etc. AMFI has constituted committees on valuation, best practices and credit policy and working groups on valuation of gilt-securities, standardization of disclosure, pensions, etc. to ensure uniform working and disclosure practices.

**Problems related to performance:** The investor prefers safety of the principal amount, regular returns, long-term growth, income tax benefits, etc. The mutual fund schemes have been designed based on the preferences of the investors, changes in stock/capital market, returns on various instruments and changing profile of the investors. The schemes are framed and conceptualized by the top management of the mutual funds and marketed by their branches and through the agents. The agents and the sales executives of the mutual funds assure higher returns to the investors and paint a rosy picture about the mutual funds while marketing schemes. The mutual funds in our country have been quite wrongly promoted as an alternative to equity investing and created very high expectations in the minds of the investors.

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# ODI WORLD CUP 2023

## Rare Feat

Team India skipper Rohit Sharma is in great form in the calendar year. While AB de Villiers hit 58 sixes in 2015, enjoying my batting,” said Rohit after the match.



ongoing ICC ODI World Cup 2023. The aggressive right-handed batsman achieved a rare feat during the match against New Zealand in Dharamsala on Sunday.

The Indian captain became the first Indian player, third overall, to hit 50 or more ODI sixes in a calendar year. Rohit achieved the feat after hitting New Zealand pacer Matt Henry for a six in the second over of India's 274-run chase.

Prior to Rohit, only South Africa's AB de Villiers and West Indies great Chris Gayle had struck or more maximums in a

Chris Gayle struck 56 sixes in 2019.

During India's run chase, Rohit hit a quickfire 46 before Lockie Ferguson dismissed him in the 12th over.

“Good start to the tournament. Job is half done. Important to stay balanced. Not to think too far ahead. Important to stay in the present. Shami took the opportunity with both hands. He has the experience in these conditions and is a class bowler. At one stage, we were looking at 300 plus. Credit to our bowlers at the back end. I am



## Kuldeep Yadav struggled against New Zealand

Team India has so far a dream run in the ongoing ICC ODI World Cup 2023. They have so far won all of their five matches and almost sealed the semifinal spot. However, tough test awaits the Men in Blue in the knockout stage.

### Attack against Spin

The Men in Blue might have looked strong both on paper and ground, however, there are chinks in their armor which is still to be exposed. Against New Zealand, aggressive batter Daryl Mitchell showed the way by attacking India's wicket taking spinner Kuldeep Yadav in the middle overs. Had the pacers led by Mohammed Shami not made a comeback, the Kiwis would have easily scored around 350 runs. The top teams must have taken a leaf out of Mitchell's book and they will aim to attack Indian spinners and not allow them to settle anymore.

### Pandya's Injury

Star all-rounder Hardik Pandya gives the much

needed balance to the Indian team. However, he is often injury-prone. He has been injured again in the most crucial time of the mega event. Though he is likely to make a comeback to the Indian team in the knockout stage of the tournament, his bowling with an injured ankle will remain a concern. Moreover, Mohammed Shami's brilliant performance will always put a question mark on Pandya's inclusion in the team as he won't be able to bowl with the same intensity again.

### Long Tail

Most of the strong teams have good batsmen in their lower middle order up to number nine and ten. However, Team India has a long tail. After the number seven batsman, they have at least four to five batters in the lower middle order who don't know how to wield the willow effectively. Luckily, India's long tail has not been exposed in the mega event so far thanks to the in-form top batters. But the law of average will soon catch up and the lower batting order is going to be exposed sooner or later in this long tournament.



## MS Dhoni makes big statement on India's chances

Team India is currently on a dream run in the ongoing ICC ODI World Cup 2023. The Men in Blue are occupying the top spot in the points table with 10 points after winning all of their five matches. With another victory from their remaining matches, they will almost seal their spot in the semifinals.

The last time India won the ODI Cricket World Cup in 2011, MS Dhoni was the skipper. The former Captain Cool's opinion on India's chances really matters. MS Dhoni has spoken about India's chances to win the World Cup for the first time during a recent event.

“It's a very good team. Bohot accha balance hai team ka. Harlog acha khel rahe hain (The team's balance is extremely good. All the players are playing well). So everything is looking very good. Isse zyada main kuch nahi bolunga, baaki samajhdaar ko ishara kaafi hai (I won't say anything more than this. For the wise, the signal is enough),” said Dhoni.

However, former off-spinner Harbhajan Singh had said in a recent interview that he doesn't feel the 2023 World Cup's Indian team is as united as the 2011 World Cup team was.

As per Bhajji, the entire team in 2011 respected Tendulkar to the extent that all the players wanted to win the World Cup for him. But, he isn't sure if players are that united about Kohli in the current team.



## Kohli compared with Messi



Team India's star batsman Virat Kohli is currently in prolific form in the ongoing ICC ODI World Cup 2023. In just five games, Kohli has garnered a total of 354 runs at an impressive average of 118, with three fifties and a century.

Meanwhile, former England captain Michael Vaughan is not surprised with Kohli's brilliant show. The former great has compared Kohli's impact with that of Argentinian football superstar and World Cup winner Lionel Messi.

As per Vaughan, these great players always come into their own on the big stage.

“Virat Kohli in the chase, there is no one better. It wouldn't surprise me if he gets a 49th century before the final, and his 50th in the final. It's written in the stars,” said Vaughan during an interview.

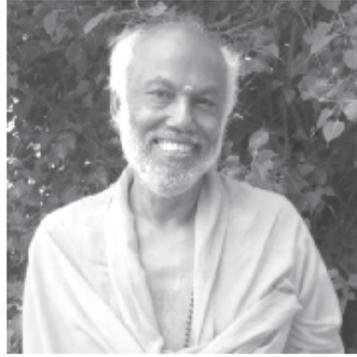
“I actually put it on social media – great, great players always arrive in World Cups. It defines their legacies. Look at the footballers, Lionel Messi had to win the World Cup for Argentina, and he did it. Virat has already won a World Cup but you just feel he is going to drive the Indian team all the way,” he added.

Vaughan feels that the Men in Blue are head and shoulders above the rest in the 2023 World Cup and are the firm favorites to win the title. The former cricketer believes it will be tough for any team to trigger a collapse of the strong Indian batting line-up.

# SELF KNOWLEDGE

## RANDOM THOUGHTS

Swami Suddhananda



If the best people can put up with the worst of inconveniences then the average man has no hope of growing in life - both materially and spiritually.

As even the poverty of the material kind can move a sensitive heart, the poverty of the mental or intellectual kind should move the sensitive even deeper as that intellectual poverty is the greatest single reason for the material poverty of the millions in an affluent world.

As we keep travelling, we see varieties of people in their own little places. Even after the longest to travel, the destination never ends. Man must find that ultimate destination here and now within himself.

Nobody or nothing can bring you happiness. In case you

All limitations of birth, growth and death belong to the world, the body and mind, whereas the truth of one's own Self remains the same-Uncreated, Changeless and Ever Existent.

-Swami Suddhananda

conclude somebody or something causes happiness, that's something or somebody shall be the cause of your unhappiness.

With one Swamiji we learn the teaching. With another we learn public speech and the art of communication. One was impressive in teaching while the other was impressive in sharing it with the masses.

To write a book on all aspects of Hinduism – the wonderful thoughts and the prevalent unjustifiable systems would be a daunting task.

Everybody comes and sings or shouts in the temple, nobody listens to God.

Those who do not have the faculty to think (like animals) have no subjective problem. But others have to be careful and not know how to handle them. So also with human beings. We have to be careful of those who do not think and are not interested in learning to think. They will be as aggressive or defensive as animals with the slightest provocation.

The speed breakers are like obstacles. Some people can create obstacles and relax as even the villagers who put the

speed breakers.

For a man walking on the road, the speed breaker is in no way an obstacle. The speedier the vehicle, the greater the impact on hitting the bump. For a man in tremendous hurry, every obstacle becomes almost a crisis, but nothing seems to affect the man who does not do anything. That is why unproductive people philosophise a lot and talk about the 'glory' of non-involvement.

The other day I was travelling to NICL. As long as the road was smooth, there was absolutely no noise from the car. But the moment there was a rough patch different kinds of noise were coming from different parts. The moment the car touched a smooth patch again there was no noise.

Life seems to be like that, where on a materially or emotionally smooth patch there seems to be no noise. The moment there is a rough but the ugliness of the personality surfaces.

We have to fix the car, the driver as well as the road. Let us not forget the traffic or the drivers ahead and those who are coming behind. To make life enjoyable we have to take care of a few things; the mind, the body, the material riches or conditions and the people we encounter in life. The most comfortable life is where the mind is happy, the body is healthy, material comforts are

available and the people we are surrounded by are sensitive and excellent.

Wisdom and Self-Knowledge will give us the strength to be happy in spite of adverse conditions at all these levels but that is not what life's all about. Definitely that is the

foundation for happiness and happy living. But a superstructure that can help thousands around will depend upon a lot of the condition of the type of mind, the body, the material riches and the types of people around.

Whatever we dream is somebody else's reality. If that person is not happy we cannot be happy by fulfilling the dream of being a millionaire or a renunciate. As in the realm of riches or achievements, so also in the realm of faith. If the follower of a faith is not happy, there is no sanity in dreaming that another who converts to that faith will be happy. It is not by dreaming or achieving this or that somebody can be happy. It is only by knowing one's own self, that somebody can discover the ultimate happiness.

It is not that the rich man is respected but it is his sacrifice. It is not that the intellectual is admired but the idea he has shared. Similarly a person is not loved because he/she is handsome/beautiful but because of the beauty or strength he/she has shared.

That is why even if somebody-a wise man-loves everybody the same way, the sacrifice of the persons at different levels of body, mind or riches prevent them from accepting the total love. They feel that they are loved as much as they have shared. From sacrifice comes confidence.

If somebody says it is unjust to love somebody more than the other just because one is rich (at any level), it is also equally unjust to love somebody more who has not done anything-poverty of different kinds.

Indeed the ultimate principle is to become sprawling like an ocean of love and a loving people to take as much as they can.

An instructor should be both a driver and a mechanic. The teacher too should be both a driver and a mechanic so that not only he teaches how to drive but also how to fix the engine (mind) in case there is trouble.

If you run, you will be a runner, but if that running is directed towards a goal, by the time you finish running you reach the goal. In Vedanta one may run to know but one need not want to know the self.

If you go on talking, not only will you not listen to what others are speaking but also you will never see what your mind is thinking.

From Page 2- Two Spices of Odisha....

### Botanical Description

Zingiber officinale Rosc. belongs to the Zingiberaceae family. It is a slender, perennial rhizomatous herb, reaching up to 90 cm in height under cultivation (Fig. 2). The herb develops several lateral shoots in clumps, which begin to dry when the plant matures. The leaves lanceolate, appear to be simple, alternate, distichous, narrow, long possessing sheathing bases 2–3 cm broad, while the rhizomes (7–15 cm long and 1–1.5 cm broad) are aromatic and thick lobed. Flowers are rare, rather small, yellowishgreen in colour, annulated, latterly flattened and covered with scaly leaves.

### Phytochemistry and Nutritional Composition

Rhizome of ginger is composed of 69 volatile compounds, which constitute 97 % of its total composition in essential oils. Those molecules present at higher concentrations are aZingiberene (28.62%), Camphene (9.32%), Arcurcumene (9.09%), b-Phellandrene (7.97%), E-a-Farnesene (5.52%), b-Bisabolene (5.40%), a-Pinene (2.57%). Non-volatile compounds (oleoresins) are the main source of bioactive compounds in the rhizome of Zingiber officinale. About 34 oleoresins have been discovered, which constitute 88.6% of the total composition, among which Gingerols, Shogaols and Paradols are the most important groups. Shogaols are the more abundant components in the dried rhizome and gingerols are mainly found in the fresh rhizomes of ginger.

Nutritional analysis showed that 100 g of ginger contains 336 kcal energy, protein 1.8 g, water 78.9g, phyto-sterols 15 mg, total carbohydrate 18 g, dietary fibre 2 g, sugar 1.7 g, total fat 750mg, saturated fat 203mg, monounsaturated fat 154 mg, polyunsaturated fat 154 mg, omega-3 fatty acids 34mg, omega-6 fatty acids 120 mg, vitamin c 5 mg, vitamin e 260 mcg, vitamin k 0.1mcg, thiamine 25 mcg, riboflavin 34 mcg, niacin 750 mcg, vitamin b6 160 mcg, folic acid 11 mcg, pantothenic acid 203 mcg, choline 28.8 mg, calcium 16 mg, iron 600mcg, magnesium 43mg, phosphorous 34 mg, potassium 415 mg, sodium 13 mg, zinc 340 mcg, copper 226 mcg, manganese 229 mcg, and selenium 0.7 mcg (Singh et al. 2017).

### Role of Ginger in Odishan Food

Ginger is popularly used as spice in every household kitchen and is a common condiment for various foods in Odishan dishes. It is used in foods for both its pungent flavor and distinct aroma. It is also used in bakery, beverage, and pharmaceutical industries. Ginger is used in various forms, including fresh, dried, pickled, preserved, crystallized, candied, and powdered or ground. Matured rhizome is commonly used in cookies, cakes, and curry. Candied or crystallized ginger is cooked in sugar syrup and coated with granulated sugar. Crushed ginger with/without sugar added is used to make tea. Ginger tea is very popular in Odisha. Ginger oil is also used as food-flavouring agent in soft drinks.

### Medicinal use of Ginger in Odisha

Ginger has been purported to exert a variety of powerful therapeutic and preventive effects and has been used for thousands of years for the treatment of hundreds of ailments from colds to cancer. The Ayurvedic Pharmacopoeia of India recommends dried rhizomes in dyspepsia, loss of appetite, anemia, rheumatism, cough and dyspnoea; fresh rhizomes in constipation, colic, and throat infections. In Odisha, ginger is a common home remedy to relieve nausea, treat cold and flu, remove excess gas, aid in proper digestion, reduce arthritis pain, stomach ulcers, liver protection, relieve asthma, prevent obesity, improve cognition, prevent cancer, relieve muscle pain, prevent menstrual cramps, control diabetes, boost heart health, prevent infection, detoxify the body, skincare, treats diarrhea, increase sexual activity, improve brain function, and regulate blood sugar. It has been shown to have anti-inflammatory, antiapoptotic, anti-tumour activities, antipyretic, anti-platelet, anti-tumourigenic, antihyperglycaemic, antioxidant, anti-diabetic, anti-clotting and analgesic properties.

# RENEWABLE ENERGY

## COP28 Presidency: Triple renewable energy capacity, double energy efficiency by 2030 to limit global warming

By 2030, global installed hydropower capacity (excluding pumped hydro) would need to grow by almost 17% from the 2022 level, report added.

Tripling renewable energy capacity for power generation and doubling energy efficiency by 2030 is crucial to limiting the global temperature increase to 1.5 degrees Celsius above pre-industrial levels by the turn of the century, highlighted a new report released on October 30.

The report by the 28th session of the Conference of the Parties (COP28) Presidency, the International Renewable Energy Agency (IRENA) and the Global Renewables Alliance was launched on the sidelines of a pre-COP event in Abu Dhabi.

“The Global Stocktake has told us exactly how far off track we are. We need to cut 22 gigatonnes of greenhouse gases in the next seven years in order to keep 1.5°C within reach. The phase-down of fossil fuels is inevitable and essential, but it must be responsible,” COP28 President Sultan Al Jaber said in the report.

“To deliver a just and orderly energy transition while advancing socio-economic development and ensuring energy affordability, reliability, and sustainability, we must rapidly accelerate our efforts to

ramp up renewable energy. Now is the time to turbocharge solutions and meet the moment's urgency with ambitious and

11,174 GW by 2030, according to IRENA's World Energy Transitions Outlook 1.5°C scenario envisioned.

onshore and 500 GW offshore), a jump from 899 GW in 2022, the report added.

By 2030, global installed

energy capacity, the global annual rate of energy intensity improvement should double by 2030 from the current level.

“Technical energy efficiency improvements embodied by heat pumps, more efficient appliances, and electric vehicles — together with flexible, smart electrification strategies and deployment of decentralised energy — are of tremendous importance in decarbonising end-use sectors such as buildings and transportation,” the report explained.

Compared to 2022, even if Nationally Determined Contributions, long-term low greenhouse gas emission development strategies are realised, the measures would only reduce carbon dioxide emissions by only 6 per cent in 2030 levels, IRENA's flagship report World Energy Transitions Outlook 2023: 1.5°C pathway showed.

Action is also needed to drive grid modernisation and expansion and ensure supply-side, flexibility and demand-side management, the authors of the report said.

From \$486 billion in 2022, the annual average investment in renewable power generation must go up to \$1,300 billion by 2030. To achieve this, the global financial architecture must be reformed to support the energy transition in the Global South.

Funding from multilateral development banks should be increased exponentially, and public capital should be redirected from the fossil fuel industry to renewable energy development.

“There is an urgent need to boost cross-sector infrastructure planning, increase cross-border co-operation and develop regional power grids,” the report said.

“Energy efficiency policy measures should include: the adoption of targets with specific time horizons; strong regulatory frameworks including building codes and energy efficiency standards for appliances; fiscal and financial incentives; and public campaigns to build awareness of the role of energy efficiency measures,” the report said.



determined action,” Jaber added further.

From 3,382 gigawatts (GW) in 2022, the world's installed renewable power generation capacity has to be multiplied by more than three times to reach

Over the same period, when it comes to installed solar photovoltaic capacity, an increase to more than 5,400 GW from 1,055 GW in 2022 is required. Wind installations need to exceed 3,500 GW (3,040 GW

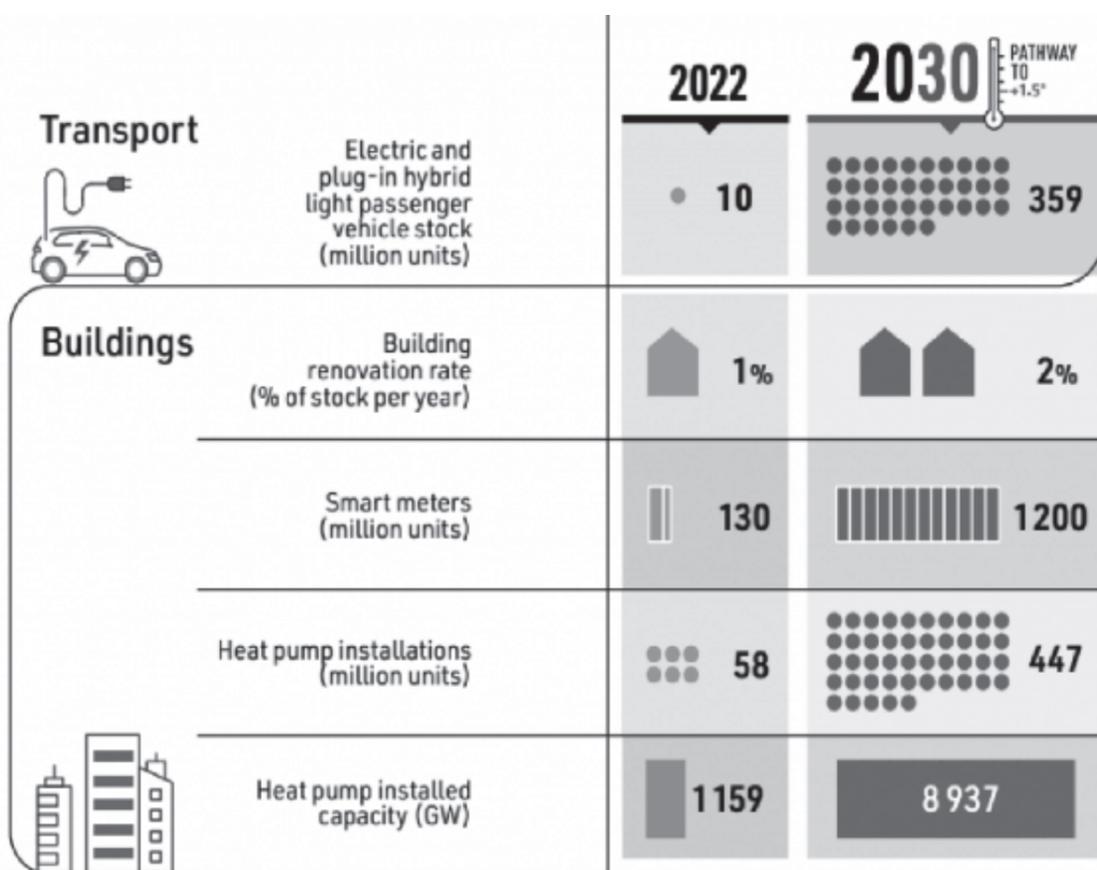
hydropower capacity (excluding pumped hydro) would need to grow by almost 17 per cent from the 2022 level, reaching 1 465 GW, according to IRENA 1.5°C Scenario.

With flexibility and storage included, the share of variable renewable energy, a combination of solar PV and wind power, a rise from 10 per cent of the total electricity generated in 2021 to 46 per cent by 2030 is needed to meet the 2030 target.

“COP28 marks the year of the first Global Stocktake, in which the world reflects on its progress in implementing the Paris Agreement. It is vital that collective action be galvanised following this key milestone in our journey toward a climate-safe existence to ensure the forthcoming round of Nationally Determined Contributions in 2025 represents a transformative leap forward, realigning us with the 1.5°C goal,” Francesco La Camera, Director-General, IRENA said.

So far, energy transition remains off-track, and global greenhouse gas emissions have reached record levels.

Besides adding renewable



Based on: (IRENA, 2023a).

# NEWS & VIEWS

## Observance of Vigilance Awareness Week-2023 Begins

- Mass Pledge Administered on Live Telecast
- Govt Functionaries, Members of Civil Society Administered Pledge by CM
- Strengthen Capacity to Detect & Deter Digital Frauds
- Computer Based Investigation, Prosecution Management System Inaugurated
- New Vigilance Division Buildings at Balasore, Rourkela Inaugurated

This year, Vigilance Awareness Week is being observed from 30th October to 5th November, 2023 on the theme say no to corruption, commit to the Nation. The observance of Vigilance Awareness Week commenced in Odisha today with administration of integrity pledge by Chief Minister Shri



He also urged the Vigilance Department to take steps for infusion of technology and expansion of the multi-disciplinary character by roping in more professionals with domain expertise to aid effective detection of benami transactions, money laundering, corruption through digital transactions,

Vigilance Division office new buildings at Balasore and Rourkela inaugurated by the Chief Minister through Video Conferencing.

Chairman 5T & Nabin Odisha Shri VK Pandian was present.

Chief Secretary, Odisha Shri Pradeep Kumar Jena in his address said that implementing honesty and integrity in public life is already one of the main pillars of our State Policy. Odisha has been at the forefront of the fight against corruption, he said.

Shri Y.K. Jethwa, Director, Vigilance welcomed the guests

It may be mentioned here that this year till date, Odisha Vigilance has registered 201 cases against 364 persons including 38 Group-A officers and 37 Group-B officers. Charge sheets have been filed in 198 cases against 486 persons including 42 Group-A and 31 Group-B officers. 87 cases have ended in conviction against 115 accused persons. 27 public servants have been dismissed from service and pension of 14 retired Public Servants stopped following their conviction in vigilance cases.



Naveen Patnaik at a State level function organized at convention Centre, Lokseva Bhawan, Bhubaneswar.

In a unique way, the integrity pledge was administered by the Chief Minister through Odisha State wide Network (OSWAN) to all district and block headquarters officials and through live telecast by the Information & Public Relations Department, Odisha to members of the public, students of schools and colleges, members of self-help groups, panchayats, Asha Karmies, AWWs.

This mass pledge is expected to further strengthen the extent of awareness on a corruption-free society at every level.

On this occasion, the Chief Minister congratulated Odisha Vigilance as it comes among the top performing anti-corruption agencies in the country as revealed by the latest statistics from the National Crime Record Bureau.

The Chief Minister also expressed happiness that during last year, Odisha vigilance continues detecting disproportionate assets against senior public functionaries.

investments in newer financial instruments like cryptocurrencies.

He also focused on Transparency of 5T Initiative undertaken by the Government with a view to achieve



transformational goals in governance. He also appealed to the people of Odisha to renew their resolve to fight against corruption and usher in a corruption-free and a New Empowered Odisha.

Computer based investigation and prosecution management system and

Best Vigilance Division, Best Vigilance Unit, Best Investigating Officer (Men & Women) and best Public Prosecutor of the vigilance for the year, 2022 were felicitated by the CM.

Shri Sanjay Kumar, Kaushal, IG, Vigilance proposed vote of thanks.

## Chairman 5T & Nabin Odisha Shri V K Pandian reviewed Metro Rail Project connecting the twin city of Bhubaneswar & Cuttack

As directed by Chief Minister Shri Naveen Patnaik, Chairman 5T & Nabina Odisha Shri V K Pandian along with senior officials reviewed the work of the proposed Metro Rail Project which will connect the twin city of Bhubaneswar & Cuttack. The Phase I of the Metro Rail project will connect Bhubaneswar Airport with Trisulia Square, via Chandrasekharpur, Jaydev Vihar, Vani Vihar, Master Canteen and Rajmahal Square.

Shri Pandian discussed and facilitated decisions for timely commencement of the construction of Metro Rail project.



Hon'ble Chief Minister Shri Naveen Patnaik had announced the project on Odisha Dibas on 1st April 2023 for which the Detailed Project Report has been approved by the Government. A Master Plan for extending the Metro Rail service to other areas of Bhubaneswar and to Khordha, Puri and Cuttack towns is being developed through Delhi Metro Rail Corporation Ltd.

Trisulia is going to emerge as a major traffic hub to serve Bhubaneswar and Cuttack cities as well as emerge as gateway to the Twin city from Banki and Athagarh side. The Central

Depot of the Metro Rail project will be located near Trisulia Square where the Command & Control Centre as well as the maintenance and stabling facilities for the Metro trains will be constructed. A New Bus Stand is being constructed at Trisulia Square, which will be further expanded and integrated with Merto station.

Chairman 5T and Nabin Odisha Shri V K Pandian expressed satisfaction on the progress made by various departments and agencies and directed officials to complete the preparatory work in time ahead of the foundation stone for the project to be laid by the Hon'ble Chief Minister on 01.01.2024.

Shri Pandian instructed that the works must be monitored very closely, observing principles of 5T to ensure timely completion of the project within four years schedule. He also asked officials to ensure that the project realizes the vision of Hon'ble Chief Minister of a world class urban transport system for the aspirational Odisha.



He advised that the metro system should leverage the latest technologies and most advanced equipment to provide efficient mobility solution to passengers. He asked officials to ensure that other modes of transport are aligned with metro rail stoppages for the seamless movement of passengers. He also advised officials to ensure that the project planning should be done in such a way so that it has enough room for long term future expansions.



Shri V K Pandian made a surprise visit to the newly constructed Cuttack Netaji Bus Terminal (CNBT) to get feedback of people and see the cleanliness at the state of the art terminal. He interacted with passengers, vendors, service providers, bus operators and other staff members. He asked officials to further strengthen integrated information management system which will enhance the passenger experience and hassle free movement of passengers.

The officials also visited the transformed Taldanda Canal. He advised that the visual aesthetics along the canal should be maintained so it continues to be recreational hub for the people of the Cuttack city.

Shri Pandian was accompanied by Smt Anu Garg, Development Commissioner – cum – Addl. Chief Secretary, Shri Manoj Kumar Mishra, Principal Secretary, E&IT Department, senior officials of Cuttack District administration, Bhubaneswar Metro Rail Corporation and Works Department of Govt. of Odisha.

# PSYCHOLOGICAL SCIENCE

## Diet – Builds the Base of Dharma

Prabhu Prasad Gadnayak

“SARIRAM - ADYAMA KHALUDHARMA SADHANAM”. Existence of the Body is the root of Dharma Sadhana – a balancing structure of Body, Mind and Soul.

You are the owner and operator of your body. In fact, your body is designed for wellness. Give it the right biochemical environment for healing and it becomes a miraculous self-healing machine.

The purpose of Diet is to increase the duration of life, purify the mind and aid bodily strength. This is its only purpose. In the past great authorities selected those foods that best aid health and increase life's duration, such as milk products, sugar, rice, wheat, fruits and vegetables. These foods are very dear to those in the mode of goodness. Some other foods, such as baked corn and molasses, while not very palatable in themselves, can be made pleasant when mixed with milk or other foods. They are then in the mode of goodness. All these foods are pure by nature. They are quite distinct from untouchable things like meat and liquor. Fatty foods, as mentioned in the eighth verse, have no connection with animal fat obtained by slaughter. Animal fat is available in the form of milk, which is the most wonderful of all foods. Milk, butter, cheese and similar products give animal fat in a form which rules out any need for the killing of innocent creatures. It is only through brute mentality that this killing goes on. The civilized method of obtaining needed fat is by milk. Slaughter is the way of sub-humans. Protein is amply available through split peas, dal, whole wheat etc.

All material activities in the world are being conducted under the three modes of material nature – goodness, passion and ignorance are emanations from the Supreme Lord is not subject to material nature. Men in the mode of goodness (Sattvika) worship the demigods; those in the mode of passion (rajasah) worship the demons; and those in the mode of ignorance (tamasha)

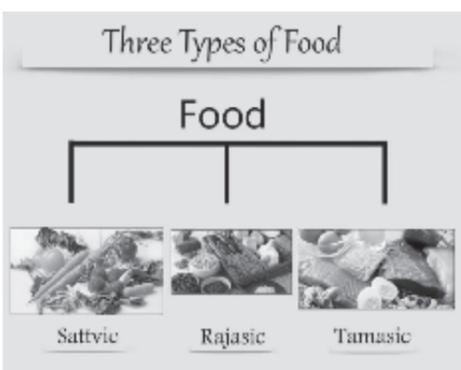
worship ghosts and spirits.

### Types of Diet:

**Sattvika** – Foods dear to those in the mode of goodness increase the duration of life, purify one's existence and give strength, health, happiness and satisfaction.

**Rajasahik** - Foods in the mode of passion, which are bitter, too salty, or too hot or overly mixed with red pepper, cause misery by reducing the mucus in the stomach, leading to disease.

**Tamashik** - Foods in the mode of ignorance or darkness are essentially those that are not fresh. Any food cooked more



than three hours before it is eaten (except prasadam, food offered to the Lord) is considered to be in the mode of darkness. Because they are decomposing, such foods give a bad odor, which often attracts people in this mode but repulses those in the mode of goodness.

AHARA SUDDHOU SATWA SUDDHI, SATWA SUDDHOU DHRUBA SMRUTI, SMRUTIRLAMVE, SARBA GRANTHINAM, BIPRAMOKHA.

-Chhandogya Upanisad.

(i.e. When diet is pure, mind and body becomes pure; When mind and body become pure memory power increases, when memory expands we become free from complexes).

### Regarding Diets in GITA:-

**Aharas tv api sarvasya trividho bhavati Priya**

**Yajnas tapas tatha danam tesam bhedam imam srnu.**

- 17.7 Gita

Even the food each person

prefers is of three kinds, according to the three modes of material nature. The same is true of sacrifices, austerities and charity. Listen now about the distinctions between them.

In terms of different situations in the modes of material nature, there are differences in the manner of eating and performing sacrifices, austerities and charities. They are not all conducted on the same level. Those who can understand analytically what kind of performances are in what modes of material nature are actually wise; those who consider all kinds of sacrifice or food or charity to be the same can not discriminate, and they are foolish. They are missionary workers who advocate that one can do whatever he likes and attain perfection. But these foolish guides are not acting according to the direction of the Scripture. They are manufacturing ways and misleading the people in general.

**Ayuh-sattva-balarogya-sukha-priti-vivardhanah**

**Rasyah snigdha sthira hradya aharah sattvikapriyah – 17.8 Gita**

Foods dear to those in the mode of goodness increase the duration of life, energy, purify one's existence and give strength, health, happiness and satisfaction. Such foods are succulent, juicy, fatty, wholesome, pleasing to the heart and appealing is dear to those in the mode of goodness.

This includes fruits, vegetables, grains, sugar, salt, spices and milk products. These are basically known as vegetarian foods.

**Katv-amlalavanaty-usnatiksna-ruksha-vidahinah**

**Ahara rajasasyesta dukhasokamaya-pradah – 17.9 Gita**

Foods that are too bitter, too sour, salty, hot, pungent, dry and creates a burning sensation within, causes pain, creates gas are dear to those in the mode of passion. Such foods cause distress, misery and disease. Such foods may be vegetarian, but it is usually over-salted and over-spiced.

Too much salt & spice creates mucus in the body and leads to such diseases as high blood-pressure, heart failure, diabetes and cancer. Such foods should be avoided.

**Yata-yamam gata-rasam puti paryusitam ca yat**

**Ucchistam api camedhyam bhojanam tamasa-priyam – 17.10 Gita**

Food prepared more than three hours before being eaten, food that is tasteless, foul smelling, decomposed and putrid, and food consisting of remnants unfit for sacrifice and untouchable things is dear to those in the mode of darkness/ignorance.

Continued Page 11

## THIRD EYE – Seat of the Soul

Prabhu Prasad Gadnayak

Of course, from time immemorial in Indian Vedic culture various books have discussed the Third eye or Tri-Netra or Gyan-Netra or Agyan-Chakra. During Vedic age many Sages could develop properly their Tri-netra through meditation. So they could see clearly about past, present and future by perceptivity, receptivity and sharpness of brain. It was more adapted to their brain through meditation as compared to that with common persons.

*The psycho physical moulding of objects and affairs to fulfill the interest of the Love Lord for unfurling the faculties of perception, conception, distinction, sharp division and remembrance with a shortening of reaction time is the fundamental of concentration and meditation*

**The Hundred Meeting Point**, the Third Eye, Acupressure Point GV 20 is great for calming your mind and relieving stress. If you close your eyes, you should feel a bumpy protrusion between your eyebrows. Use your middle finger to apply pressure to this point for up to a minute, and then release. This point is also very effective for treating Sinus pain.

Since all meridian pathways cross at the top of your head, it's called the Hundred Meeting Point. We use this point to balance the body's energy, especially to end an acupressure session. Holding GV 20 with the 3rd Eye Point between the eyebrows lightly, can open a profound spiritual experience, beyond what words can say.

*The Sandal Wood Paste is smeared on the foreheads of worshipers of Vishnu and Shiva, which is meant to protect the "Aghna Chakra" present between the eyebrows, which is known as Third Eye. Sandal wood is a virtual ware house of goodness and has antiseptic, astringent, anti-inflammatory and disinfectant properties.*

**For Lovemaking**, lightly holding GV 20 for a few minutes after an orgasm can balance the energy released, making the intimate exchange, a sacred act for healing each other. This focus was the basis of ancient Chinese Sexology practices. The Hundred Meeting Point (GV 20) transforms sexual energy into a deep spiritual experience.

**For Epileptic Seizures**, the Hundred Meeting Point is traditionally used to prevent and relieve epileptic seizures. GV 20 is also good for headaches, heatstroke, and for boosting morale.

**For Mental Health**, the Hundred Meeting Point also connects with the pineal gland and balances the seventh chakra. Holding this point lightly with the 3rd Eye Point (GV 24.5) between your eyebrows, until you get a gentle pulse, can help stabilize mental imbalances without using drugs. Holding these two spiritual acupressure points for several minutes with long, slow deep breaths, balances the relationship between the pituitary and pineal glands for mental health.

To fix your attention at the root of your nose to have 'you' and draw the spirit onward by chanting the Holy Name. This was my policy when I was Jesus.

- Sri Sri Thakur

Repetition of the Name makes a man sharp, keen and meditation or Dhyana makes him calm and receptive. To remain engaged in any single thought and to feel that which distracts but can not break our continuity is 'Dhyana' or 'Meditation'."

- Sri Sri Thakur

Focus that thought in strong affirmation at the point of concentration between the eye brows, the Ajna Chakra. The Solution, Control and Balance will be spontaneously activated and there will be perfect Motor Sensory Coordination by which everybody can solve and control and balance in any awkward/problematic situation. So, Protection of Third Eyes and its management is vital for every go of life.

Remnants of food may be eaten only when they are part of a meal that was first offered to the Supreme Lord or first eaten by saintly persons, especially the spiritual master. Otherwise the remnants of food are considered to be in the mode of darkness, and they increase infection or disease. Such foodstuffs, although very palatable to persons in the mode of darkness, are neither liked nor even touched by those in the mode of goodness. The best food is the remnants of what is offered to the Supreme Personality of Godhead. In Bhagabat-gita the Supreme Lord says that He accepts preparations of vegetables, flour and milk when offered with devotion. Patram Puspam Phalam toyam. Of course, devotion and love are the chief things which the Supreme Personality of Godhead accepts. But it is also mentioned that the prasadam should be prepared in a particular way. Any food prepared by the injunctions of the scripture and offered to the Supreme Personality of Godhead can be taken even if prepared long, long ago, because such food is transcendental. Therefore to make food antiseptic, eatable and palatable for all persons, one should offer food to the Supreme Personality of godhead.

Food in the mode of ignorance may include some vegetarian food that has become contaminated. Food in the mode of ignorance generally pertains to all varieties of non-vegetarian foodstuff such as meat, fish and eggs. These include beef, mutton, goat, pig, chicken, venison, turkey, duck, turtle, prawn, crab, frog, insect, snake, clam, oyster, shark, whale, caviar, horse and dog, just to name a few. Absurd as it may sound to the student of bhakti-yoga, all the food mentioned above is very popular in various parts of the world. Such food is to be avoided by all classes of yogis, as well as by progressive human beings in general

Continued Page 11



## FINANCE

# Evolution of Mutual Funds Market in India

Pradeep Kumar Panda, Economist, Bhubaneswar

The economic development of a country largely influenced either by credit based financing through financial institutions or by financial securities through capital market. The financing through capital market proves to be rapid economic development due to its instantaneous information processing mechanism of financial sector while real sector takes some time to process available information. In this sense, the economic development through stock market precedes the development through real sector. Further, the ensuring efficient stock market may result in providing strong support for economic development. More specifically, if the small savings may be properly channelised into stock market activities, then larger inflow of capital is possible besides ensuring efficient stock market operations.

Mutual Funds in recent past as a channel of resource mobilization has gained immense importance in general and in India in particular. Generally, an investor prefers to invest in units of mutual funds due to its efficient diversification. In other words, the diversification of portfolio becomes difficult for the investor either due to in-sufficient fund or due to the absence of expert opinion. Hence, investor attempts to find-out the best possible way of earning on his investment by evaluation various profitable opportunities of multiple mutual fund opportunities available to him. The selection of one mutual fund in preference to another may be largely induced by investor's risk-return framework. For instance, if investor prefers to earn higher rate of return, then he naturally selects his investment in growth oriented mutual fund. Further, the examination of mutual fund performance calls for close scrutiny of return on market index. If the mutual fund performs better than return on market index, then investors, expecting higher return, may attempt to invest in that fund. In essence, if the mutual fund yields higher return than market return, it can be said that it has outperformed the market index.

If the mutual fund is performing purely on the benefits of its component securities, then it is possible to earn higher return as compared to market return. Otherwise, the return on mutual fund is influenced by the return on market index; it means that return variation of market index may largely induce the return on mutual fund either in positive or negative direction depending upon its associated correlation. More specifically, if the return mutual fund strongly depends upon the return on market index, then there is possibility of integration between them. In this case, there is uni-directional influence from market index to mutual fund. If the operation of mutual fund is so strong, it may also give a shock to market index, suggesting a reverse causation from mutual fund to stock market

index. It is not necessary that price influence from stock index to mutual fund excludes the reverse influence from mutual fund to stock market index. In other words, there is possibility of strong co-integration between them, asserting a bi-directional influence between them. Such integration may give special information about the return on mutual fund with help of return on market index.

The component securities in that portfolio are well diversified; it is possible to get higher return with lesser risk. The diversification does not mean that component securities in portfolio must match with securities in market index. It is quite possible that proxy portfolio may be constructed that resembles the market index's risk-return. Otherwise, the securities traded in the stock market may ensure co-integration with market index. In

ii) **Second Phase – 1987-1993** (Entry of Public Sector Funds) : 1987 marked the entry of non-UTI, public sector mutual funds set up by public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC). SBI Mutual Fund was the first non-UTI Mutual Fund established in June 1987 followed by Canbank Mutual

ahead of other mutual funds.

iv) **Fourth Phase – since February 2003** : In February 2003, following the repeal of the Unit Trust of India Act 1963 UTI was bifurcated into two separate entities. One is the Specified Undertaking of the Unit Trust of India with assets under management of Rs.29, 835 crores as at the end of January 2003, representing broadly, the assets of US 64 scheme, assured return and certain other schemes. The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations.

## Problems of Mutual Funds in India

An institutional setup of financial intermediaries is required to mobilize the savings of the society and investing rationally

investors by providing them more options and better services. There are 56 mutual funds operating with a wide branch network in our country. The present state of mutual funds, their performance, profitability and decline of NAVs below issue prices have been causing concern to the investors.

The UTI Act governs UTI and the SEBI regulations are not applicable to UTI. A set of common rules and regulations are required for the same business to provide level playing field. In the absence of a single comprehensive legislation for mutual funds, there are several Acts applicable to the business of mutual funds. UTI has followed 'trust approach' while SEBI-regulated mutual funds have combined both trust and corporate approaches. The Indian Trusts Act, 1882 does not contain adequate provisions to deal with a trust where there is a large-scale mobilization of public funds/ savings for expert fund management to maximize the returns to the investors. The management of funds has been entrusted to the assets management companies incorporated under the Companies Act, 1956 to separate management from ownership, control and supervision. There are several parties to mutual funds such as sponsor, the trustees, the AMC, the custodians and the investors as beneficiaries. The rights, duties and obligations of all the parties need to be focused under a specific statute or Act rather than enforcing partly under SEBI Act, The Companies Act and the Indian Trusts Act. All the problems of mutual fund industry have been classified in the following categories:

## Problems related to structure:

The problems related to structure under SEBI (Mutual Funds) Regulations, 1996 are pertaining to regulations 2 (q), 7, 16 (5), 24 (3), 21 (b), 24 (2), 32, 33, 43, & 44. AMFI has taken a lead & made representations to the SEBI & the Central Govt. to amend the regulations. The problems related to the Indian Trusts Act, 1882 are pertaining to individual/collective liability. The post-SEBI mutual funds have opted for trustee company structure. The liability of the trustees is more onerous under the board of trustees structure as compared to the trustee company structure. The Indian Trusts Act does not permit perpetual succession. The companies Act, 1956 permits perpetual succession but it can't protect the interest of the investors due to the privilege of limited liability. The Govt. of India should consider enacting a separate comprehensive Mutual Funds Act and clearly spell out rights, duties and obligations of the various constituents of mutual fund to provide a uniform regulatory framework and to create a level playing field for all the mutual funds in the industry including UTI.

Continued Page 03

## MUTUAL FUNDS Sahi Hai

Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC established its mutual fund in June 1989 while GIC had set up its mutual fund in December 1990. At the end of 1993, the mutual fund industry had assets under management of Rs.47, 004 crores.



such case, it is quite possible to state the return on mutual fund may be predicted with help of market index. Further any such existence may also support the superior stock selection of fund manager.

## Evolution of Mutual Funds Market in India

The mutual fund industry in India started in 1963 with the formation of Unit Trust of India, at the initiative of the Government of India and Reserve Bank of India. The history of mutual funds in India can be broadly divided into four distinct phases.

i) **First Phase – 1964-87**: Unit Trust of India (UTI) was established in 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and functioned under the Regulatory and administrative control of the Reserve Bank of India. In 1978 UTI was de-linked from the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative control in place of RBI. The first scheme launched by UTI was Unit Scheme 1964. At the end of 1988 UTI had Rs.6, 700 crores of assets under management.

iii) **Third Phase – 1993-2003** (Entry of Private Sector Funds) : With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund families. Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI were to be registered and governed. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993. The 1993 SEBI (Mutual Fund) Regulations were substituted by a more comprehensive and revised Mutual Fund Regulations in 1996. The industry now functions under the SEBI (Mutual Fund) Regulations 1996. The number of mutual fund houses went on increasing, with many foreign mutual funds setting up funds in India and also the industry has witnessed several mergers and acquisitions. As at the end of January 2003, there were 33 mutual funds with total assets of Rs. 1, 21,805 crores. The Unit Trust of India with Rs.44, 541 crores of assets under management was way

for economic development. Unit Trust of India was set-up by the Central Govt. under the UTI Act, 1963 with an objective of mobilizing savings of middle and lower income groups and providing them opportunities to acquire property in the form of shares. The growth of UTI took place during the period when the economy was under a control regime and securities markets were irrelevant to industrial growth as the financial intuitions were the major purveyors of long-term finance. The economic liberalization and globalization created a fervent environment in our country and several small investors participated in the equity of the corporate sector. The investors who subscribed to equity shares issued at high premia, after abolition of the office of the Controller of the Capital Issues, have lost their investments as the market prices of such shares are prevailing at very low rates or not quoted at all. SEBI has raised the amount of minimum subscription in public issues and shifted to compulsory trading of securities in dematerialized form through depositories. The private sector mutual funds have benefited the

## SPORTS AFFAIRS

### Afghanistan players celebrate after their victory against defending champions England

Minnows Afghanistan have caused two major upsets in the ongoing ICC ODI World Cup 2023 so far by beating defending champions England and formidable Pakistan.

Talent, proper training, fighting spirit and hard work have contributed to the remarkable

stadiums and facilities to train and play their home matches.

Now, the result is visible in Afghanistan cricket team's performance in the ongoing mega event.

Though there has been many surprising upsets in the 48-year

coach from 2016 to 2018.

Several Afghanistan players have become familiar with Indian pitches, grounds, and conditions for many years now. Some of the top Afghan cricketers have gained invaluable experience by playing



rise of Afghanistan cricket. Moreover, there is also another crucial factor to Afghanistan cricket's rise and that is India's guiding hand.

India has supported Afghanistan cricket in many ways over the last few years. Some former Indian cricketers have provided coaching to the national team. India has also provided Afghanistan players Indian

history of the World Cup, lower ranked Afghanistan defeating the defending champions is truly unprecedented. This win sets the stage for Afghanistan to aim high for other cricket milestones.

"It is one of the biggest upsets ever. I am really happy and overwhelmed by their victory. They have made history," said Former India batsman Lalchand Rajput, who was Afghanistan's

in various Indian Premier League (IPL) franchises.

Ravaged by conflict, Afghanistan has not been able to host international matches. However, India has become a home turf for them for almost eight years. Many Afghanistan players have played in places like Dehradun, Greater Noida, and Lucknow and they are cashing in the golden opportunity.

### Who will be New Coach of Team India?

Legendary batsman Rahul Dravid's current contract as the head coach of Team India will

World Test Championship.

With Dravid's two-year stint set for completion after the World

sources, BCCI is most likely to seek fresh applications in the post-Dravid era. Under the circumstance, batting icon VVS Laxman will be one of the leading candidates to become the next India head coach. The National Cricket Academy (NCA) head can be joined by Sitansu Kotak as the batting coach.

As per reports, Laxman might be looking after the Indian side in the absence of Dravid for the upcoming five-match T20I series against Australia. Dravid and a host of seasoned campaigners including skipper Rohit

Sharma, star batsman Virat Kohli, KL Rahul and premier pacer Jasprit Bumrah might be rested for the five-match T20I series after a gruelling World Cup campaign.



expire at the end of the ongoing ICC ODI World Cup 2023. After Dravid succeeded former coach Ravi Shastri, India made it to the semifinals of the ICC World T20 last year. The Men in Blue also played in the final of the ICC

Cup, it is very much unlikely that the former India captain will seek his renewal.

BCCI has also the option to ask Dravid to reapply for the head coach job. However, as per

### Fog stopped match at HPCA Stadium in Dharmasala

Rains often stop cricket matches. Several important matches could not be played due to rain in many mega tournaments in the history of cricket.

Moreover, some bizarre reasons behind stoppages of play have surfaced over the years. Nature can surprise us with its tricks and when nature dictates terms, things come to a standstill.

Let's have a look at some of the bizarre reasons when cricket matches were stopped.

#### Fog stopped Match

The match between India vs New Zealand during the ICC ODI World Cup 2023 at the HPCA Stadium in Dharmasala was halted for some minutes due to fog on Sunday as Visibility became an issue. The incident happened during India's run chase.

With the likes of Lockie Ferguson and Matt Henry bowling at around 145kph, it was tough for the Indian batters to bat in the middle. The players and the on-field umpires, Adrian Holdstock and Michael Gough, had a discussion before walking off the ground. However, much to the relief of the players and the fans, the match resumed soon.

#### Setting Sun

The ODI match between India and New Zealand at McLean Park in Napier on January 23, 2019 was interrupted for a brief while due to sunlight. The players had to go off the ground for a brief period due to the disturbance caused by the setting sun. Indian southpaw Shikhar



Dhawan complained to the umpires that the sun was falling on his face.

#### Excessive Sunlight

A Test match between England and West Indies at Old Trafford in Manchester on July 30, 1995 was halted due to excessive sunlight. As per reports, sunlight reflected from a greenhouse and it struck the batters right on their eyes.

#### Swarm of Bees

The World Cup match between Sri Lanka and South Africa at the Riverside Ground in Chester-Le-Street on June 28, 2019 was interrupted for a brief period as the players laid on the ground upside down after a swarm of bees appeared.

#### From Page 03 (Evolution of Mutual....)

The ignorance of the investors about mutual funds coupled with aggressive selling by promising higher returns to the investors have resulted into loss of investors' confidence due to inability to provide higher returns. All mutual funds set a higher target for mobilization of savings from the investor by launching new schemes and expanding investor base. The agents or distributor of mutual funds are more governed by commissions and incentives they get for selling the schemes and not by the requirements of the investors and quality of the products. They share commissions with the investors and don't explain the risk factors to them. The investors who invest in growth or equity schemes consider it as an alternative to stock market investing and the investors who invest in debt schemes expect higher returns on their investments than returns on nationalized banks' fixed deposits. The investors expect higher returns and get dissatisfied when they don't receive the expected returns. The NAV of the mutual fund scheme gets discounted on debiting the front-ended load of issue expenses after closure, further discounted on listing and continue to decline on trading due to poor demand for such units due to the poor sentiments of the investors. The mutual funds are bound to invest the funds as per their investment objectives of each scheme published in the offer document. After the issue is over, it becomes the mandate and the mutual funds have no choice to invest the funds in other securities, which can provide higher returns.

# ECONOMY

## Economic Development through Gram Panchayat

Pradeep Kumar Panda, Economist, Bhubaneswar

Sustainable development calls for empowerment of Gram Panchayats. Local economic development is not just about provision of basic needs of individuals but also about people working together to achieve sustainable economic growth and improved lives. Employment and income are needed for prosperity and improved quality of human lives.

This implies creation of more employment in the Gram Panchayats, promotion of entrepreneurship and addition of further opportunities for economic growth. As local governments, Panchayats have key role to play for local economic development in villages of India. This includes efforts to improve economic well-being and quality of life of people by creating livelihoods opportunities and income generation in an equitable manner.

The Constitution of India through the 73rd Amendment, entrusted the States to devolve powers and responsibilities upon Panchayats with respect to preparation of plans for economic development and social justice and implementation of schemes for economic development and social justice in relation to the 29 subjects listed in the Eleventh Schedule.

In this context, out of these 29 matters, some matters such as Small scale industries, including food processing industries; Khadi, village and cottage industries; Technical training and vocational education; Animal husbandry, dairying and poultry; Minor forest produce; Fisheries; Agriculture, including agricultural extension; Markets and fairs; Poverty alleviation programme and Maintenance of community assets are important in which Panchayats can play significant role towards undertaking economic development in their respective areas.

While all of these subjects directly impact local economic development, however, actual devolution of these subjects varies across States.

For economic development, skill upgradation and employment generation in their respective areas, It is envisaged that Panchayats work towards

maximising production and employment opportunities through agriculture, animal husbandry, pisciculture, and by adoption of best technologies and practices. They can facilitate skill upgradation of local labourers/youth and can take initiatives like developing local markets and related infrastructure; facilitate efficient transportation and market linkages for local agriculture produce.

Necessary support for formation and promotion of Self-help groups, ensuring assured minimum wage employment for poor and the marginalised in the village through MGNREGS and equitable wages for men and women are some more potential roles of Panchayats towards equitable economic development.

Currently, Panchayats are engaged in some economic activities through formulation of Gram Panchayat Development Plans (GPDPs); utilization of grants of Union Finance Commissions for providing basic facilities and MGNREGA for employment and some other central and State sponsored schemes; implementation of e-Gram Swaraj and e-Governance in Panchayats through Core Common Software Applications, developed to address various aspects of Panchayats' functioning including planning, budgeting, implementation, accounting, monitoring, and delivery of citizen services etc.

It is important that Panchayats are able to optimally utilize their potential and available resources in catering to needs for the economic development in their area. Role of panchayats is pivotal in ensuring inclusive economic development and income generation in their respective Panchayat areas through undertaking various economic activities and converging various resources at their disposal.

There is need to understand the status of involvement of Panchayats in employment generation and income generation in their respective areas, to explore and suggest potential areas of involvement of Panchayats towards ensuring local economic development and employment generation,

strengthened role of Panchayats in economic development in equitable manner in their areas within existing frameworks and available resources under various funds, different central and state sponsored schemes, its own revenue sources etc.

Assessment of the perceptions of state governments and officials with regard to role of Panchayats in local economic development and employment generation and understanding of Panchayats with regard to their own roles and responsibilities towards local economic development and employment generation will help in this direction.

There is requirement of mapping the areas and status of devolution to panchayats, both in policy and in practice, that are relevant for involvement of Panchayats in activities related to local economic development, listing out various enabling factors and arrangements made by states for Panchayats to enable them for undertaking economic development activities and mapping the kind and extent of interventions being made by Panchayats to meet the mandate of economic development in

their areas.

There is need to identify the challenges being faced by

opportunity for employment generation for unemployed population. Panchayats can effectively plan for the suggested interventions.



Panchayats in performing their official roles towards employment generation and document successful cases/best practices in respect of economic development and employment generation through Gram Panchayats

Action plan may be prepared for securing inclusive local economic development through employment generation Panchayats that may include activities and interventions of Panchayats towards economic development through increasing

Accordingly planning for resources in terms of funds, functions and functionaries need to be devolved to Panchayats so as to enable them to undertake activities for economic development and employment generation with necessary capacity building for execution of activities for economic development and social justice by local government functionaries. This will result in development of grass root level of rural India.

From Page 08 (Third Eye...)

**Patram puspam phalam toyam yo me bhaktya prayachhati**

**Tadaham bhakti-upahrtam asnami prayatatmanah – 9.26 Gita**

If one offers to Me with love and devotion a leaf, a flower, a fruit or water, I will accept that offering from my pure hearted devotee.

One who loves the Lord Krishna will give Him whatever He wants, and he avoids offering anything which is undesirable or unasked. Thus meat, fish and eggs should not be offered to the Lord. If He desired such things as offerings, He would have said so. Instead, He clearly requests that a leaf, fruit, flowers and water be given to Him, and He says of this offering, "I will accept it". Therefore, we should understand that He will not accept meat, fish and eggs. Vegetables, grains, fruits, milk and water are the proper foods for human beings and are prescribed by Lord Krishna Himself. Whatever else we eat cannot be offered to Him, since He will not accept it. Thus, we cannot be acting on the level of loving devotion if we offer such foods.

Offering foodstuffs is wholly identical with His eating and actually tasting. This point should be emphasized; because of His absolute position, His hearing is wholly identical with His eating and tasting. Only the devotee, who accepts Krishna as He describes Himself, without interpretation, can understand that the Supreme Absolute Truth can eat food and enjoy it.

This means that non-vegetarian foodstuff such as meat, fish and eggs, as well as preparations containing such things are not offerable to the Lord. Food offerable to the Lord includes vegetables, fruits, nuts, grains and milk products. It should be noted that being Gopala, the protector of the cows, Krishna is very fond of milk products such as yogurt, butter etc. A diet of such food offered to Krishna will make one healthy and fit for the practice of yoga as well as free from karmic reactions.

**Yajna-sistasinah santo mucyante sarva-kilbisaih**

**Bhunjate te tv agham papa ye pacanty atma-karanat – 3.13 Gita**

The devotees of the Lord are released from all kinds of sins because they eat food which is offered first for sacrifice i.e. food taken after performance of Yajna. Others, who prepare food for personal sense enjoyment/gratification, are not only thieves but also the eaters of all kinds of sins and perpetuate their own bondage. How can a person be happy if he is both a thief and sinful?

**Annad bhavanti bhutani parjanyaad anna-sambhavah**

**Yajnad bhavati parjanya yajnah karma samudbhavah – 3.14 Gita.**

All living bodies subsist on food grains, which are produced from rains. Rains are produced by performance of yajna (sacrifice), and yajna is born of prescribed duties/activities.

Soul have no needs either for present or in future. Soul does not need to eat. Human body eats. In eating animal foods soul has no problem, problem is with the body and mind. In toto suffering is with the body. The food of the soul is Bhajan, Kirtan, Prayer, Satnam and Satsang. Pure and proper diet builds the base of Dharma.

**Sri Sri Thakur on Diet:**

Digest skillfully what is propitious to you and others too in such a manner that it may nurture your inner urge and capability. - **The Message, Vol.5**

Pleasing the irritation of hunger with easy absorption gives nourishment that raises the vitality up, that is diet, so take thy food and drink to invigorate thyself. - **The Message, Vol.1.**

In-adherence, unchaste go of life, and indiscriminate incompatible intake of food invite unhealthiness – both physical and mental, hence, are the danger signals to existential propitiousness. - **The Message, Vol.8.**

The fundamental basis of Dharma is to live and grow, and for that the first and foremost necessity is health; do, move and unobstructed in your go. - **232, Chalar Sathi.**

Seers, scientists and learned men say that rice or other food carries in it even the mental condition of the one who serves it; this being so, if I am to receive food from someone, it should be done in such a way that I can receive higher feelings; isn't it so? - **233, Chalar Sathi.**

Be aloof from the kind of place, person and food which brings on hatred, aversion, uneasiness, or unsteadiness of mind; by such foods one's health is easily broken down; beware! - **234, Chalar Sathi.**

If you wish to be energetic and diligent, do not renounce hunger; hunger makes the food that is eaten suitable for nourishing you, and this nourishment is the fuel for energy. - **235, Chalar Sathi.**

Without reason do not eat in a way that brings improper excitation or depression; eat in a way that banishes the uneasiness and depression of hunger and thus makes you sound and brings you well-being; then you can easily be active. - **236, Chalar Sathi.**

As health can control the mind, so also can the mind bring health under control; however pure, sound and strong your mind is, your health also to a large extent will follow after it; and for this matter of attaining health it is necessary to keep watch over the purity of your environment; there is hardly anything that can vitiate health and mind as much as an impure environment can; be careful. **237, Chalar Sathi.**

As when one eats one must clear the bowels, so also, to receive nourishment it is absolutely essential to clear out the substances thrown off by the body; and for this purpose, appropriate exertion – at least until one perspires sufficiently – is invaluable and like ambrosia for health. **242, Chalar Sathi.**

A healthy defense mechanism can protect us from infecting diseases from different bacteria, viruses etc. genetic and immune-deficiency diseases, metabolic and endocrine disorders, obstinate heart, kidney, liver and nervous system defects including psychiatric problems.

Vegetarian diet produces stimulation in our body which is very negligible and almost harmless to our tissues. Of course this vegetarian diet should be conditioned to our Physical needs and increase our longevity & live healthily.



## SCIENCE & TECHNOLOGY

# The 2023 Nobel Prize in Chemistry

The 2023 Nobel Prize in Chemistry has been awarded to three scientists for the discovery and development of quantum dots. These tiny particles have unique properties and now spread their light from television screens and LED lamps. They catalyse chemical reactions and

unusual characteristics. In 1937, the physicist Herbert Fröhlich had already predicted that nanoparticles would not behave like other particles. He explored the theoretical consequences of the famous Schrödinger equation, which shows that when particles become extremely

*Er. Mayadhar Swain*

differ in hue depending on how long it was heated. He found that when heated, copper chloride crystals formed inside the glass. The smaller the crystals, the bluer the glass appeared. In the early 1980s, Alexei Ekimov succeeded in creating size-

chopped up, the greater the surface area it will expose to its surroundings.

During his work with these tiny particles, Brus noticed something strange—their optical properties changed after he had left them on the lab bench for a while. He guessed that this could be because the particles had grown, so to confirm his suspicions he produced cadmium sulphide particles that were just about 4.5 nanometres in diameter. Brus then compared the optical properties of these newly made particles with those of the larger particles, which had a diameter of about 12.5 nanometres. The larger particles absorbed light at the same wavelengths as cadmium sulphide generally does, but the smaller particles had an absorption that shifted towards blue. He published his discovery in 1983.

In the 1990s, Dr. Bawendi found out how to produce quantum dots that had superb optical quality. They had to be made in solution with exquisite control of their size and surface. Bawendi invented an ingenious chemical method for doing this. The breakthrough revolutionized technology in medicine and our everyday electronics.

also expected to revolutionize the encryption of quantum information.

Quantum dots are thus bringing the greatest benefit to humankind. Researchers believe that in the future they could contribute to flexible electronics, tiny sensors, thinner solar cells and encrypted quantum communication – so we have just started exploring the potential of these tiny particles.

Thanks to the work of the laureates, humanity is now able to utilise some of the peculiar properties of the nanoworld. Quantum dots are now found in commercial products and used across many scientific disciplines, from physics and chemistry to medicine.

### Who are the winners?

Dr. Mounqi Bawendi is born in 1961 in Paris, France and did his PhD from University of Chicago, USA in 1988. He is now working as Professor at the Massachusetts Institute of Technology, Cambridge, USA. He used to study under Dr. Brus as a postdoctoral researcher.

Dr. Louis Brus is born in Cleveland, USA in 1943 and did his PhD from Columbia University, New York, USA in 1969. He is now working as Professor emeritus at Columbia University.

Dr. Aleksey Ekimov is born in 1945 in the former Soviet Union and did his PhD in 1974 from Ioffe Physical-



*Mounqi Bawendi, Louis Brus and Alexei Ekimov*

their clear light can illuminate tumour tissue for a surgeon. The winners are Mounqi Bawendi of the Massachusetts Institute of Technology, Louis Brus of Columbia University and Alexei Ekimov of Nanocrystals Technology in New York State.

It is known that an element's properties are governed by how many electrons it has. However, when matter shrinks to nano-dimensions quantum phenomena arise; these are governed by the size of the matter. The Nobel Laureates in Chemistry 2023 have succeeded in producing particles so small that their properties are determined by quantum phenomena. The particles, which are called quantum dots, are now of great importance in nanotechnology.

Quantum dots are essentially minuscule, inorganic particles that shine different colors when exposed to light. And they are so tiny that they are roughly the same size in comparison to a soccer ball as a soccer ball is to planet Earth, Professor Heiner Linke, a member of the Nobel Committee for Chemistry, said.

### Previous Works on Quantum Dots

When Alexei Ekimov and Louis Brus produced the first quantum dots, scientists already knew theoretically that they could have

small there is less space for the material's electrons. In turn, the electrons—which are both waves and particles—are squeezed together. Fröhlich realised that this would result in drastic changes to the material's properties.

Researchers then succeeded in predicting numerous size-dependent quantum effects. They also worked to try to demonstrate

dependent quantum effects in coloured glass. The colour came from nanoparticles of copper chloride and Ekimov demonstrated that the particle size affected the colour of the glass via quantum effects.

A few years later, Louis Brus discovered the same effect independently using cadmium sulfide crystals. He was working at Bell Laboratories in the US,



A Quantum dot is a crystal that often consists of just a few thousand atoms. In terms of size, it has the same relationship to a football as a football has to the size of the Earth.

them in reality, but in vain. At that time it was almost impossible to sculpt in nanodimensions. Therefore, few people believed that this knowledge would be put to practical use.

### Works of Nobel Laureates

In the 1970s, Ekimov, a recent doctoral graduate, started working at the S. I. Vavilov State Optical Institute in what was then the Soviet Union. He began studying how colored glass could

with the long-term aim of making chemical reactions happen using solar energy. To achieve this, he was using particles of cadmium sulphide, which can capture light and then utilise its energy to drive reactions. The particles were in a solution and Brus made them very small, because this gave him a larger area on which the chemical reactions could take place; the more a material is

### Use of quantum dots

Quantum dots now illuminate computer monitors and television screens based on QLED technology. They also add nuance to the light of some LED lamps, and biochemists and doctors use them to map biological tissue.

The dots are also used in solar cells and to visualize blood vessels feeding tumors in biomedical imaging. They are

Technical Institute, Saint Petersburg, Russia. He was previously the chief scientist at Nanocrystals Technology, a company based in New York, USA.

Prize amount: 11 million Swedish kronor will be shared equally between the Laureates.

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# MISCELLANEOUS

## Farmers and Rowing

As per an old age saying-It takes a village to raise a champion. It holds true for hosting rowing competitions in the Chapora river, about 20 km from the state capital in the 37th National Games in Goa.

Though Goa is rich in water bodies, rowing as a sport hasn't really taken root in this coastal state and the infrastructure for the sport was never created.

The organisers knew that it was always going to be a challenge to build a course for the sport as rowing needs still water and a straight course of two kilometres or more.

First identifying a venue where

Director of competition Ismail Baig, while pointing out to the lush green land lined with coconut trees on the other side of the river bank to explain how things looked when he arrived in



Goa 10 days ago.

With just 12 days left for the

30,000 square metre of land to the authorities to build a concrete road till the river bank, level the farms and even clear about 5000 square metre of land of small shrubs and bushes.

“Every new venue has its own challenges. But here, we had to work on war footing for the last 10 days to get the land levelled, build temporary infrastructure while ensuring that there is no long-term damage to the soil as the farmer will have to start cultivation soon after,” said Baig.

To ensure that the farmers also don't suffer damages, the government has already decided on the compensation to be paid to them though some of them have not demanded anything in return.

Goa sports minister Govind Gaudé was all praise for the



all these requirements were met took time and then when they found the right spot, building the required infrastructure became the next hurdle as there was no free land around the river bed.

This is where the local farmers came forward to bail the government and the organisers out despite the ongoing harvesting season.

“The course is quite good. The tide does affect the flow of water but it is manageable. But the real challenge was to make a place for boats to be kept, build technical officials' area and other facilities as the river is surrounded by privately owned farms,” said

rowing event to start, a lot depended on the co-operation of



the farmers as the harvesting season was still on and the crops were yet to be cut.

But in the next two days, 23 farmers not just cleared their land but also handed over about

farmers.

“The overwhelming support from the farmers shows how much these Games mean to the Goans. We are grateful to them for their support,” said Gaudé.

### From Page 16 (Economics Nobel...)

Using these statistics, Goldin was also able to show that the pay discrimination (the pay differences that cannot be explained by observed differences in factors such as productivity, education and age) that affected women increased significantly with the growth of the service sector in the twentieth century. Prior to this, women usually worked in sectors where pay was based on piecework; workers in these types of industries, whether male or female, were paid in relation to their productivity. Between the end of the nineteenth century and 1940, the pay difference between men and women that can be attributed to discrimination increased from twenty to fifty-five per cent in the manufacturing industry. In other words, pay discrimination increased, somewhat surprisingly, at the same time as the earnings gap between men and women decreased. One reason for this was that piecework contracts were increasingly abandoned in favour of pay systems based on a monthly wage. Goldin showed that in association with the introduction of modern pay systems, employers tended to benefit employees with long and uninterrupted careers. Expectations thus played a role not just for potential female employees but also their potential employers.

The parenthood effect We can now see that the earnings gap between women and men in high-income countries is somewhere between ten and twenty per cent, even though many of these countries have equal pay legislation and women are often more educated than men. Why is this? Goldin attempts to answer precisely this question and, among other things, succeeds in identifying one key explanation: parenthood.

By studying how differences in income between men and women changed over time, Goldin and her co-authors, Marianne Bertrand and Lawrence Katz, demonstrated in an article from 2010 that initial earnings differences are small. However, as soon as the first child arrives, the trend changes; earnings immediately fall and do not increase at the same rate for women who have a child as they do for men, even if they have the same education and profession. Studies from other countries have confirmed Goldin's conclusion and parenthood can now almost entirely explain the income differences between women and men in high-income countries. Goldin showed that this motherhood effect can partly be explained by the nature of contemporary labour markets, where many sectors expect employees to be constantly available and flexible in the face of the employer's demands. Because women often take greater responsibility than men for childcare, for example, this makes career progression and earnings increases more difficult. Tasks that are hard to combine with part-time work also make it more challenging to maintain a career for the person in the household, usually the woman, who chooses to reduce their working hours. All these factors have far-reaching consequences for women's earnings.

### A glimpse of the future

By trawling through the archives and compiling and correcting historical data, Goldin has been able to present new and often surprising facts. She has also given us a deeper understanding of the factors that affect women's opportunities in the labour market and how much their work has been in demand. The fact that women's choices have often been, and remain, limited by marriage and responsibility for the home and family is at the heart of her analyses and explanatory models. Goldin's research shows that the differences between women and men in the labour market are determined by diverse factors during the various periods of societal development. Policymakers who want to affect these differences must first understand why they exist. Investments in information and education, or legislation that removes institutional barriers, may have a significant effect for a certain time, particularly if women's career expectations and educational levels lag behind those of men. However, the same investments probably have a limited effect in societies where women already have high levels of employment and are perhaps more highly educated than men. For example, we know that it is not enough for women to be educated on the same terms as men; the earnings gap between men and women remains. The opportunity to plan and finance a return to the labour force after having children, or to work more flexibly, may be of greater importance. Goldin's studies have also taught us that change takes time, because choices that affect entire careers are based on expectations that may later prove to be false. US history and similar developments in many other high-income countries show that change can be hidden for decades in the aggregated statistics, because a new behaviour does not initially have a significant overall impact.

Major changes in the labour force can only occur over relatively short periods of time when groups that adopted the new behaviour in the labour market start to reach middle age and affect the career choices of younger women. Her insights reach far outside the borders of the US and that similar patterns have been observed in many other countries. Her research brings us a better understanding of the labour markets of yesterday, today and tomorrow.

## Religion on Ground Mohammad Rizwan performs Namaz on Ground

Recently, former Pakistan spinner Danish Kaneria opened up on the discrimination he faced from his teammates during his playing days for being a Hindu. Kaneria revealed that former captain Shahid Afridi wanted him to give up Hinduism and convert to Islam.

It's always Pakistan cricketers who have brought religion to the field. India registered a resounding victory against Pakistan in a league



match of the ODI World Cup 2023 at the Narendra Modi Stadium in Ahmedabad on October 14. However, Pakistan fans couldn't accept the defeat and instead, they focused on a passionate moment when spectators on the ground greeted their wicket-keeper-batsman Mohammad Rizwan with 'Jai Shri Ram' slogans. Moreover, several former Pakistani cricketers and their board (PCB) also joined the bandwagon to target Gujarat and then India for what they claimed was an outrageous religious jibe made at Rizwan. They also went on to complain about the incident to ICC.

However, the fans of Green Army forgot the fact that Rizwan is frequently spotted praying on the cricket field where his team won. While it is possible that his prayers were not aimed at the Hindu-majority Indian team, it's worth mentioning that Pakistan's former cricketer Waqar Younis expressed joy that Rizwan prayed 'in front of Hindus'.

Moreover, it's just the tip of the iceberg. The Pakistani team as a whole often struggles to separate their sport from religious sentiments. It's almost unclear whether they're playing cricket or pursuing a religious mission.

There are many instances in the past as well when the Pakistani cricketers have brought religion to the cricket field. For some instances, the then captain of the Pakistan team- Mushtaq Mohammed called Pakistan's test series win against India a 'victory of Muslims worldwide over Hindus' in 1978. Former cricketer Shahid Afridi had made headlines for boasting about smashing a TV upon witnessing his daughter perform the 'aarti'.

Former Pakistan speedster Shoaib Akhtar once explained the concept of Ghazwa-e-Hind by saying that that 'they will first capture Kashmir and then invade India'. Moreover, former Pakistan captain Inzamam-ul-Haq had once said that 'if Muslims show their Muslim-ism, not one human on earth will remain non-Muslim'.

## Vivacious To Vulnerable

There was a girl I knew since years  
Full of life, full of Vigor.  
And a soft smile doing its magic that  
Never had I seen on her face disappear.

Someone who used to dance  
On the tunes of love and alacrity,  
Could dance no more;  
For she was bound by the chains of apathy.

A ball of sunshine was suddenly  
Trapped in a gigantic room of darkness,  
And she failed to lighten it up like she did  
With everyone's small world she entered into.

She let those chains stop her from dancing.  
She let that darkness consume her.  
Could dance no more;  
For she was bound by the chains of apathy.

A ball of sunshine was suddenly  
Trapped in a gigantic room of darkness,  
And she failed to lighten it up like she did  
With everyone's small world she entered into.

She let those chains stop her from dancing.  
She let that darkness consume her.  
She became habituated.  
She turned from vivacious to vulnerable.

Someone who once found it difficult  
To stop chattering,  
Was now silent and that too  
Forever.....



-Barsha Ragini

# TOURISM

## Tourism in Mayurbhanj

Located in the Northern boundary of the state of Odisha with a total geographical area of 10,418 sq.kms, Mayurbhanj has been tourists' paradise right from the hoary past. The district is blessed with lush green forests, lofty hills, enthralling waterfalls, captivating wild life sanctuaries, places of historical and archaeological importance, prominent pilgrimage sites and above all hospitable and peace loving people which make the ultimate destination for tourists.

### SIMILIPAL:

Similipal Tiger Reserve is a place of exceptional natural beauty and scenic grandeur spread over 2750 sq.kms. Vast stretch of luxuriant vegetation, predominantly with Sal (*Shorea robusta*) and more than 1150 plant species, offers ideal shelter for wild animals. The landscape,



beautifully studded with numerous small and high hills like Meghasani (1165 m) and Khairaburu (1178 m high), is densely covered with vegetation. Sparkling waterfalls like Joranda (150m) and Barehipani (400m) are situated in the Core Area of Similipal National Park. A visitor to Similipal can see animals like Tigers, Elephants, Sambar, Barking deer, Gayal, Chittal or the spotted deer, Chaurasingha or the Four-horned antelope, Wild boar which are quite common. Similipal has varied avifauna of peninsular and also of Himalayan region. Hill myna, Pea-fowl, Red Spur fowl, Painted partridge, Shaheen falcons and squails are important birds. Reptiles include Python, King Cobra, Rat snake, Common Krait, Russell's viper etc. For the above varieties of Fauna, Similipal has been declared a National Park since 1956. As a Tiger Reserve, Similipal earned fame from October 1974 when a two month old tiger cub was adopted as a pet by Dr. Saroj Raj Choudhury, the late lamented Field Director of the Similipal Tiger Reserve. The cub was named "Khairi" after the name of the river Khairi.

Orchidarium at Gurugudia is the abode of 94 species of Orchids (Malanga) and 1076 species of other plants. It also harbours some Himalayan species of Orchids too. About half of the orchids in Similipal are terrestrial, that means, they grow on the ground and the rest are epiphytic. It spreads upon the branches, trees and rocks.

The extensive and densely forested hilly tracts of Similipal Biosphere Reserve are the home of many tribes such as Bathudi, Kolha, Santal, Ujia (Savara), Gonda, Bhuyan including two primitive group Hill Khadias and Mankdias. They live on forest products, roots and fruits and shifting cultivation. The marginal farmers also adopt animal husbandry and horticulture of common vegetables which cater to local demands. Fruit-bearing indigenous trees like kendu, mahul, tentuli, sal, char, jeutha etc directly support the economy of the tribal families. Plants such as harida, bahada, anla, kochila, kendu leaves, siali leaves, patalagaruda etc also play a key role in the life and economy of communities living in and around the forest.

### RAMTIRTHA:

Located beneath the feet of Similipal National Park nearby



Jashipur town with facilities of Tourist Rest house, the place is famous for medicinal herbs, crocodile germination centre, Ram Mandir and natural beauties. The Crocodile Project was started in 1979 at Ramtirtha. It is the only Crocodile Rearing Centre in the Mayurbhanj district where the Mugger Crocodile Management Programme has helped the Mugger Crocodiles to survive and flourish on the bank of the Khairi river. As per the mythological accounts, during the days of Tretaya Yuga, Lord Shree Ram along with Devi Sita and brother Laxman passed through the dense forest of Similipal; where due to tiredness, Devi Sita sat on the plateau for a while and she washed her face and feet in the river that was flowing beneath. Since then Ramtirtha has been characterized as a legendary place.

### KHICHING:

Situated only 25 km from Karanjia and 150 km from Baripada, Khiching was the ancient capital of the Bhanja rulers. The present Kichakeswari temple made of black granite or muguni stone, dates back to 10th century A.D. It was reconstructed from the ruins of an earlier temple and the deity was



installed on 14 March 1942. The temple of Goddess Kichakeswari is a priceless embodiment of superb charm and inimitable grace and occupies a significant place among the famous monuments of Odisha like Konark, Puri and Bhubaneswar as a sacred sanctuary and religious activities and Goddess Kichakeswari, in the form of eight-armed Chamunda of Sakta Pantheon stands gloriously betokening the heyday of royal dignity and aristocracy. One of the most precious relics of Khiching is the newly restored temple of Lord Nilakantheswar popularly known as Kutaitundi which is situated at a distance of about five hundred yards to the north of the Thakurani's compound. It is a small temple of Indo-Aryan style without a porch and is highly ornamented on the surface depicting various scenery of religious episodes and mundane activities. Apart from the above monuments, there are the diminutive temple of Chandrasekhar (Siva) and the ruins of Itamundia, Kichakagarh, Viratgarh, Chaulakunji, Shankhua Rajar Garh etc. The archaeological museum located in the Thakurani compound, contains large number of images, Copper Plate Grants, pre-historic tools and fragments of temples which attract scores of visitors round the year.

### BARIPADA:

Baripada is situated on the bank of the Budhabalanga and is the



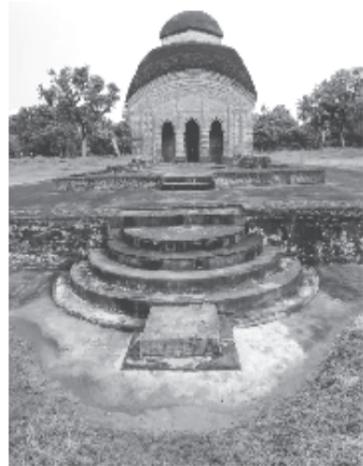
headquarters of the district of Mayurbhanj. This city is known for temples and historical monuments. In addition, the fame of Baripada Chhau dance has crossed geographical limitations and has claimed worldwide famous for its

beauty, vigour and marvel of the art. The temple of Lord Jagannath at Baripada is universally known as Hari Baldev Jew temple. Known as Odisha's Dwitiya Srikshetra, Baripada hosts the second most popular Ratha Yatra in the state after Puri. The temple was built by Raja Baidyanath Bhanja in 1575 A.D. after the style of Kakharua Baidyanath temple of Manatri. In the temple premises are found many Jain and Buddhist sculptures besides several icons of Brahmanical religion. There is another Jagannath temple of diminutive size built by Raja Srinath Bhanja in 1863-64 A.D. It is characteristically known as Banthia Jagannath (Dwarf Jagannath) temple. During the early part of the twentieth century the Brahmo Samaj got some foothold in Mayurbhanj. Maharaja Sriram Chandra was a patron of Brahmo religion. His wife Sucharu Devi was a Brahmo and the daughter of Keshab Chandra Sen. A Brahmo prayer hall was built at Baripada in 1925 to cater to the need of the followers. The Brahmo Mandir was later on constructed in the Golapbag area which was the heart of Baripada town. The Ambika temple located at Ambikasahi is an ancient temple of Baripada. Goddess Ambika is revered as the Living Goddess who protects her devotees from all disasters.

The main attraction of Baripada town is the magnificent Royal Palace. Its design is an imitation of the world famous Buckingham Palace of London. There are two large courtyards and a swimming pool. The Northern gateway is designed like the Charminar of Hyderabad. There is another palace at Beldadia built at a secluded elevated ground to accommodate royal guests. The palace has rendered accommodation to several eminent personalities including Sardar Vallabhbhai Patel, Gyanendra Shah, the last king of Nepal, J.N. Tata and Keshab Chandra Sen. To the extreme south of the town is located the Queen's Park or Ranibag. It shelters the monument of the late queen Maharani Lakshmi Kumari, wife of Maharaja Sriram Chandra Bhanja Deo.

### HARIPURGARH:

Haripurgarh was once the royal capital of the illustrious Bhanja rulers of Mayurbhanj. It is situated



about 15 km from Baripada on the right bank of the Budhabalanga river. The monuments and archaeological findings in and around the site whisper silently the glorious heritage of the bygone days. It was also the stronghold of Vaishnavism. Raja Baidyanath Bhanj, who was a devoted Vaishnava built here a magnificent temple in honour of his Guru Rasikaraya. The temple was made of burnt bricks in Gaudiya style with decorative designs on the outer surface. During the century that

followed the death of Baidyanath Bhanja, a few more Vaishnavite shrines were erected in and around the capital. These were Radhamohan and Lakshmi-Narayan temples at Haripur and The Gundicha temple at Brundabanpur Sasana, adjacent to it. On the South-east of the temple of Rasikaraya and outside the fort enclosures lies the temple of Lord Jagannath. The image of Jagannath which was formerly being worshipped in the temple has now been brought to the neighbouring village Pratappur. The general belief is that this temple was constructed by Raja Harihar Bhanja in imitation of the Gaudiya style of architecture. There is a stone image of Mahisasuramardini Durga known by the name Gadachandi, in the bamboo thicket of Barapada, a place situated close to Haripur. Another image discovered there represented Kotasini or kotavasini, which is presumed to be the presiding deity of the fort.

### MANATRI:

Situated at a distance of 36 km from Baripada town, Manatri is famous for the sacred shrine of Kakharua Baidyanath (Lord Shiva). Tradition says that a Raja of the Soma Vamsa



was attacked with leucoderma; his whole body being depigmented with white patches, he was called 'Kakharua'. From the fact that the Raja's disease which gave him the look of a Kakharu (pumpkin) was cured by Baidyanath, the God came to be called Kakharua Baidyanath. The architectural design and workmanship of the temple are that of the 15th or 16th century A.D. The temple is divided into three parts: Natamandira, Jagamohana, and Mula Mandira. Maha Shivaratri is the main festival of the temple when a large number of pilgrims gather to worship the deity.

### BHIMKUND:

Located in the vicinity of Booring village in Thakurmunda P.S., Bhimkund is a large and deep pool in the river Baitarani. The legend goes that Bhima, the second Pandava, used to take his bath here in this pool when the Pandavas lived in disguise in Viratnagar, the present Kaptipada. Here the majestic Baitarani river provides two most scary waterfalls called Sanakunda and Badakunda to the nature lovers. The waterfall has terrific characteristics of imparting awesome experience to the visitors due to large vertical shaped gorge



and speeding current and makes the environment smoky. Further, huge roaring sound of the waterfall makes the place most interesting among the tourists. During Makara festival in the month of January, thousands of people gather here from various parts of the district and from Keonjhar district to take holy dip in the pool.

### DEVKUND:

Located at a distance of 57 km from Baripada, Devkund or Debakunda is famous for the waterfall and the temple of Goddess Ambika. Devkund means the bath tub of Gods and Goddesses. Unlike this there are four more kunda (tanks) at Devkund



which are named as Bhudarkund, Tailakund, Haridrakund and Devkund. Due to these five tanks at Devkund it is also known as 'Panchasagara Tirtha'. The cascade touching the base of the temple falls on a gorge where the river rests awhile and further follows its course. Climbing up more than 100 steps from Devkund, at the source of the river, there is the temple of Devi Ambika Mata, which is worth seeing.

### SITAKUND:

Sitakund is an important tourist spot in the Mayurbhanj district. It is located within Similipal National Park amidst spectacular natural environment with lush green forest. This mesmerizing waterfall is associated with a mythological story. It is believed that Goddess Sita rested here for a few days during her



exile, so the place is named Sitakund after her. There is a tank whose water comes from the top of the hill and accumulates in this tank where tourists can enjoy bathing. Lord Hanuman is worshipped in a small cave near the waterfall.

### SAMIBRUKSHA:

Three Km to the south of Podadiha in Kaptipada is seen a hillock of 500 ft. height. On the western side of it there are five caves which from a distance look like small rooms. Tradition says that the five Pandavas hid their weapons in these five caves before proceeding to the court of the king of Virata. On the thirteen day of Chaitra fullmoon (Troyodashi Tithi), water running down the eastern side of the hillock is believed to be sacred. Attracted by the sanctity of



the water, people gather here from distant places at the time of the mela. There is a hermitage at the foothill.

Thus, the district of Mayurbhanj has got a tremendous potential for attracting large number of tourists (both Domestic and Foreign Tourists). Hence, there is need for providing easy and more comfortable modes of transport, better accommodation, co-operation from various travel agencies, development of tourism destinations, trained guides and tourist literature. Furthermore, concerted efforts by all stakeholders such as the Central and State Governments, Private sector and the community at large are pertinent for promotion of tourism in the district.

# FACTS TO KNOW

## PAPAYA & TONGUE EXERCISE

In the future, the new treatment method for malignant tumors will no longer be chemotherapy, radiotherapy or surgery, but changing one's diet to improve the new blood vessels!

A high-quality diet is the natural chemotherapy three times a day.

The following information should be taken seriously, it is simple and easy to implement, and it is very good.

What you may not know is: Papaya, which is usually easy to obtain, is the king of fruits!

The tomato that the doctor praised was nothing compared to papaya.

Papaya has been selected by WHO (World Health Organization) as the fruit with the highest nutritional value for two consecutive years, that is, the king of fruits.

### The nutritional value of papaya is:

- 1. Calcium:** Papaya has 2 times that of apples.
  - 2. Vitamin C:** Papaya has 13 times that of apples, 7 times that of bananas, 7 times that of watermelon, 8 times that of cherries, and 1.3 times that of pineapples.
  - 3. Vitamin A: Papaya has** 10 times that of kiwi, 18 times that of apples, 1.5 times that of guava, 15 times that of banana, 1.5 times that of watermelon, 15 times that of cherries, and 16 times that of pineapple.
  - 4. Vitamin K: Papaya has** 5 times that of bananas, 2.5 times that of watermelon, and 4 times that of pineapples.
- Great again! related to eye protection.**
- 5. Carotenoids, lycopene, B carotene, lutein and zeaxanthin, etc.:**

Papaya has 2000 times better than kiwi. Kiwis, apples, cherries, pineapples, bananas, guava, none of these have these ingredients.

### STORY FROM A PATIENT

I have been suffering from cancer for 6 years. I have undergone chemotherapy. Some doctors told me to eat more papayas. My gratitude is indescribable, I just hope that more people can benefit from it.

When you go to visit people in the future, if you choose fruit as a gift, you can bring papaya.

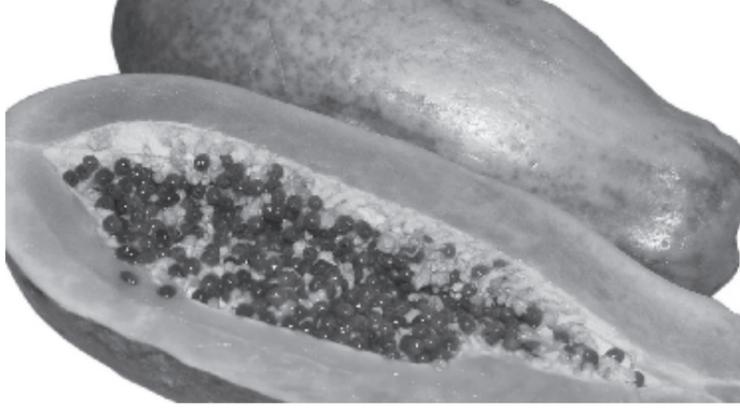
According to a Doctor from the US: After the age of 50 one may experience many types of illnesses. But the one I am most worried about is Alzheimer's. Not only would I not be able to look after myself, but it would cause a lot of inconvenience to

my family members.

One day, my son Sushil came home and told me that a doctor friend has taught him an exercise

was a marked improvement in my Brain Retention.

My mind was clear and fresh and



using the tongue.

The tongue exercise is effective to reduce the onset of Alzheimer's and is also useful to reduce/improve the following:

1. Body weight
2. Hypertension
3. Blood-Clot in Brain
4. Asthma
5. Far-sightedness
6. Ear buzzing
7. Throat infection
8. Shoulder/ Neck infection
9. Insomnia

The moves are very simple and easy to learn.

Each morning, when you wash your face, in front of a mirror do the exercise as below :

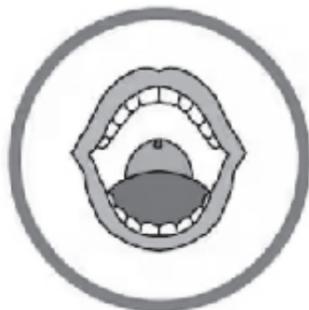
Stretch out your tongue and move it to the right and then to the left for 10 times. Since I started exercising my tongue daily, there

there were other improvements too in

1. Far sightedness
2. No giddiness
3. Improved wellness
4. Better digestion
5. Less flu/cold
6. I am also stronger and more agile.

The tongue exercise helps to control and prevent Alzheimer's. Medical research has found that the tongue has connection with the BIG Brain.

When our body becomes old and weak, the first sign to appear is that our tongue becomes stiff and often we tend to bite ourselves. Frequently exercising your tongue will stimulate the brain, help to reduce our brain from shrinking and thus achieve a healthier body.



Open your mouth as long as you can!



Always gargle while washing teeth! It lifts the soft palate spontaneously.



Touch your upper lip!



Touch your lower lip!



Touch the right corner of your mouth!



Touch the left corner of your mouth!

## KEEP WALKING

Walking is the exercise that needs no gymnasium. It is the prescription without medicine, the weight control without diet, the cosmetic found in no pharmacy. It is the tranquilizer without pill, the therapy without a psychoanalyst, the fountain of youth that is no legend. A walk is the vacation that does not cost anything.

The organs of our body have their sensory touches at the bottom of our foot, if you massage these points you will find relief from aches and pains as you can see the heart is on the left foot. It is indeed correct since the nerves connected to these organs terminate here. God created our body so well that the thought of even this. He made us walk so that we will always be pressing these pressure points and thus keeping these organs activated at all times. So, keep walking.

Nature has made our feet sensitive. We have a lot of acupressure points on our feet which love to be massaged every now and then. But, we deprive our poor feet the right to feel different surfaces by continuously covering them in thick chappals, or walking on flat tiled floor. Then there is the obsession with clean, soft feet. The choice is simple. Do you want to be pretty and sick or tough and healthy? Health is the wealth that can give you the smile that no beauty parlor can produce. Let's go back to the first step. No baby ever wore shoes while learning to walk. And the first step was such joy. The baby was trying out the strength of his leg muscles, and suddenly discovered balance by becoming aware of the muscles in his feet. Most children hate wearing shoes, they prefer sandals. Shoes and socks, worn the whole day, render our feet numb. The more comfortable our shoes, the lesser aware we are of our feet.

Good posture is important during walking exercise, and swinging the arms opposite to the movement of the legs makes for a better stride.

commonly used acupressure points located on the legs and feet. Acupressure points on the legs and feet are used for a very wide range of conditions including digestive problems, stress and anxiety, insomnia, hot flashes, headaches, PMS, and more. For acupressure points on other parts of the body.

Why does it feel so good to fall asleep on sand or lying on the earth looking up at the stars? According to Martin Zucker (author of Earthing), connecting your physical body to the flow of the earth's electric energy has been scientifically proven to promote healing and create a deep sense of well-being within us.

Zucker suggests that modern lifestyle has increasingly separated humans from this flow of subtle omnipresent energy of

the earth. We wear insulative rubber or plastic-soled shoes that block the flow of energy and walk on concrete or asphalt. Current research has revealed that connecting to earth's energy creates an uplifting shift in our physiology. It harmonizes and stabilizes the body's basic biological rhythms, reduces and eliminates pain, knocks down (and even knocks out) chronic inflammation, promotes health, vitality and better sleep.

Summer is the perfect season for walking barefoot. Why not take advantage of good weather, grass and warm sand? Now is the time to take a bare step towards health!



### Benefits of walking barefoot:

- 1. Improve Your Posture -** Poorly developed muscles in the feet can lead to bad posture, which is a major factor in developing back problems. Walking or running barefoot strengthens the muscles in the feet, calves, thighs and hips.
- 2. Develop Here-and-Now Awareness -** Quieting the mind chatter can be challenging, unless you are engaged in an activity that requires you to be fully present. It is hard not to pay attention to every step when you're walking barefoot, you have to be on the look out for sharp rocks and thorns! This helps you focus on the present moment.
- 3. It's a Free Reflexology Session-** There are many reflex points that correlate to every part of your body in your feet. When you walk barefoot, these little pressure points get stimulated naturally with the help of every little bump and rock in the road, which enhance the natural healing process of our bodies.
- 4. Increase Sensory Experiences-** There are distinct differences between walking on sand, grass, wood or asphalt. By wearing shoes all the time, we are missing out on the sensory experiences we can pick up with our feet. The world becomes truly three-dimensional when we can sense more with our feet.
- 5. Improve Mental/Emotional Health-** It is probably not a coincidence that most exercises involving mental concentration are done barefoot such as: martial arts, yoga and tai chi. Walking barefoot and connecting to earth's energy can help decrease anxiety and depression and increase the levels of those feel good endorphins.

Continued Page 18

# WOMEN EMPOWERMENT

## Economics Nobel for Women-Labour Market Research

Pradeep Kumar Panda, Economist, Bhubaneswar

The 2023 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel is awarded to Prof. Claudia Goldin "for having advanced our understanding of women's labour market outcomes."

She uncovered key drivers of gender differences in the labour market. She provided the first comprehensive account of women's earnings and labour market participation through the centuries. Her research reveals the causes of change, as well as the main sources of the remaining gender gap.

Prof. Claudia Goldin is an American Economist and Professor of Harvard University. She is third woman to get Economics Nobel Prize after Prof. Esther Duflo (2019) and Prof. Olliver Ostrom (2009).

Women are vastly underrepresented in the global labour market and, when they work, they earn less than men. Claudia Goldin has trawled the archives and collected over 200 years of data from the US, allowing her to demonstrate how and why gender differences in earnings and employment rates have changed over time.

### Presence of U-Shaped Curve

Goldin showed that female participation in the labour market did not have an upward trend over this entire period, but instead forms a U-shaped curve. The participation of married women decreased with the transition from an agrarian to an industrial society in the early nineteenth century, but then started to increase with the growth of the service sector in the early twentieth century. Goldin explained this pattern as the result of structural change and evolving social norms regarding women's responsibilities for home and family.

During the twentieth century, women's education levels continuously increased, and in most high-income countries they are now substantially higher than for men. Goldin demonstrated that access to the contraceptive pill played an important role in accelerating this revolutionary change by offering new opportunities for career planning.

Despite modernisation, economic growth and rising proportions of employed women in the twentieth century, for a long period of time the earnings gap between women and men hardly closed. According to Goldin, part of the explanation is that educational decisions, which impact a lifetime of career opportunities, are made at a relatively young age. If the expectations of young women are formed by the experiences of previous generations – for instance, their mothers, who did not go back to work until the children had grown up – then development will be slow.

Historically, much of the gender gap in earnings could be explained by differences in education and occupational choices. However, Goldin has shown that the bulk of this earnings difference is now between and women in the same occupation, and that it largely arises with the birth of the first child.

"Understanding women's role in the labour is important for society. Thanks to Claudia Goldin's groundbreaking research we now know much more about the underlying factors and which barriers may need to be addressed in the future," says Jakob Svensson, Chair of the Committee for the Prize in Economic Sciences.

History helps us understand gender differences in the labour market. Over the past century, the proportion of women in paid work has tripled in many high-income countries. This is one of the biggest societal and economic changes in the labour market in modern times, but significant gender differences remain. It was first in the 1980s that a researcher adopted a comprehensive approach to explaining the source of

these differences. Claudia Goldin's research has given us new and often surprising insights into women's historical and contemporary roles in the labour market. Globally, around half of all women are in paid employment, while the equivalent figure for men is eighty per cent. When women work, they usually earn less. Understanding how and why levels of employment and earnings differ between women and men is important for socioeconomic reasons, in both the short and long run, because the issue relates to the most efficient use of society's resources. If women do not have the same opportunity to participate in the labour market, or they participate on unequal terms, labour and expertise are wasted. It is economically inefficient for jobs not to go to the most qualified person and, if pay differs for performing the same work, women may be disincentivised to work and have a career. By combining innovative methods in economic history with an economic approach, Goldin has demonstrated that several different factors have historically influenced – and still influence – the supply of and demand for female labour. These include women's opportunities for combining paid work and a family, decisions relating to education and childrearing, technical innovations, laws and norms, and the structural transformation of the economy. In turn, her results have enabled a better understanding of how and why rates of employment and pay differ between women and men. To achieve these insights, Goldin looked back over two hundred years.

### In the rearview mirror

Over the last few centuries, society has experienced significant political, social and technological changes. Contemporary industrialised countries have enjoyed steady economic growth since the industrial revolution. It would be easy to believe that women's participation in the labour force would follow the same trend, but Goldin's research has shown that this is not the case. Looking in the rearview mirror, she has created an understanding of how women's circumstances changed as the economy was transformed from a traditional agrarian economy to contemporary society. However, some parts of this mirror were smudged, due to women's work being underreported in historical sources, and these smudges needed wiping away. When this was done, Goldin could allow the overall picture to emerge by analysing both the corrected and new historical data. When she zoomed in on US history, this picture became crystal clear – she was able to identify groundbreaking patterns that have not only challenged existing knowledge, but which have also changed the view of women's historical and contemporary roles in the labour market. One of these patterns looked like the letter U. The U-shaped curve. Before Goldin's pathbreaking book was published in 1990, researchers had mainly studied data from the twentieth century and concluded that there was a clear positive association between economic growth and the number of women in paid employment. In other words, as the economy grew, more women were in work. However, because older data had barely been studied, this relationship remained unclear over a longer period of time.

Goldin's first observation was that women's employment rates had often been incorrectly stated in existing data. For example, it had once been common for women's occupation to be designated as "wife" in censuses and public records, but even if they were married it was not automatically the case that they did no work other than domestic labour. The fact is that it was not unusual for women to work alongside their husbands in agriculture or various forms of family

business. Women also worked in cottage industries or production in the home, such as with textiles or dairy goods, but their work was not always registered correctly in the historical record. By compiling new databases using historical time-use surveys, industrial statistics and censuses, Goldin was able to correct the data on women's participation in the labour market. She established that the proportion of women in the US labour force was considerably greater at the end of the 1890s than was shown in the official statistics. For example, her

employment rates of married and unmarried women. While around twenty per cent of all women worked for pay, only five per cent of married women did so. This was also the period of US history in which the upward trend for female participation in the labour market started – where the U-shaped curve turned upward. Goldin showed that technological progress, the growth of the service sector and increased levels of education brought an increasing demand for female labour. However, social stigma, legislation and other



corrections demonstrated that the employment rate for married women was almost three times greater than that registered in censuses. By uncovering data all the way back to the end of the eighteenth century, she was also able to reveal a surprising new historical fact: prior to the rise of industrialisation in the nineteenth century, women were more likely to participate in the labour force. One reason for this was that industrialisation made it harder for many married women to work from home and so combine work and family. Goldin documented this in an innovative manner, using data from over ten thousand female household heads in eighteenth-century Philadelphia. Even if Goldin was able to show that many unmarried women were employed in manufacturing during the industrial era (in some states, up to forty per cent of all young women worked in industry), the total female labour force declined. Along with the previously known increase at the start of the twentieth century, Goldin showed that women's historical participation in the US labour force could be described using a U-shaped curve for the two-hundred-year period from the end of the eighteenth century. Because economic growth was steady throughout this period, Goldin's curve demonstrated that there is no historically consistent association between women's participation in the labour market and economic growth. We now know that this U-shape is in no way unique to the US and holds true in many other countries. These insights make it possible to better map and understand women's position in the labour market internationally. In other words, we should not count on economic growth automatically reducing gender differences in the labour market. But what explains the differences? Why is equality progressing so slowly?

Goldin established that marriage is one important explanation. Do you take this man to be your lawfully wedded husband? By the beginning of the twentieth century there was a significant difference in the

institutional barriers limited the influence of these factors. Goldin was also able to establish that marriage played a greater role than had previously been believed. Goldin noted that legislation known as "marriage bars" often prevented married women from continuing their employment as teachers or office workers. Despite an increasing demand for labour, married women were excluded from parts of the labour market. This type of legislation peaked during the 1930s' Great Depression and the years following it – but was not the only reason. Goldin also demonstrated that there was another important factor in the slow reduction of the gap between men's and women's rates of employment, namely women's expectations for their future careers.

### The importance of expectations

The labour market consists of different generations, cohorts, who faced different circumstances when making their life choices. Goldin developed a cohort-based approach to the analysis of what happens when a cohort enters the labour market. In the early twentieth century, for example, most women were only expected to work for a few years prior to marriage and then to exit the labour market upon marriage, which influenced their educational choices. Goldin showed that in periods of rapid development, women may make decisions based on expectations that later do not come to fruition.

In the second half of the twentieth century, societal changes meant that married women often returned to the labour force once their children were older. The job opportunities they then had were based on educational choices made perhaps twenty-five years previously, at a time when they, according to contemporary social norms, were not expected to have a career. Many women who were young in the 1950s had mothers who were housewives and, when their mothers returned to the labour market, the daughters had already chosen their educational paths. In other words, the daughters did not

expect to have a career when they planned their future, and it only became apparent much later that they could have one that was long and active. For much of the twentieth century, women underestimated how much they would work; expectations and outcomes did not start to converge until the 1970s. Consequently, women who were young in that period invested more in their education. In recent decades, women have become increasingly likely to study and, in high-income countries, women generally have a higher level of education than men. The way that women often left the labour force for an extended period after marriage also explains why the average employment level for women increased by so little, despite the massive influx of women into the labour market in the latter half of the twentieth century. Also, because women who had spent many years at home with their children long comprised a large proportion of the female labour force, the cohort-based approach explains why progress appeared to be slower than it actually was. For example, if participation in the labour market was twenty per cent for one generation and forty per cent for a later generation, the average participation will be thirty per cent (given that the generations are of equal size), despite labour market participation actually doubling between these two generations.

### Change in Societal Norms

However, even if changing societal norms, new patterns in the labour market and increasing levels of education influenced women's level of employment, more recent innovations have fundamentally changed their opportunities for both planning and having a career. One of these innovations was a tiny pill. The power of the pill Women's labour market expectations changed at the end of the 1960s, when the pill was introduced – an easy-to-use family planning and contraceptive method women could independently control. By utilising the fact that young women could access the pill in different years in different US states, Goldin and her co-author Lawrence Katz, demonstrated the power of the pill. Goldin found that the pill resulted in women delaying marriage and childbirth. They also made other career choices, and an increasing proportion of women started to study economics, law and medicine. The affected groups were those born in the 1950s, who thus had access to the pill when they were young. In other words, the pill meant that women could better plan their future and thus also be clearer about what they expected, giving them entirely new incentives to invest in their education and careers. Even if the pill influenced both educational and career choices, this did not mean that the earnings gap between women and men completely disappeared, though it has become significantly smaller since the 1970s. To understand how the earnings gap changed over history, Goldin once again decided to look in the rearview mirror.

### Historical earnings gaps

Goldin began by compiling statistics from a range of sources, producing the first long series on the pay gap between men and women. Using materials that covered two hundred years, she was able to demonstrate that many historically important structural changes in the labour market actually benefitted women, long before the issue of equality was a priority. The gender earnings gap lessened significantly during the industrial revolution (1820–1850) and when demand for administrative and clerical services increased (1890–1930). However, despite economic growth, increasing education levels among women and a doubling in the proportion of women working for pay, the earnings gap essentially stayed the same between 1930 and 1980.

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# HEALTH & WELLNESS

## Dual Burden of Malnutrition Among Indian Women

Pradeep Kumar Panda, Economist, Bhubaneswar

Malnutrition is a dual problem that either results in under nutrition or obesity /overweight. The second form of malnutrition is less studied and the research in this area is emerging in the recent past only with growing obesity across the world.

Often malnutrition is understood as lack of nutrients that ill affects the individuals' health and is taken as synonym to under nutrition. It is a result of a set of nutritional related deficiencies and lead to spectrum of disorders related to nutritional deficiencies. It causes iodine deficiency disorders like hypothyroidism, Goiter, Protein energy malnutrition, affects the eyesight as a result of vitamin A deficiency, iron deficiency anemia, compromised immune function and results in many other non-communicable diseases such as osteoporosis, weak digestive system and also results in fetal growth retardation in pregnant women.

Malnutrition status of women is very important because it is through women and her children that the effect of malnutrition is propagated to future generation. A malnourished mother gives birth to a low weight child who is more prone to diseases and negatively affects the future economic growth and development of the family and the society and continues the vicious circle of poverty and malnourishment.

According to NFHS 4, in India 23.9% of women suffers from under nutrition and more than 50% of all women age 15-49 years are anaemic in 2015-16 which is marginally low (2.2%) than what it was in 2005-06. About 7% of women age 15-49 years suffers from hypertension for which the percentage in urban areas (7.3%) is higher than that in rural areas (6.5%). BMI data reveals the increasing double burden of malnutrition among women in India. 20.6% of women population is obese in 2015-16 as compared to 14.8% in 2005-06. The problem is much intense in urban areas. On the other hand we witness a fall in under nutrition among women from more than 30% to 22.9% in 2015-16.

The nutritional status of adults is measured by his/her BMI. A BMI below 18.5 Kg/m<sup>2</sup> reflects undernourishment and a BMI greater than 25 kg/m<sup>2</sup> reflects obesity. The latest NFHS 4 data clearly shows that today India suffers from the dual burden of malnutrition where there coexists undernourished with over nourished or obese population.

Percentage of obesity among women has remarkably increased from 14.8% in 2005-06 to 20.6% in 2015-16 and the increase in witnessed in urban as well as rural India. This definitely points out the problem which is recently emerging and requires attention from the researchers and the policy makers. On the other hand there is a fall in the percentage of undernourished women from 33% to 22.9% between 2005-06 to 2015-16, the fall is witnessed in both rural and urban areas. We are witnessing the dual burden where there exist large percentage of undernourished women 22.9% of which 26.7% of rural and 15.5% of urban women is undernourished along with equal percentage of obese women

population (20.6%). It is important to notice here that a large chunk of urban women is obese (31.3%) as



compare to rural area (15%). On the other hand undernourishment is greater among rural than urban women. 26.7% of rural women is malnourished against 15.5% of urban. This makes us conclude that the intensity of the problem of obesity is relatively higher in urban areas and that of under nutrition is higher in rural areas.

Another silent health problem that most of the women in India are facing is Anaemia. It is found to be present in large proportion among undernourished as well as obese women. It measures lack of iron which is one of the most important nutrients for a healthy body. Malnourishment among women as measured by anaemia is present in both urban and rural India and need to be addressed independently as it cannot be solely attributed to income inequality.

A large proportion of urban (51%) and rural (54.4%) non pregnant women age 15-49 years are anaemic. The scenario is somewhat similar in case of pregnant women for which the figures are (45.8%) urban and (52.2%) rural. It is slightly higher in rural areas against urban area. The percentage of women with anaemia have showed a marginal decline when we compare the figures of NFHS 4 and NFHS 3, it has fallen from 56.2% to 53.2% among non-pregnant women and witnessed a fall of around 7.5 percentage points from 57.9% to 50.4% among pregnant women. This fall cannot be taken as satisfactory and requires the attention from health professionals and researchers in this area to target the problem effectively and look for possible solutions through integrated policy framework which aims to promote healthy life and a healthy lifestyle.

The women health in India is in a bad state even though the data reveals slight improvement in some key indicators of women health and nutritional status. We now analyze the socio economic factors that are expected to influence nutritional status directly. There is little improvement over the two periods of NFHS 3 (2005-06) and NFHS 4 (2015-16). For instance, female population above 6 years of age who ever attended school increased from 58.3% in 2005-06 to 68.8% in 2015-16. There is also an increase in percentage of women with 10 or more years of schooling but still only one third of women population have

10 or more years of schooling experience. This reflects the lack of accessibility to education in true

sense to a larger proportion of the total population of our country.

The relationship between health and education is proven by many studies. Larger reforms in education, especially women education will create ripple effects in diverse areas including health which will thus impact the economic growth and development of our country. Factors related to women empowerment have shown improvement over the period. One of the factors which has shown a major change is a large increase in percentage of women having a bank account which they themselves operate to 53% from 15% in 2005-06.

This suggests the impact of the government initiative on digitalization of the economy and schemes like Pradhan Mantri Jan Dhan Yojna which certainly have resulted in such massive increase in the percentage of women holding bank accounts. The increase has been witnessed in both urban and rural areas. Other indicators like spousal violence have also shown a decline over the period but is more widespread in rural areas (34.1%) as compare to urban areas (25.3%). More than 80% of women (both rural and urban) accepted that they participate in household decision



making as oppose to approximately 75% in 2004-06. Thus the women empowerment indicators definitely have shown improvement over the years and can be accepted as important socio economic factors adds to the explanation of falling under nutrition among women over this period.

Though there is marginal fall in the rate of under nutrition among women but still the percentage of under nourishment among Indian women is high. Along with this we are witnessing a rapid increase in obesity among women. In order to understand the pattern of under

nutrition and obesity in India we now do a state level analysis to figure out the states with maximum and minimum number of malnourished women. We will classify the states as top rung, upper middle rung, lower middle rung and bottom rung based on health and wellbeing of women.

Jharkhand, Bihar, Madhya Pradesh, Gujarat, Rajasthan, Chhattisgarh, Odisha, Assam and Uttar Pradesh have more than one fourth of its women population being under nourished and are classified as the bottom rung states. The states with more than 15% to 20% of undernourished women forms the lower middle rung, it consists of Maharashtra, Telangana, West Bengal, Karnataka, Tripura, Uttarakhand, Andhra Pradesh, Himachal Pradesh and Haryana. If we look at child malnutrition and women malnutrition we find high degree of association between both because the states with high degree of women under nutrition is also the ones with high degree of child malnutrition. This indicates the relationship between women and Child health. The exceptions are Meghalaya and Delhi where now the proportion of women with obesity is a greater than those suffering from under nutrition.

Looking into the second side of the problem, obesity is on rise in all the states of India and has increased at a rapid rate between NFHS 3 and NFHS4. The states with high level of obesity of about one third or more of women in the state being obese are Chandigarh followed by Delhi, Goa, Andhra Pradesh, Kerala, Andaman ad Nicobar, Punjab and Tamil Nadu. Other states with almost one fourth of women being obese are Jammu and Kashmir, Himachal Pradesh, Telangana, Sikkim, Manipur, Gujarat, Maharashtra, Karnataka and Haryana. These states together builds up the bottom rung and the lower middle rung. It is lowest in states of Chattisgarh, Bihar and Jharkhand which are basically the states with high percentage of under nutrition. This pattern is quite

obvious because the dominant factors in these states are those that leads to high degree of under nutrition, for instance these are poor states of India with low GDP and growth rates. Also there are states like Delhi, Tamil Nadu, Goa etc. which has high percentage of under nourished women and Children along with high obesity. This points out towards a need of dual setup program to target two opposite problems coexisting at the same time.

Under nutrition among women is higher in rural areas as compare to urban areas. The difference in

percentage of undernourished women between rural and urban areas has been as high as 16% in Gujarat. There exist large variation in proportion of under nourished women in rural and urban areas. The other states in which the difference in the proportion of under nourished women is high are Jharkhand, Maharashtra, Telangana, Odisha and Chattisgarh. On the other hand the problem of obesity is primarily concentrated in urban areas. There is an excess of proportion of obese women in urban areas over rural areas for all the states. The urban excess over rural in proportion of obesity among women is largest in the following states: Telangana, Gujarat, Odisha and Maharashtra. The urban excess over rural is more than 10% for almost all states of India.

Data reveals improvement in selected socio economic factors that are linked to women health and nutritional wellbeing over the period 2005-06 to 2015-16. The data also suggests low rate of improvement in rural areas as compare to urban areas with respect to these selected indicators which again can be accepted partially as a reason for high malnutrition rate among women in rural areas as compare to urban areas. The current scenario though have witnessed improvement over the past but still suggest lack of reach of basic health services and a scope for further improvement with respect to some key indicators like literacy rate and other factors determining women empowerment which directly impacts women nutritional and wellbeing status.

The current scenario of health and nutrition doesn't give us a chance to appreciate lower under nutrition in some states because these same states are the one which have the highest proportion of obesity. Clearly we can make the observation that today obesity among women is extremely high especially in the high income states like Delhi, Chandigarh, and Punjab etc. It needs attention because this is the new emerging health problem accompanying prosperity across states and is definitely a bigger threat in near future if not controlled as obesity leads to many serious health problems and shall lead to a negative impact on working capacity and hence growth. This demands a deeper analysis of the problem.

Obesity is highly concentrated in urban areas and the policies and targeting of the group should be framed accordingly to the data revelation for solving the dual problem of high under nutrition which shows an excess in rural areas and the problem of obesity which shows an excess in urban areas. There is a precipitous rise in obesity and fall in proportion of under nutrition among women in all states.

Today more than one third proportion of obese women coexists with more than one fifth proportion of under nourished women in most states of India. This scenario cannot be treated as satisfactory and needs to be addressed with a dual kind of policy framework targeting under nutrition on one hand and overweight and obesity on the other hand.

## SPECIAL REPORTS

### Farmer's daughter aspires to represent India in Rugby

Braving poverty and hard struggle, a poor farmer's daughter from Bargarh district is dreaming to achieve big. She is also working very hard to fulfill her aspiration.

Meet Nirmalaya Rout, who is representing Odisha in rugby at the 37th National Games in Goa.

Nirmalaya's father Vasudev Raut is a farmer. Apart from her parents, she has two siblings, a brother and sister. Vasudev, despite his constraints, somehow sent his daughter to Bhubaneswar to study. Along with studies, Nirmalaya also took up sports which is helping her to have name and fame in the circuit today. She has led her team to win gold medal in Rugby Sevens at



we were three brothers and sisters, it was difficult to survive in such a situation without much facilities.”

“I have also played in Junior National and Senior Nationals for Odisha. The Junior National

On the advice of her father, she left the village and headed towards Bhubaneswar, where she took admission in a private school. She saw the game there for the first time.

“When I came to Bhubaneswar for the first time, I saw this game. I liked it and got engrossed in it. Now I see my bright future in it. Ever since I started playing rugby, my family's financial condition has gradually improved and I now want to give a better future to my siblings and represent the country in the same game,” she said.

The 18-year-old player, who was part of the Asian Rugby Under-18 Championship (Kathmandu) silver medal-winning team, said, “I feel a little scared before every match, but as soon as the first match is over, the excitement of winning automatically fills me. And seeing the enthusiasm of the team, I get the courage to compete boldly.”



the India University Games 2023.

“My childhood was very difficult, the financial condition of the family was not good and

was held in Bihar in 2022. In that, our team got the second position whereas, in the 36th National Games (Gujarat), Odisha were the champions.”

### Passion for Soccer

They are daily labourers by profession, but their passion is football. They earn their living by working as khalasi and doing other odd jobs. But they are obsessed with football during their leisure time and dare to dream big with their obsession.

Meet Kailash Harijan and Sania Harijan from Borigumma area in Koraput district who are determined to organise International Gold Cup Football. Moreover, inspired by Kailash and Sania's love for football, several of their khalasi friends have also come forward to extend their helping hands to make the tournament a grand success.

“We are passionate about football. Apart from working as khalasi, we play football every day. We have been organising this tournament for the last 12

years. However, we want to make it big this year with the participation of some international teams. It will give us immense pleasure and joy to watch international players plying their trade in the mega event,” said Kailash Harijan.

“We work as khalasi and do other odd jobs to earn our living. However, our passion is football. We have been organising this tournament due to our immense love for the game. Players from different countries will participate in the tournament this year,” said Sania Harijan.



Khalasi friends of Kailash and Sania are organising the Gold Cup Football Tournament for the last 12 years. However, they have thought big this time and this year some foreign teams will participate in the International Gold Cup Football Tournament. Nigeria and Nepal teams along with many state sides will be in the fray this year.

“People of Koraput are passionate about football. Our khalasi friends in the district are playing some great football during their leisure time. Beyond their professional commitments, they are also managing to find time to organise such a huge football tournament. We all have been inspired by their passion for the game. We request the government to provide proper facilities to help the budding footballers in the district,” said Padman Swain, President of Maa Budhi Thakurani Khalasi Association.



### Study under Tree

In what could baffle the tall claims of the Odisha government, students of a school in tribal-dominated Kandhamal district are reportedly attending their classes under a tree for the last three years in the absence of adequate infrastructure.

As per reports, students of Class VI in Jhiripani Government High School under Tumudibandha block in the district are forced to study under a mango tree located on the bank of a river as there is only one classroom for 156 students of eight classes in the school.

Due to the lack of classrooms, while some students of a class are forced to read in the CRC building, others are having their study by sitting in the kitchen. As no more rooms are available, students of class VI have no alternative but to study under the tree.

Though the school teachers have informed the higher authorities about the ordeal of the students due to lack of classrooms and requested them to take necessary steps several times, it has so far fallen on deaf ears.

“It gives us immense pain to teach the students under the tree in dangerous condition for the last three years. We request the



government to take necessary steps to arrange proper classrooms for the students of the school so that the teaching will be effective for them,” said a teacher of the school.

“We have informed about our problem to the district administration several times. However, we have only got assurances in return. No steps have been taken so far to solve our problem,” she added.

“We are always in a state of panic while teaching the students under the tree. A branch of the tree may break anytime causing injury to the students. During the rainy season, we face many problems,” said another teacher.

The students also rued lack of classrooms in their school.

“It is often scary to read by sitting under the tree. We can't read during the rainy season due to lack of classrooms. It is also difficult to concentrate on study by sitting outside the classroom,” said a student of the school.

Meanwhile, Tumudibandha Block Education Officer (BEO) Pabitra Badatia said that he is aware of the problem of the school and steps will be taken to solve the issue soon.

“We have written about the problems of the school to the higher authorities. Hopefully, it will be solved soon,” said Badatia.

*From Page 15 (Keep Walking...)*

6. Balance the Body's Electrical Systems- Our bodies are made up of about 60 % water, which is great for conducting electricity. Walking barefoot can also help recharge and re-balance our body's natural internal 'electrical systems' as well as promoting an ionic balance within our cells and tissues.

7. Improve Sleep Patterns- Our ancestors had an intimate relationship with the earth. They slept close to it; either on plant-based bedding or the ground itself. Homes were made of stone or some other conductive material. Barefooting regularly can give your body an opportunity to calibrate its physiological rhythms with the earth's, which can help improve sleep.

**Points to Note:**

- When it comes to the best form of exercise, experts say good old-fashion walking is the best.
- Five-minutes of walking is enough to reverse harmful effects caused to arteries in the legs.
- Walking increases circulation and supplies more blood and oxygen to the muscles, organs and even the brain. Walking regularly has been linked to improved memory and increased growth of new neurons. It also wards off the weakening of brain tissue associated with aging.
- Regular walking, like most aerobic activities, is good for you because cardio-vascular exercise strengthens the heart and lungs, increasing overall fitness.
- Together with diet and other exercise plans, it can also help with weight loss and tone up muscles.
- Walking is also better for the spine than running, as it puts less stress on the discs.

Regular walking is excellent for spinal discs, which receive minerals and vitamins through the pumping action it causes. And the best thing is that you can see results from walking reasonably quickly - although it depends on each person's individual level of fitness, age and how often and fast they are walking.

# Legendary Tall Man Biju Babu

*Pradeep Kumar Panda, Economist, Bhubaneswar*

Legendary Son of the Soil Tall Man Late Bijayananda Patnaik, affectionately known to the people at large as Biju Patnaik, Biju Babu strode like a colossus in the politics and public life of Odisha, and played a very important role in our national life and politics as well. His life was an extraordinary saga of adventure and sacrifice, valour and prowess.

Born on 5 March 1916 in Cuttack, Odisha, he hailed from a family of freedom fighters, ideologues and patriots. Biju Patnaik was educated in the Mission Primary School of Cuttack and Ravenshaw Collegiate School, in the same city and, thereafter, studied in the Science stream in the prestigious Ravenshaw College, Cuttack.

Even as a student, Biju Patnaik was drawn to the national liberation movement. During his school days, Biju Patnaik took part in the freedom struggle and had to face police lathi charge while attempting to meet Mahatma Gandhi in 1926. In his formative years, he came under the influence of Mahatma Gandhi and the great nationalist sons of Odisha, Gopabandhu Das and Madhusudhan Das. He actively associated himself with the freedom struggle and participated in the Quit India Movement in close association with revolutionary leaders like Aruna Asaf Ali. He also underwent imprisonment from 1943 to 1945.

A nationalist to the core, Biju Patnaik was an inspiring leader who was deeply committed to the national cause, public welfare and development. He was a socialist at heart and was greatly inspired by the ideals and ideas of Acharya Narendra Deva, Jaya Prakash Narayan, Dr. Rammanohar Lohia and Minoo Masani. His life was a shining example of how commitment to certain finer human values can be the guiding

force for the welfare of the industrialist, he brought Odisha would accelerate the pace of



people. Naturally, he was a leader of the masses who articulated their concerns in the Chambers of the nation's representative institutions.

During his long innings in public life, Biju Patnaik was elected time and again to the Odisha Legislative Assembly as also to both the Lok Sabha and the Rajya Sabha. He was elected to the State Legislative Assembly for the first time in 1947. Thereafter, he was returned to the State Legislative Assembly six more times. During these eventful years, he adorned the Office of the Chief Minister of Odisha during 1961-63 and three decades later during 1990-95.

Biju Patnaik's commitment to parliamentary democracy and to the development and progress of the country through industrialization, his concern for the development of the States and his belief in true federalism provided not only a roadmap for holistic development but also a plan of action. Biju Patnaik has been hailed as the maker of modern Odisha and the architect of industrialization in the State. Himself a successful

into the map of industrial India.

Before entering the arena of politics, he had played a vital role in the industrialization of Odisha by setting up the Kalinga Airlines, Kalinga Tubes, Orissa Textile Mills, Kalinga Iron Industries, etc. Odisha's economic development owes a great deal to Biju Patnaik for the construction of the Paradeep Port, the Express Highway, the MIG air engine factory, cement factory, several irrigation projects, etc. He also started two Universities and several other centres of higher education in the State.

Biju Patnaik believed that unless the States became strong, India could never be a strong nation. He used to assert that when he championed Odisha's development, it was not because of any narrow consideration but to make the country as a whole strong and prosperous. He stressed that true federalism would result in strengthening India's unity in diversity which

progress of the nation.

Concerned as he was for the poor and the downtrodden, as the Chief Minister of Odisha, Biju Patnaik took a major initiative to raise the minimum wages in the State. He was an articulate champion of women

and Coal during 1977-80, he provided a new direction and dynamism to the steel industry in the country. The 'Son of the Soil' breathed his last on 17 April 1997 at the age of eighty-one.

Biju Patnaik was a man of rare courage, action and creativity. He is regarded as the 'Bhumi Putra' or the 'son of the soil' in Indonesia for his faring actions during the Indonesian freedom struggle in conducting rescue operations and saving the life of the then President of Indonesia, Sukarno, in the late 1940s. He headed an Air Transport Command in the Second World War during 1940-42. A grateful Russia honoured him for the overtime service to the country in 1945 for flying across to the embattled Soviet troops during the Second World War. In 1948, he landed the first platoon of troops in Srinagar which fought the Pakistani raiders.

An icon and role model for the youth and the younger generations of India, Biju

**BIJU PATNAIK**  
The Pride Of Odisha

He is known to have cycled all the way from Cuttack to Peshawar in the year 1932 on the 'Visit India Mission' traveling roughly 4500 Miles.



empowerment and gave due recognition to the talent of the womenfolk by making reservation not only in employment but also in local bodies in the State during his Chief Ministership. It was his commitment to women's welfare which impelled him to take the stringent measures of enforcing prohibition and abolishing dowry.

At the national level, Biju Patnaik came to be recognized as a very eminent parliamentarian. He was a member of the Sixth, Seventh, Eighth and Eleventh Lok Sabhas representing the Kendrapara parliamentary constituency during 1977-79, 1980-84, 1984-89 and the Aska constituency during 1996-97, respectively. He was also a member of the Rajya Sabha in 1971. During 1996-97, he was the Chairman of the Parliamentary Standing Committee on Finance. As the Union Minister of Steel, Mines

Patnaik was a great patron of science and technology and took several steps in this direction. The Kalinga Foundation and the Kalinga Prize instituted by him and monitored by the UNESCO is an everlasting testimony to his vision of modernisation of society through the dissemination of science and popularising scientific knowledge and ideas. Since its institution in 1951, the Kalinga Prize has become a source of encouragement and inspiration to all those who aspire for excellence in their respective fields.

Legendary Biju Patnaik was a great optimist and had an unshakeable faith and confidence in the infinite potential of the youth of the country. He dreamt of a prosperous and developed India where everyone had the opportunity to develop his or her personality and realize the full potential.

Deep Homage to Tall Man!



# Odisha's Economic Surge Bolstered by Approval of 12 New Projects at the 123rd State Level Single Window Clearance Authority (SLSWCA) Meeting

**12 projects worth INR 2,794.47 crores with an employment potential for 4,715 approved**

The 123rd State Level Single Window Clearance Authority (SLSWCA) meeting, convened today, marked another significant stride in Odisha's journey towards industrial excellence. Under the astute guidance of



Chief Secretary Shri Pradeep Kumar Jena, IAS, the SLSWCA gave its nod to 12 transformative projects, further solidifying the State's position as a preferred investment destination.

The 123rd SLSWCA meeting showcased the State's commitment to diversifying its industrial landscape across multiple sectors. Significant endorsements were made in these semiconductor and ESDM sector, further strengthening Odisha's manufacturing capabilities. The Aluminium industry received a boost, emphasizing the State's focus on modern manufacturing and sustainable materials. The steel sector, both downstream and primary, witnessed a surge in approvals, highlighting the region's rich mineral resources and metallurgical expertise. Gemstone sector emerged as a priority, reflecting Odisha's commitment to diamond and jewellery production. The food, beverage and allied sectors saw advancements, tapping into the State's food processing potential. Tourism sector's growth was championed to leverage Odisha's cultural and natural attractions. These sectors spanned across 7 districts indicating a widespread industrial development strategy.

These projects, with a combined investment of INR 2,794.47 Crores, are set to generate employment for approximately 4,715 individuals, reflecting the State's unwavering commitment to job creation and sustainable development.

In the semiconductor and ESDM sector, RIR Power Electronics Ltd committed to Invest INR 510.80 Crores in the

establishment of manufacturing fabrication and packaging facility for silico carbide devices and SIC modules on Semi-Conductor and ESDM Sector. Consequently, generating employment for 206 individuals in Khordha, InfoValley.



Nuvo Aeon Diamond and Jewellery Manufacturing LLP is poised to revolutionize the gemstone sector with its state-of-the-art lab-grown diamond and jewellery manufacturing facility in Khordha. With an investment of INR 256.50 Crores, this pioneering venture will not only

generate employment opportunities for 300 individuals but also serve as the first-of-its-kind manufacturing facility. Furthermore, it is expected to stimulate the growth of ancillary and downstream industries within the gems and jewellery sector.

The steel sector has experienced significant growth due to investment from several companies including Four Star Metaliks Pvt Ltd, Khedariasp Ltd, New Laxmi Steel & Power Pvt Ltd and Abhirav Industries Pvt Ltd. Collectively, these companies have invested near about INR 900 Crores in regions such as Jajpur & Sundergarh. Through these investment in ancillary & downstream sectors the state will generate employment for more than 1696 people.

In Fertilizer sector, the Utkal Phosphates Pvt Ltd is investing 62.07 Crores on establishing a manufacturing unit of Single Super Phosphate (SSP)

& Granulated Single Super Phosphate (GSSP) fertilizer unit with annual capacity of 1,20,000 MT in Jagatsinghpur.

Hindalco Industries Ltd is gearing up to invest INR 834.00 Crores in the aluminium downstream sector, specifically for the establishment of an Aluminum Battery Foil manufacturing facility in Sambalpur. This significant investment is expected to create job opportunities for 1,038 individuals. It will not only energize the investment landscape but also make the state more appealing to companies involved in electric vehicle (EV) battery manufacturing, encouraging them to establish their units in the region

Narayani Green Pack is setting up a corrugated paper and paper board containers manufacturing facility for Nestle in Khordha with an investment of INR 50.84 Crores and an employment potential of 120.

In the Food, Beverage and Allied sector M/s Maa Tarini Roller Flour Mills LLP slated to Invest 58.30 Crores on fully automated flour mill in Khordha while Milk Mantra dairy is investing Pvt Ltd 51.10 Crores on establishing a manufacturing unit for dairy product in Puri. The combined employment

generation potential is around 1135.

Odisha tourism sector is set to shine brighter with Mayfair Hotels and Resorts Ltd Investment of INR 73 Crores and an employment potential of 150 in Jharsuguda.

These projects spanning across diverse sectors from Semiconductor to Tourism underscores Odisha's Multifaced growth strategy and steps towards industrial revolution.

The project details are as follows which received approval from the committee:

Odisha today stands at the cusp of an industrial resurgence, blending traditional resource advantage with modern innovations. The State's strategic vision, coupled with its commitment to sustainable and inclusive growth, is not only attracting national and global investors but also setting a benchmark for holistic development. As these projects unfold, they will undoubtedly catalyse Odisha's journey towards becoming a powerhouse of industrial prowess, economic prosperity and employment generation. The future beckons with promise, and Odisha is leading the way with the clarion call of "Come, Join the Juggernaut".

Sl No	Project Name	Project Description	Project Cost (Rs in Cr)	Employment (Potential)	Sector	Location
1	RIR Power Electronics Limited	Manufacturing of Silicon Carbide (SiC) devices and SiC modules	510.80	206	Semiconductor and ESDM	InfoValley, Khordha
2	Nuvo Aeon Diamond and Jewellery Manufacturing LLP	Lab Grown Diamonds and jewellery manufacturing unit	256.50	300	Gemstone	Khordha
3	Hindalco Industries Ltd	Aluminium Battery Foil	834.00	1,038	Aluminium Downstream	Rengali, Sambalpur
4	Utkal Phosphates Private Limited	Manufacturing unit of SSP & GSSP fertilizer unit with annual capacity of 1,20,000 MT	62.07	110	Fertilizer	Paradeep, Jagatsinghpur
5	FourstarMetaliks Private Limited	50,000 MT MS Pipe and 40,000 MT MS Strip Plant	63.05	200	Steel (Downstream)	Sundergarh
6	Khedariasp Ltd	Expanding its capacity by setting up 28,800 TPA Steel Billet, 28,200 TPA TMT Rod & MS pipes.	56.00	60	Steel (Downstream)	Sundergarh
7	M/s Maa Tarini Roller Flour Mills LLP	Fully automated flour	58.30	75	Food, Beverage & Allied Sectors	Khordha
8	Milk Mantra Dairy Private Limited	Manufacturing unit for dairy products	51.10	1,060	Food, Beverage & Allied Sectors	Gop, Puri
9	Narayani Green Pack	Corrugated paper & paperboard containers manufacturing facility	50.84	120	Packaging	Khordha
10	Mayfair Hotels And Resorts Limited	Hotel and Resort	73.00	150	Tourism	Jharsuguda
11	New Laxmi Steel & Power Pvt Ltd	0.3 MTPA Stainless Steel Rolling Product.	547.00	1,186	Stainless Steel	Kalinga Nagar IE, Jajpur
12	Abhirav Industries Private Limited	1.2 MTPA Iron ore Beneficiation Plant and 0.8 MTPA Pellet Plant	231.81	250	Steel (Beneficiation & Pellet Plant)	Sundergarh
		<b>Total</b>	<b>2,794.47</b>	<b>4,715</b>		

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