

“Power is gained by sharing knowledge and not hoarding it”



EMERGING THOUGHTS

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Chartered Accountants

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Foreword

We, at SURESH & CO. are indeed ecstatic to release the series “EMERGING THOUGHTS”. This publication is a consolidated treasury of constructive thoughts and amusing updates of articulated assistants (Interns undergoing Chartered Accountancy course) who will be emerging as Chartered Accountants in near future and employees.

Man is a social animal. In order to live peacefully & comfortably in society, he needs to remain updated about what all is going on across the globe while sitting at the corner of his house. This concept of daily updates which services to the whole organization every morning inculcates knowledge, confidence about the subject and invokes one’s interest deeper into the topics by giving them an insight about the happenings in this divergent world.

The response we receive from the readers are always overwhelming and this eternal ritual has been an amazing journey reaching milestones as the learning opportunities have always illuminated our path with the essence of knowledge.

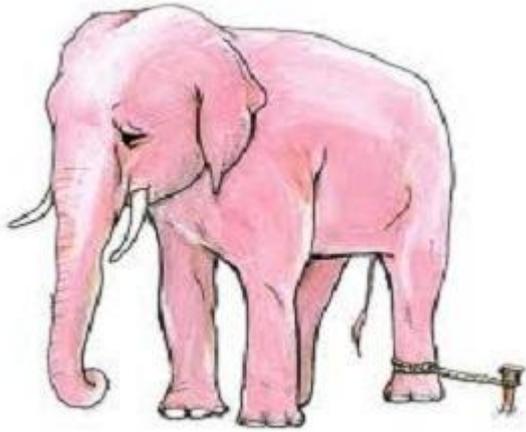
At SURESH & CO., every individual is empowered to be bold in the name of innovation and wisdom and are encouraged to think beyond their capabilities. This not only helps them to purify their thoughts, enriches their vision but also gives them an opportunity to reconnaissance various things that are beyond their study domain.

We at SURESH & CO., wanted to share these gems of infant thoughts as conceived by these young minds. It is to be noted that these updates may or may not have been reviewed by any senior or a technical expert and thus these should be used only to kindle thoughts in certain positive direction. Readers are advised to do further research and analysis on the topics which they find interesting.

“An investment in knowledge pays the best interest.”

“The only person who is educated is the one who has learned how to learn and change.”

Update for the day #961 | The Elephant Rope



ELEPHANT ROPE

A gentleman was walking through an elephant camp, and he spotted that the elephants weren't being kept in cages or held by the use of chains.

All that was holding them back from escaping the camp, was a small piece of rope tied to one of their legs.

As the man gazed upon the elephants, he was completely confused as to why the elephants didn't just use their strength to break the rope and escape the camp. They could easily have done so, but instead, they didn't try to at all.

Curious and wanting to know the answer, he asked a trainer nearby why the elephants were just standing there and never tried to escape.

The trainer replied;

“when they are very young and much smaller we use the same size rope to tie them and, at that age, it's enough to hold them. As they grow up, they are conditioned to believe they cannot break away. They believe the rope can still hold them, so they never try to break free.”

The only reason that the elephants weren't breaking free and escaping from the camp was that over time they adopted the belief that it just wasn't possible.

Moral of the story:

No matter how much the world tries to hold you back, always continue with the belief that what you want to achieve is possible. Believing you can become successful is the most important step in actually achieving it.

By **Darshan Jain**



Update for the day #962 | Piercings with Benefits

If you have been contemplating going out to get a piercing but you are on the fence about it, then hear this out! There are many reasons why someone might decide to get a piercing - one of those unique reasons may be a potential therapeutic benefit of getting or being pierced. Few piercings that may have benefits beyond the style they add to your look with body jewellery.

So many people want to get something pierced, but they are not sure what they want to get done. There are some potential alternate benefits to getting pierced.



The most well-known piercing with an alleged added benefit is the **daith**. Your daith (pronounced 'doth', like 'moth'), is a piercing located on your ear's innermost cartilage fold. It has been said that the daith piercing could help ease the onset of migraines (though this has not been proven by science). A daith piercing is a type of cartilage piercing located in the middle ear, often adorned with a closure ring, a seamless ring, a curved barbell or a **BCR**. If you follow the ridge of your helix (upper ear) into the area where it connects to your inner ear, a daith earring would run through the bit of cartilage directly above your ear canal.

Turns out that the most common piercing of all, the **lobe**, also comes with some potential benefits. Depending on where within the lobe your piercing is, they could help with lowering symptoms of depression. They are also rumoured to help heighten eyesight. It is said that pirates had their lobes pierced with gold hoops to help them see better when sailing the seas.



If you are in the market for appetite suppression, the **tragus** piercing is the one for you. In case you're wondering, the handy little flap in front of your ear canal is also known as your tragus. There is an acupressure point located directly in the middle of this flap that is supposedly responsible for controlling your hunger pains.

A **rook** piercing is located near the inner ridge of the ear cartilage in the centre of the ear, parallel to the outer rim of the ear. A lot of times this piercing is confused with the daith. Though this piercing is lesser known, getting this piercing helps to release tension and lower stress levels.

The **conch** piercing (pronounced "konk") is located in the middle portion of your ear cartilage. It's named after the shell due to the ear's structural similarity to a conch. Due to the placement of the acupressure points within your ear, the conch piercing could have a therapeutic effect on reducing chronic pain. This pressure point also aids in muscle relaxation.



There are many variations to the **helix** piercing, including the single, double, or triple helix. You can also choose between forward helix piercings or the industrial bar piercing. Depending on which variation you choose, this piercing could help with insomnia and allergy relief.

Acupressure Therapy tells that the Earlier a child's Ear is Pierced the better

The wearing of ornaments in the ear is considered among the married Indian women to be very sacred and auspicious for earrings signifying the status and the wealth of the person. By appending ornaments to almost every part of the ear, the women also ensured a continuous state of mental and physical well-being. It is also believed that the longer the ear lobes of women the more is their beauty and wealth. According to the Acupressure therapy the earlier a child's ear is pierced it is good for the meridians connecting the brain pass through this area and thus helps in the quick development of the brain. They also state that the point of vision is situated in the centre of the lobe. Apart from religious and spiritual significance the piercing of ears also has a lot of therapeutic values. Why You Must Get Your Child's Ears Pierced?

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- 1) Healthy for reproductive organs
- 2) Good for the brain
- 3) Improves eyesight and keeps ears healthy
- 4) Keeps the digestive system in check

By **Priyanshi Jain**



Update for the day #963 | The GameStop Saga

The meteoric rise of GameStop's stock price has generated international headlines.

GameStop is a video game retailer headquartered in Grapevine, Texas, which operates more than 5,000 stores. Between malls dying out and the pandemic, if you forgot the company existed, that would be fair. But it's still out there, trucking along. GameStop has become a popular play among short-sellers, who are basically investors who think a stock will go down. In Wall Street terminology, these investors are bearish on a stock's prospects. Again, dying malls plus pandemic. You get the reasoning. (Plus, GameStop has had a rocky history and faces a long-term threat from digital game downloads.)

The GameStop saga started last September when Ryan Cohen, investor and founder of the online pet food giant Chewy, bought a 13 percent stake in GameStop and demanded it to move more of its business online. Others like Tesla boss Elon Musk, the world's richest man, also played a role in influencing small investors to buy GameStop shares.

As a result, GameStop's share price began to surge as small investors gobbled the cheap stock using trading apps like Robinhood. For Hedge Funds like Melvin Capital, Citron Research, and other powerhouses on Wall Street, however, this was an opportunity to "short" - bet against the small traders as they were sure that the GameStop rally would not last long.

While shorting is a risky business, many hedge funds traditionally have made money out of it. It is the process of borrowing a company's shares and selling them with the intentions of buying them back at cheaper rates when the share price falls.

However, the hedge funds who shorted GameStop and similar stocks have been left high and dry as small investors drove up share prices intending to take down Wall Street financial powerhouses with big short positions.

Now, these hedge funds are facing a short squeeze and are scrambling to reduce their losses. It may be noted that a short squeeze occurs when a stock jumps sharply, forcing investors who had bet on a price fall, to buy it and avoid greater losses. This often leads to higher demand for the share and the price also shoots up.

The bigger crisis is in the making - It may be noted that over 71 million GameStop shares worth almost \$5 billion are currently shorted. These bets have cost investors over \$6 billion, including a loss of nearly \$3 billion on Monday.

The fact that GameStop's gains have beaten the traditional stock market movement is scary and could lead to deeper losses. In the past few sessions, GameStop has been one of the most actively traded stocks, with buy orders sharply overshadowing sell orders. The volatility generated as a result has led to widespread confusion on the New York stock exchange.

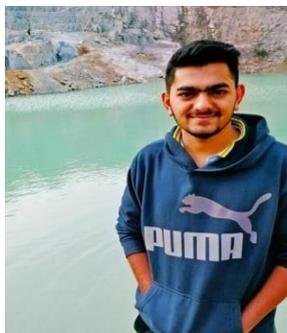
Experts say that the GameStop bubble will burst, but not before it causes significant damage to traditional investment patterns. However, small investors on the Reddit group do not seem to care much about the US markets and are rejoicing their victory against the big bulls of Wall Street.

On the WallStreetBets subreddit forum, members continue to aggressively promote the GameStop stock as they pitch it as a battle of small investors (regular folks) versus the Wall Street powerhouses (hedge funds and big firms).

The short-squeeze war that has been triggered over GameStop and similar entities is a growing sign of conflict between small investors and bigger investment firms. While it is difficult to say when the GameStop saga will end, analysts believe that it will be a hard lesson for both hedge funds and small investors.

Because of how and why the company's stock price increased so dramatically, this story that will continue to play out in the days ahead— together with crisis management-related lessons for business leaders like the - “power of the masses”.

By **Akshit K Jain**



Update for the day #964 | Information Overload

Information overload (also known as infobesity, infoxication, information anxiety, and information explosion) is the difficulty in understanding an issue and effectively making decisions when one has too much information about that issue, and is generally associated with the excessive quantity of daily information.

The advent of modern information technology has been a primary driver of information overload on multiple fronts: in quantity produced, ease of dissemination, and breadth of the audience reached. Longstanding technological factors have been further intensified by the rise of social media and the attention economy. In the age of connective digital technologies, informatics, the Internet culture (or the digital culture), information overload is associated with over-exposure, excessive consumption, and input abundance of information and data.

How to combat it?

Unplug:

Do your brain a favor and get off the computer for a few hours every day, and make sure to disable those annoying notifications. Just take time to do nothing.

Manage Your Information:

Be more selective and prioritize your information. When you get an email, most likely you can tell from the subject line whether it needs a quick response or if you can put it aside for a while.

Limit the distractions:

Since having emails come in every few minutes is so bad for your decision-making skills and impairs judgment.

Spend only as much time on decisions, tasks and activities as they are worth.

By **Ashrith ARK**



Update for the day #965 | RoRo Train

RORO means Roll-on/roll-off, where loaded trucks are directly carried by railway wagons to their destination. The first ever RO-RO service in India was run by Konkan Railway. Konkan Railway passes through tough terrains of India. There is NH-66 passing through same route. Truck drivers find it extremely difficult to drive loaded trucks through ghats, undulating surfaces, narrow roads and poor road and weather conditions. The Konkan Railway Corporation (KRC) came with concept of RORO, where loaded trucks are moved on wagons and are travelled by train.

RORO services are combination of best features of road and rail transports in the sense that they offer door to door service with minimal handling transported by rail link. Road transport has advantage of door to door delivery of goods. However, increasing traffic on roads is leading to congestion and delays to passenger vehicles. This will cause unsafe travel conditions. Also, delays at interstate check posts due to inspection of various documents, etc. contribute to increased travel time.

On the other hand, Railways provide hassle free and environmentally friendly transport to medium to large quantum of freight. Rail transport is most fuel efficient of all means of transport and is much safer than road.



Advantages of RO-RO Trains :

- 1) Faster movement of goods and essentials, reducing Time taken by trucks to reach destinations due to traffic congestion in between cities.
- 2) Reduces congestion on the roads.
- 3) Saves fossil fuel.
- 4) Reduces carbon footprint.

- 5) Relief to crew of truck as it avoids long distance driving.
- 6) No hassles of check posts/toll gates etc.
- 7) Seamless Inter-operability between roadways & railways-Inter-modal transport on existing track.
- 8) Ensuring uninterrupted supply of essential commodities.
- 9) RO-RO will be reckoning force in "vocal for local".
- 10) Will boost our local MSME units by encouraging piecemeal /decentralized loading through trucks.
- 11) Provides link between agriculture producing regions and agro consumption centres.
- 12) Connects and Balances the commodity deficient and surplus markets.

By **Narasarwesh E**



Update for the day #966 | Nike GO Fly Ease

“It doesn’t matter if you start Unknown, it is important that you finish Unforgettable”. Whenever we think of sports and sportswear, Nike is one of the first names that strike our mind. So, when such a big company brings out an initiative beyond the ordinary, it is worth a mention.

What is Nike GO Fly Ease?

With an eye toward making shoes even more accessible to people with disabilities, Nike is introducing a sneaker that can be taken on and off completely hands-free. The shoe known as the Nike GO Fly Ease is part of Nike’s Fly Ease collection of adaptive styles. Designers said the product came about to better serve people with disabilities but ultimately could be handy for anyone who’s got their hands full. It’s intuitive — *easy on, easy off* — and evidence of how design, innovation and engineering can meet to answer an ambitious North Star: the creation of a hands-free shoe. Behind the shoe’s smooth motion is a bi-stable hinge that enables the shoe to be secure in fully open and fully closed states. This duality allows another signature detail: the Nike GO Fly Ease tensioner. The tensioner’s unique flexibility super-charges an action many might take for granted (kicking-off a shoe) and completely reimagines this movement as the basis for accessible and empowering design. Nike’s lace-less sneakers are being lauded not just for the ease of putting on and taking off without the use of the hands but for being launched at a time when a global pandemic has cautioned people against touching vulnerable surfaces.



How did they come up with Nike GO Fly Ease?

Matthew Walzer, who is suffering from Cerebral palsy, had reached out to Nike in 2012. The 16-year-old said that it was his dream to go to college without worrying about someone having to assist him in wearing shoes. Walzer's letter had inspired Tobie Hatfield to create a shoe that would address his specific need.

Sports and fitness are fields of equal opportunities and comfort should be catered to people of all abilities.

Let us all look forward to creating opportunities in every field for the differently-abled and make the world a better place for everyone around us.

By **Varsha S V**



Update for the day #967 | Japan – ‘The Most Prepared Place in the World’

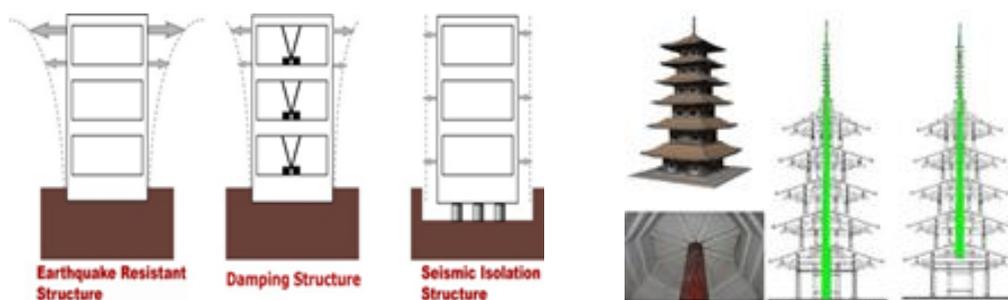
“Japan never considers time together as time wasted. Rather, it is time invested.”

Today’s update is all about - **Japan ‘The Most Prepared Place in the World’** for a natural disaster

Japan is a country that has experienced more than its fair share of natural disasters, and in doing so they've become one of the best-prepared nations on earth. The ability to innovate, invest, educate, and learn from past mistakes has made Japan the **most earthquake-ready country** in the world.

Eight ways Japan prepares for natural disaster:

1) Earthquake-resistant buildings



Given the regularity of earthquakes in Japan, all houses are built to withstand some level of tremor. Houses in Japan are built to comply with rigorous earthquake-proof standards that have been set by law. These laws also apply to other structures like schools and office buildings. It’s said that around 87% of the buildings in Tokyo are able to withstand earthquakes.

Many structures are built to become a little more flexible if hit by a tremor and some structures are built on Teflon, which allows buildings to move with the shock, while still others feature inflated, rubber, or fluid-filled bases, which can absorb shock. Tokyo’s famous Skytree was built to withstand natural disasters by mimicking the shape of ancient wooden pagodas, which have survived through centuries of earthquakes.

2) Earthquake-ready bullet trains:



Japan is a train-dominated country and their network of *shinkansen* (bullet trains) are the transport of the future, whizzing across the countryside at an eye-watering pace. To ensure the safety of all passengers, the trains are equipped with earthquake sensors that are triggered to freeze every moving train in the country if necessary. In 2011, when a 9.0 magnitude quake hit Japan, there were 27 moving *shinkansen* in action. Every single train was triggered by smaller pre- quakes and stopped before the major quake hit, resulting in zero deaths or even injuries.

3) Awareness and education on disaster prevention:



Just as other schools around the world may hold emergency fire drills, schools in Japan run regular earthquake drills, some as often as once a month. From a young age, schoolchildren are educated on the best way to seek protection and stay safe if an earthquake hits their area. The most common method during the drills is for children to get under their desks and hold onto their table legs until the quake is finished. If playing outside, children are taught to go straight to the centre of open space to avoid getting hit by falling debris. There are also field trips in Japan, where local fire department personnel put children in earthquake simulators, so they can identify the feeling of a quake from a very young age.

6) Water Discharge Tunnel



One of the most impressive feats of engineering is Tokyo's little-known Water Discharge Tunnel located on the outskirts of the city, sitting patiently underneath a soccer field and skate park. This largely hidden tunnel collects floodwaters caused by natural disasters like cyclones and tsunamis and safely redistributes the water into the Edo River.

This means if the area is hit with an earthquake and triggers a tsunami, the city should be spared any major flooding. It took 13 years to build and cost US\$3 billion, but you can't put a price on how many lives it promises to save.

7) Immediate TV coverage



If an earthquake hits the nation, all of Japan's TV channels immediately switch to official earthquake coverage, ensuring that that population is well informed on how to stay safe. The coverage delivers info on the quakes, where to seek protection, and whether any tsunamis are approaching, giving citizens time to retreat to higher ground.

8) Phone updates



Every smartphone in Japan is installed with an earthquake and tsunami emergency alert system. Triggered around five to ten seconds prior to the impending disasters, it's meant to give users time to quickly seek protection if necessary. The system chants “*Jishin desu! Jishin desu!*” (translating to “There is an earthquake”) until the earthquake stops.

“The whole of Japan is a pure invention. There is no such country, there are no such people... The Japanese people are... simply a mode of style, an exquisite fancy of art.”

– **Oscar Wilde**

By **Adithya CV**



Update for the day #968 | Beautiful Ancient Temples in India

Today's update is regarding the temples, those not only most ancient but also a architectural marvel.

1) Brihadeshwara Temple, Tanjore, Tamil Nadu

Built by King Rajaraja Chola in 1002 AD, this temple was dedicated to Shiva and is the finest example of Dravidian art. The Brihadeshwara temple combines the best in the tradition of temple building - architecture, sculpture, painting and other allied arts. It is composed of many interconnected structures such as the Nandi pavilion, a pillared portico and a large hall. Its vimana (the roof like structure that towers above the sanctum sanctorum or main shrine) is 66 metres high



2) Chennakeshava Temple, Karnataka

Situated on the banks of the Yagachi river, this temple was an early masterpiece of the Hoysala Period. It was built by the Vijayanagara ruler to commemorate their victory over the Cholas and is solely dedicated to Vishnu as most of the figural carvings depict aspects of Vishnu, particularly the incarnations and the God seated with Lakshmi.



3) Konark Sun Temple, Odisha

This temple was built by King Narasimhadeva I of the Eastern Ganga Dynasty around AD 1250. The temple is in the shape of a gigantic chariot with elaborately carved stone wheels, pillars and walls. A major part of the structure is now in ruins. The temple is a UNESCO World Heritage Site.



4) Vittala Temple, Hampi, Karnataka

Perhaps one of the most popular of all the temples in the Hampi complex, this houses the famous musical pillars that have amazing acoustics. The British wanted to find out the reason behind this, and so they cut two pillars to check if there was anything inside that was producing the sound. They found nothing but hollow pillars.



By Sai Rahul

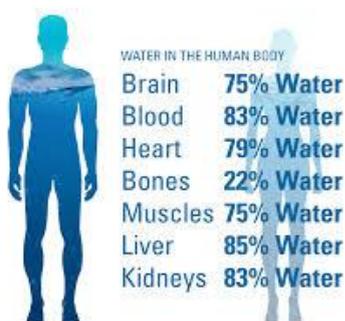


Update for the day #969 | Water : The Irreplaceable Source



Water is indeed essential for all life on, in and above the Earth. Earth is the only known planet in this universe where life is possible only because of the availability of this water, oxygen, sun and other factors. Water is the most important necessity of life for all the living beings on the earth. Without water no one can exist even for a day. We also know that 71% of the earth surface is covered with water out of which the Oceans holds 96.5% and there is very less percentage only about 3% of the Earth's water is fresh water Out of which only about 1.2 % can be used as drinking water and rest is locked up in glaciers, ice caps and permafrost or buried deep in the ground. So, with the above given facts we should not waste clean water and save it for future generations.

As stated above, water occupying the major portion of the earth let us glance at the water proportion In Human body. Upto 60% of the human body is water. So organ wise, the brain and heart are composed of 75% water, the Lungs are about 83% water. The skin contains 64% water, muscles are 75% and kidneys are 83%, and even the bones contain 31% of water



Each day human and every living being must consume a certain amount of water to survive. The quantity varies according to age and gender, and also by where someone lives (Location). Generally, an adult male needs 3 liters per day while an adult female needs about 2.2 liters per day. All the water a person needs does not have to come from drinking liquids, as some of this water is contained in the food we eat.

Water serves a number of essential functions to keep us all going

- 1) A vital nutrient to the life of every cell, acts first as a building material.
- 2) It regulates our internal body temperature by sweating and respiration
- 3) The carbohydrates and proteins that our bodies use as food are metabolized and transported by water in the bloodstream;
- 4) It assists in flushing waste mainly through urination
- 5) Acts as a shock absorber for brain, spinal cord, and fetus
- 6) Forms saliva
- 7) Lubricates joints

Water role in cooking

Water is a cleansing agent because most soil is soluble in water. It also plays a most important part in the preparation of foods, since it serves as a medium for the cooking of foods, as in the processes of steaming and boiling. Because water dissolves many substances, it acts as a carrier of flavor as in fruit drinks, tea, and coffee. Although there are some foods which can be cooked without a water medium, baked potatoes and roast meat for example, certain foods such as rice and dried beans require water during cooking. It is readily seen that water is indispensable in cooking.



Water is a universal agent / crystallite which plays a very important role in every living and non-living beings. Importantly water has no substitute. So, we as responsible citizens of the earth should use it wisely and sustainably so that it is available to all the living beings. As the summer is approach let us all be cautious on the consumption of water and make an effort to provide water to the animal, birds and even the plans living around us.

By **Mithun H S**



Update for the day #970 | How Hungry is the Dragon? – China importing rice from India

Let us look at why China is importing rice from India for the first time in decades.

The Chinese love their rice. It is a staple food item for two-thirds of the people living in China. However, it seems the country is running out of this basic commodity. In fact, they are desperately looking to plug a shortfall and they are looking at India to meet this demand. At first glance, we may think there isn't anything out of the ordinary here. After all, China is the biggest importer of rice and India by far the largest exporter. Surely their paths are bound to cross.

But in reality, it is not that simple. China avoids buying rice from India because they don't like the "quality" of rice we produce. Instead, China prefers sourcing it from countries like Thailand, Myanmar, Vietnam and even Pakistan. However, as the pandemic unfolded, these countries were struggling to resuscitate their supply chains and China was forced to look at alternative producers.

India had a bumper rice harvest this year and were offering sharp discounts—as much as \$100 per tonne, compared to other exporters from Thailand and Vietnam. And few reports state that China is contracted to import 100,000 tonnes of Indian broken rice—a particular variant mainly used to produce noodles and Chinese wine.

But it still begs the question—How did China run out of rice exactly?

First, there was a flood. The Yangtze River basin, home to 70% of China's rice farms, witnessed the worst floods since 1939. It damaged millions of acres of agricultural land destroying a lot of produce. Then, there were the locust attacks—Swarms of critters laying waste to everything on their path—crops, stems, leaves, pulses grains, you name it. Soon after, there was the African Swine flu—a disease that started killing pigs in mass which eventually led to a shortage of pork. Now pork has nothing to do with rice. But it's still part of the staple diet in China. So, when pork prices started spiking alongside other food grains, doubts about an impending food crisis started looming large. The Chinese government intervened almost immediately releasing millions of tonnes of rice, soybean and corn from its national reserves. And while it assuaged prices for a while, reserves started running thin simultaneously.

The domestic food supply simply couldn't replenish the buffers quickly enough and China was forced to look at importers elsewhere. But then there is another more fundamental problem here. The country's agrarian economy has had to play second fiddle to massive Chinese industries over the past few decades as urbanization paved the way for the country's growth. Since 1949, China has lost one-fifth of its agricultural farms and it now faces the daunting task of feeding 22% of the world population with only 7% of the global arable land. And now they're buying and leasing fertile lands and fields in various African, South American and ASEAN nations in a bid to fix

the deficit. This decade alone, the Chinese invested around \$94 billion in farming lands abroad. But clearly, it's still not enough.

In the meantime, the Chinese state kept denying anything was amiss. And while they had to face the inevitable prospect of admitting there was a mini food crisis unfolding with the country, the state machinery pinned the blame on chronic food wastage. And truth be told, they weren't entirely wrong. According to estimates, China generates 17–18 million tonnes of food waste each year. And with rising disposable income they can actually afford to eat more and perhaps even waste more.

So, in a coordinated effort, the Chinese state reintroduced the “clean plate” campaign and President Xi personally called on the Chinese people to stop wasting food. He asked them to—“cultivate thrifty habits, and foster a social environment where waste is shameful and thriftiness is applaudable”.

What followed eventually were a slew of PR campaigns sponsored by the Chinese state. It was designed to imbibe a sense of patriotism and unite the Chinese people in a time of adversity. Hotels adhered to strict portion control and trimmed down their buffets. Restaurants started rewarding people to finish their meals and some even fined those who left food on their plates. In some cases, servers were instructed to nag diners not to waste. But you can only pacify people for so long because after everything is said and done, food is still a very sensitive subject in China. 45 million people starved to death in the 1950s and 60s as the country witnessed multiple famines. So, the Chinese state cannot afford to gamble here and therefore they are turning to India.

By **Meghana KR**



Update for the day #971 | Field Marshal KM Cariappa : The First Indian Chief of Independent India



Field Marshal Kodandera “Kipper” Madappa Cariappa OBE (28 January 1899 – 15 May 1993) was the first Indian Commander-in-Chief of the Indian Army and led the Indian forces on the Western Front during the Indo-Pakistan War of 1947.

He is one of the two Indian Army officers to hold the highest rank of Field Marshal (the other being Field Marshal Sam Manekshaw). His distinguished military career spanned almost three decades, at the highest point of which, he was appointed as the Commander-in-Chief of the Indian Military in 1949.

Field Marshal Kodandera Madappa Cariappa was born on 28 January 1899 in Coorg. After his formal education at Madikeri, he went on to study at the Presidency College, Madras. He was an active sportsman.

Cariappa was one among the select few who was selected for the first batch of KCIOs (King’s Commissioned Indian Officers) at the Daly Cadet College in Indore and was commissioned in the Carnatic Infantry. He was in active service with the 37 (Prince of Wales) Dogra in Mesopotamia (present-day Iraq) and then posted to the 2nd Rajput Light Infantry (Queen Victoria’s Own). He went on to become the first Indian officer to undergo the course at Staff College, Quetta in 1933. In 1946, he got promoted as the Brigadier of the Frontier Brigade Group.

K.M Cariappa saw action in Iraq, Syria, and Iran from 1941-1942 and then in Burma in 1943-1944 and became the first Indian Officer to be given command of a unit in 1942. He went on to receive many awards and accolades in his distinguished career. In 1947, Cariappa became the first Indian to be selected to undergo a training course at Imperial Defence College, Camberley, UK. Cariappa was promoted to the substantive rank of lieutenant-colonel on 17 July 1946. The same year, he was promoted to Brigadier of the Frontier Brigade Group. It was during this time that Colonel Ayub Khan – later Field Marshal and President of Pakistan, 1962-1969 – served

under him. In 1947, Cariappa was the first Indian who was selected to undergo a training course at Imperial Defence College, Camberly, the UK on the higher directions of war. During the traumatic period of partition, he handled the division of the Indian Army and sharing of its assets between Pakistan and India, in a most amicable, just, and orderly manner. He was then the Indian officer in charge of overseeing the transition. After India's independence, K.M.Cariappa was appointed as the Deputy Chief of General Staff with the rank of Major General. Thereafter, he became the Eastern Army Commander and General Officer Commanding-in-Chief, Western Command during the outbreak of war with Pakistan.

Post-Independence, Cariappa was appointed as the Deputy Chief of the General Staff with the rank of Major General. On promotion to Lieutenant General, he became the Eastern Army Commander. On the outbreak of war with Pakistan in 1947, he was moved as General Officer Commanding-in-Chief, Western Command and directed operations for the recapture of Zojila, Drass, and Kargil and re-established a linkup with Leh. K.M Cariappa was appointed as the first Commander-in-Chief of an independent Indian Army on 15 January 1949 and the day is celebrated as Army Day. Post-retirement from the Indian Army in 1953, he served as India's High Commissioner to Australia and New Zealand.

He was awarded the 'Order of the Chief Commander of the Legion of Merit' by American President, Harry S. Truman. The Government of India conferred the rank of Field Marshal on Cariappa in 1983.

By **Punith B D**



Update for the day #972 | Feel the Earth beneath your feet!

Everything feels unstable, as though the very ground below us could just disappear at any time. But a remedy exists that dates back thousands of years and still works today. It is called Earthing.

Earthing refers to contact with the Earth's surface electrons by walking barefoot outside or sitting, working, or sleeping indoors connected to conductive systems, some of them patented, that transfer the energy from the ground into the body. It is also known as grounding. Earthing therapy rests on the intuitive assumption that connecting to the energy of the planet is healthy for our souls and bodies. There are many types of earthing. All of them focus on reconnecting yourself to the Earth. This can be done through either direct or indirect contact with the Earth. Walking barefoot-Have you ever been outside on a warm summer day and felt the urge to run barefoot in the grass?

Lying on the ground-You can increase your skin-to-earth contact by lying on the ground. You can do it in the grass by the park or on the sand at the beach.



How does earthing work and why is it so powerful?

Our innate immune systems use white blood cells known as neutrophils to release reactive oxygen molecules to oxidize and destroy pathogens and damaged cells. Free radicals have an electron imbalance that makes them electrically charged in their quest to find a free electron and neutralize, they can attach to or steal an electron from a healthy cell, damaging it in the process. The damaged cell then needs to be removed, and the immune system sends another neutrophil to process it, starting the entire cycle over again. This is how chronic inflammation is set in motion. This entire the response is compounded by the fact that free radical-generating substances are present all around us: in fried food, alcohol, tobacco smoke, pesticides, air pollutants, and even the sun's rays.

The Earth has an infinite supply of free electrons, so when a person is grounded, those electrons naturally flow between the earth and the body, reducing free radicals and eliminating any static electrical charge. The reason grounding is so powerful is it reduces and prevents inflammation from occurring in the body, which in turn prevents inflammation-related health disorders.

Ryegrass is the type of grass which is generally used in Earthing therapy centres and also in lawns because chemicals found in ryegrass pollen decrease swelling by interfering with certain chemicals. These chemicals might also slow down the growth of prostate cancer cells. Ryegrass fibre might promote the growth and activity of healthy bacteria in the gut.



Health Benefits of Earthing:

- 1) Improves Sleep & Pain Management
- 2) Weight loss
- 3) Reduction of inflammation
- 4) Faster recovery from injuries/wounds
- 5) Reduced pain
- 6) Lower stress levels
- 7) Improves Immunity
- 8) Reduction of delayed onset muscle soreness after physical exercise
- 9) Enhanced mood and general wellbeing

Earthing restores your body's natural internal electrical stability and rhythms. It shifts the nervous system from a stress-dominated mode to one of calmness.

Get grounded! Feel better!

By **Hamsashree H S**



Update for the day #973 | February the 14th

It is a curious thought, but it is only when you see people looking ridiculous that you realize just how much you love them.

-Agatha Christie

First of all a Happy Valentine's Day to you all!

Valentine's day is the day of love and is celebrated every year on February 14. Chocolates, roses, and presents are exchanged between loved ones around the world. It is said that it is all in the name of St. Valentine. Valentine's Day history and its patron saint's tale are veiled in mystery. The popular belief about St Valentine is that he was a priest from Rome in the third century. Marriage was banned by Emperor Claudius II because he felt married men were poor soldiers. Valentine felt it was unreasonable, so he broke the law and secretly arranged marriages. Valentine was thrown in prison and put to death after Claudius found out.

There, he fell in love with the daughter of the jailer, and when he was taken to death on February 14, he wrote her a letter of love and signed "from your valentine". It is a very old tradition to hold a specific Valentine's Day, believed to have arisen from a Roman festival. In the middle of February, the Romans had a festival called Lupercalia formally the beginning of their springtime. The church later tried to make this festival a Christian celebration and planned to use it to remember St. Valentine as well. Gradually, the name St Valentine continued to be used by people to express their emotions to those they loved.

Valentine's Day – love is what this day is about. Not only a special day for couples and family, it is also an ideal time to offer your heartfelt thanks and appreciation for your employees. Not many leaders know that celebrating Valentine's Day at work has some positive impacts, such as promoting better workplace culture, improving camaraderie, promoting appreciation, increasing positivity, encouraging a caring environment, as well as enhancing the workforce's mood.

Todd Patkin, the author of "Finding Happiness: One Man's Quest to Beat Depression and anxiety and – Finally – Let the Sunshine In", said that money is not the first thing people desire. "Instead, showing appreciation, respect and yes, even love are the three most important ways to make your people feel great about their work." And more, happy engaged employees are the single best way to boost your company's bottom line.

A lot of us are in the notion that the day is just for couples or partners. But, it isn't, as the day is more towards your loved ones. It could be to your parents, your grandparents or your siblings or your friends or it could be even to your dog who is waiting for you to reach home from work.

But a lot of people tell that after a tiring day, what gives you happiness? Its love. It could be seeing your kids or hugging them after a long day at work or asking him/her what he/she learnt at school or just playing with them.

It could be even having dinner with your family. Or maybe just going out with your best friends and talking about your school days.

The borderline is expressing how much you love and care to the people that actually matter to you until it's too late.

"Where there is love there is life."

—Mahatma Gandhi

By **Rithik Jain**



Update for the day #974 | Ninja Cart

What comes to our mind when we think of vegetable or fruit market? Huge crowd, people negotiating, lot of vegetables being rotten,

This actually a loss-loss-loss situation i.e loss for farmers, loss for retailers, and loss for end consumer.

What does that actually mean,

- 1) Farmers do not get the right price due to lack of information, changes in demand and distribution inefficiency.
- 2) Retailers face problems like higher costs, low quality and unhygienic produce, high price volatility, and the everyday hassle of going to the market
- 3) Consumers have to bear with volatile cost, non-availability of good quality produce, and lack of hygiene in market place.

The founder of Ninjacart, Thirukumaran Nagarajan observed that it was an unfavorable situation for farmers to end consumers.

Ninjacart was founded in the year 2015 by Ashutosh Vikram, Kartheeswaran k k, Sharath Loaganathan, Thiru Nagarajan, Thirukumaran Nagarajan, Vasu Devan.

Ninjacart is a Bengaluru based B2B startup founded on 2015. Ninjacart allows farmers to sell their vegetables and fruits directly to shops, retailers and restaurants without middlemen involved and going to the collection centers and sabji mandi.

Ninjacart by leveraging technologies such as big data, predictive analysis and IOT for effective and efficient supply chain management. Ninjacart procures fresh from farm with 12 hours of the harvest. The fresh produce moves to collection centers. After this the vegetables are cleaned and sorted into different grades. The algorithm comes into picture and finds the best available prices and is transferred to fulfillment center.

The supply chain creates a seamless link from farmers to a collection center to fulfillment center to the retailer/ customer. Ninja cart has an application for their retailers and customers where they quote the price and quantity required and the lead time to deliver is usually 12 to 14 hours. The retailers and customers make the payment on delivery and the same is paid to farmers with 12 hours of the harvest.

The Funding is as follows:

Total funding of Ninjacart is \$150 million.

April 2019 Ninjacart raised \$100 million in series C.

December 2018 Ninjacart raised \$34.6 million in Series B.

July 2018 Ninjacart raised \$4.9 million.

March 2018 Ninjacart raised \$1 million.

April 2017 Ninjacart raised \$5.5 million in series A.

The investors include Syngenta Ventures, Neoplux, Trifecta Capital, Tiger Global Management, Clark Valberg, Tanglin Venture, Steadview, AccelCapital, Mistletoe.

The facilities include:

FARMERS:

- 1) Farmers realize 20% more revenue than the existing market.
- 2) one stop-sale for all produce
- 3) Transparent weighing & pricing
- 4) Payment in 24 hour
- 5) Saves time

STORES:

- 1) Competitive prices
- 2) Doorstep Delivery
- 3) High-Quality Graded Vegetables

CONSUMERS:

- 1) Hygienically handled-one touch handling method
- 2) 100% Traceable to farms-improves food safety
- 3) Better Quality

We can conclude that innovation and technology is key to success.

By **Shashank KE**



Update for the day #975 | Uttarakhand Floods

A disaster was reported at Raini village at around 10:45 am on 7th February, after a part of the Nanda Devi glacier broke off and increased the level of water in Rishiganga, Dhauliganga and Alaknanda rivers. The rising water levels affected two dam sites in Chamoli and other downstream areas including Joshimath. About 150 labourers working in a power project are reported missing.

Experts are uncertain about what caused the massive glacier burst at Chamoli in Uttarakhand on Sunday but the incident brought focus to the dangers of climate change the state is sitting on. In 2013, the state was devastated by a cloudburst which led to severe flood and landslides.

The disaster in Uttarakhand has once again turned the spotlight on climate change and its impact on ecology. Though the actual cause of the glacier burst is being probed, scientists for long have warned that glaciers are disappearing from the Earth and global warming, especially in the last three decades, is a major reason behind it. As the world is getting hotter, ice caps on mountains are melting rapidly.

Experts warn at this rate, the Himalayas might lose one-third of its glaciers by the end of this century. This is bound to be catastrophic for two billion people residing in and around the mountain range in India and neighbouring countries.

In July 2020, experts had warned about melting of glaciers in the Nanda Devi region. A study by IIT Kanpur and Dehradun-based Wadia Institute of Himalayan Geology shows nearly 26 square kilometres of the glaciated area of Nanda Devi region was lost in 37 years.

Climate change is driving temperatures up dramatically in India and the world. India has witnessed more than half degree Celsius rise in average temperature in the last 10 years, while global temperature reported anomalies of about one degree Celsius.

Preliminary investigations show that the event in Uttarakhand is caused by a landslide. It would require more research on this to conclude if it was a man-made disaster. A similar event had happened in the region around 2016 (probably with lesser impact) which indicates that this is a very sensitive region, hence caution should be exercised for development projects taken up in the region.

The floods wrecked NTPC's Tapovan Vishnugad 520 MW hydel project and wiped out the under-construction Rishiganga mini-hydel project, roads, bridges as well as homes. A majority of those missing are feared stuck in tunnels at these two power projects. Reports also suggest major damage to THDC India's 444 MW Pipalkoti and the Jaypee Group's 400 MW Vishnuprayag hydropower projects.

“Even though the causality of the event is debated, the effects of the disaster are because of human interventions. The deaths would not have happened if we avoid building such massive infrastructure projects in sensitive areas” independent researcher Raj Bhagat Palanichamy .

By **Prathiksha J Shetty**



Update for the day #976 | A Dedicated Entrepreneur's Thirst for Success



Mr. Sathya Shankar – Managing Director

It's not every day that we come across humble brands taking on global giants and making their presence felt in the industry. Born out of a lesser known town, Narimogeru in Puttur taluk, Bindu Fizz Jeera Masala is today competing for shelf space with global giants.

The story behind Bindu Fizz Jeera Masala, a refreshing Indian ethnic drink, is indeed an inspirational one. Through sheer determination, undeterred faith and battling various odds, a man from a small town began this venture, with the sole aim to accomplish success and offer employment opportunities to those around him.

Leading from the front, Mr. Sathya Shankar's business optimism and competitive spirit and relentless pursuit of success, has enabled his business to surge forward. Born in Bellare village near Puttur in an agricultural family, he studied till PUC before business aspirations consumed him. He first purchased a single auto rickshaw through a bank loan. He worked hard with full dedication to close the loan and sold the auto rickshaw, so he could climb the next step to buy a diesel Ambassador. It wasn't long before the car made way for an automobile spare parts dealership, which was started in Puttur in 1987. His efforts didn't end there. People who came to buy spares started to ask for tyres and request for credit. This inspired his following ventures which were a tyre dealership and an automobile finance company. In 1994, he started a company for second-hand vehicle finance, as he realized that there was a demand for second-hand vehicles. Mr. Sathya Shankar was slowly but surely on the path to success.

Although business was good, he did not see enough opportunity to grow. In the year 2000, he decided to establish a manufacturing unit. Mr. Sathya Shankar decided to capitalize on a water source in his 50-acre farm. The water from the stream was tested and was found to be pure enough to be bottled. With that, he began a packaged drinking water brand.

After two successful years, on a trip to north India, Mr. Sathya Shankar chanced upon the idea to create an unconventional carbonated drink. He launched Bindu Fizz Jeera Masala, a soft drink with unique Indian taste to appeal to the local palate.



The brand met with a struggle in the initial years and 50% of stocks were returned from the market, as the drink was unfamiliar to consumers. The company was not able to advertise as they did not have enough funds. When the shopkeepers said that everyone was used to only orange and cola beverages and unwilling to try anything else, the team had to coerce the shoppers to try to drink for free. However, once news of the taste and quality of Bindu Fizz Jeera Masala spread by word of mouth, it was soon among the best beverage brands in the market.

The company decided to package the product in PET bottles as PET bottles are easy to handle. In the case of glass bottles, the customer had to drink the beverage in the shop and return the bottle, but in the case of PET bottles, they could carry it home and refrigerate it. Implementing packaging in good quality pet bottles ensured convenience for users.

While a fruit drink was added to the portfolio in 2005, the company also diversified into the snack food sector with potato wafers in 2009. Beginning with very less turnover in 2001, the organization grew to a turnover of few crores by 2005. While the 100-crore turnover mark intimidates many, Mr. Sathya Shankar took it as a challenge. The company is today having a turnover of around Rs. 400 crores.

Mr. Sathya Shankar aims to reach a turnover of 1000 crores with strategic decisions to widen their market and setting up new plants across India.

Mr. Sathya Shankar's secret to success is that he believes in life one must think through the work that they want to begin and then give it their full attention. While they may be faced with failure sometimes, they must not deviate and must continue to be focused.

By **Kiran Kumar**



Update for the day #977 | Most Popular Tournaments in The World

Like Doug Williams said,

“Never give up, never give in, and when the upper hand is ours, may we have the ability to handle the win with the dignity that we absorbed the loss.”

Most popular cricket tournaments in the world:

1) ICC Cricket World Cup

The ICC Cricket World Cup is the international championship of One Day International (ODI) cricket. The event is organised by the sport's governing body, the International Cricket Council (ICC), every four years, with preliminary qualification rounds leading up to a finals tournament. The tournament is one of the world's most viewed sporting events and is considered the "flagship event of the international cricket calendar" by the ICC.

2) ICC Champions Trophy

The ICC Champions Trophy was a One-Day International (ODI) cricket tournament organized by the International Cricket Council (ICC), second in importance only to the Cricket World Cup. It was inaugurated as the ICC Knockout Tournament in 1998 and has been played approximately every four years since. Its name was changed to the Champions Trophy in 2002.

3) T20 World cup

The ICC T20 World Cup (earlier known as ICC World Twenty20) is the international championship of Twenty20 International cricket. Organised by cricket's governing body, the International Cricket Council (ICC), the tournament currently consists of 16 teams, comprising the top ten teams from the rankings at the given deadline and six other teams chosen through the T20 World Cup Qualifier. All matches are played as Twenty20 Internationals. The event has generally been held every two years.

4) Ashes Series

The Ashes is a Test cricket series played between England and Australia. The Ashes are regarded as being held by the team that most recently won the Test series. If the test series is drawn, the team that currently holds the Ashes retains the trophy. The term originated in a satirical obituary published in a British newspaper, The Sporting Times, immediately after Australia's 1882 victory at The Oval, its first Test win on English soil. The obituary stated that English cricket had died, and "the body will be cremated, and the ashes taken to Australia". The mythical ashes immediately became associated with the 1882–83 series played in Australia, before which the English captain Ivo Bligh had vowed to "regain those ashes". The English media therefore dubbed the tour the

quest to regain the Ashes.

5) Indian Premier League

The Indian Premier League (IPL) is a professional Twenty20 cricket league in India contested during March or April and May of every year by eight teams representing eight different cities in India. The league was founded by the Board of Control for Cricket in India (BCCI) in 2008. IPL has an exclusive window in ICC Future Tours Programme. The IPL is the most-attended cricket league in the world and in 2014 ranked sixth by average attendance among all sports leagues. In 2010, the IPL became the first sporting event in the world to be broadcast live on YouTube.

6) NatWest series

The NatWest Series is the name used for One Day International cricket tournaments held in England since 2000. The tournaments are sponsored by the National Westminster Bank. The original format of the NatWest Series was a three-team triangular tournament, involving England and two visiting international sides. Each of the three teams would play the other two three times each, after which the two top teams would face each other in a final at Lord's in London. The ten matches would be played at the seven international grounds (Lord's, Edgbaston, Headingley, Old Trafford, The Oval, Trent Bridge and the Riverside Ground), as well as other county cricket grounds such as the St Lawrence Ground (Canterbury), Sophia Gardens (Cardiff), the Rose Bowl (Southampton) and at Bristol. The first NatWest Series was held in 2000 a year after England hosted the World Cup. The West Indies and Zimbabwe were the two visiting teams, with England and Zimbabwe contesting the first final. England won by 6 wickets, with Darren Gough taking 3–20 and Alec Stewart scoring 97.

7) Border-Gavaskar trophy

The Border–Gavaskar Trophy is a Test cricket series played between India and Australia. It is currently played via the International Cricket Council's future tours program, with varying lengths of time between matches. If the series is drawn, then the country holding the trophy previously retains it. The series is named after Australia's Allan Border and India's Sunil Gavaskar, the first 2 test cricketers to have scored over 10,000 Test runs in their respective careers, former captains of their respective teams, and were both world record holders for the most career runs scored in Test match cricket.

8) Asia Cup

The Asia Cup is a men's One Day International and Twenty20 International cricket tournament. It was established in 1983 when the Asian Cricket Council was founded as a measure to promote goodwill between Asian countries. It was originally scheduled to be held every two years.

9) Commonwealth Bank series

The Australian Tri-Series refers to the one-day international (ODI) cricket tournament held in Australia and contested by Australia and two touring teams. The series is played during the height of the Australian cricket season, in the summer months of December, January and February. The series has been the primary format for international one-day cricket throughout most of the history of ODI cricket in Australia. The tri-series was first held in 1979–80 and was contested every season until 2007–08. It has since been held twice, in the 2011–12 season, and again in the 2014–15 season, prior to the World Cup and then the format was switched to Twenty20 International (T20I) format for the first time in the 2017-18 season with Australia, New Zealand and England competing.

By **GHANASHYAM M**



Update for the day #978 | Forest Fires - Good or Bad.

Every year it seems like there's another disastrous wildfire in the world. In 2019, nearly 9 million acres were burned in the US alone. Uncontrolled fires often started accidentally by people, rampage and decimate forests.

Many people don't realize that fire is a natural part of a forest's life. At times, undesirable plants can grow on the forest floor, choking out desirable trees. This makes it more difficult for good trees to grow and for animals to find food and places to live. Fire can burn through these unwanted plants, making more room for desirable trees. This, in turn, makes it easier for animals to find homes and food. In fact, the seeds of some of the most desirable hardwood trees need fire to crack open their shells before they can take root and grow into a tree.



Controlled forest fire

A **controlled burn** is a wildfire that people set intentionally for a specific purpose. Well-thought out and well-managed controlled burns can be incredibly beneficial for forest management—in part because they can help stop an out-of-control wildfire. The technique is called **backburning**, and it involves setting a controlled fire in the path of the approaching wildfire. All the flammable material is burnt up and extinguished. When the wildfire approaches, there's no more fuel left for it to keep going, and it dies out. Forest managers are now replicating this natural strategy when appropriate, starting manageable, slow-burning fires to make room for new life that will help keep the forest healthy in the long term.

Benefits of controlled forest fires

- 1) Release seeds or otherwise encourage the growth of certain tree species, like lodgepole pines.
- 2) Clear dead trees, leaves, and competing vegetation from the forest floor, making way for young, healthy trees and vegetation to thrive.
- 3) Break down and return nutrients to the soil
- 4) Remove weak or disease-ridden trees, leaving more space and nutrients for stronger trees.
- 5) Keep tree stands thin and open, letting more sunlight in so trees stay healthier.
- 6) Improve wildlife habitat.

Disadvantages of forest fires

- 1) Controlled forest fires don't mean all intentional wildfires are good. Many of the fires intentionally set for agriculture and land clearing are at best ill-advised, and at worst devastating.
- 2) Slash and burn fires are set every day to destroy large sections of forests.
- 3) These fires don't just remove trees; they kill and displace wildlife, alter water cycles and soil fertility, and endanger the lives and livelihoods of local communities. They also can rage out of control.
- 4) Smoke can irritate the eyes and respiratory system and worsen chronic heart and lung diseases, including asthma.



India in a traditional way

History suggests that indigenous tribes or the aboriginals across the world have used fire as a means to shape the landscape and as part of their forest management practices. In Indian forests, indigenous tribes like Soligas in Karnataka have traditionally used fire as a means for safety, food production and landscape management until the Wildlife Protection Act, 1972 made it a criminal offence.

“Setting litter fire (taragu benki in Kannada) in forest patches was a practice Soligas followed till 50-60 years ago. These fires are ground-level fires that go up to two-three feet in height. We had

to stop it when the Act came into effect. These fires were lit mostly in the months of January and February when there is still some moisture in the litter,” told by Soliga C. Madegowda, senior research associate and secretary of the Zilla Budakattu Girijana Abhivrudhi Sangha, an organisation that works for the welfare of the tribal people.

Not just Soligas, other Adivasi communities also practised forest fires for a range of reasons — for better visibility of the forest that ensured their safety and easy movement, easy collection of non-timber forest produce, better food production, grass regeneration for livestock, etc.

Take-away

All sorts of fire is risky. To minimize that risk as much as possible, controlled burns must be well-considered, well-planned, ignited and maintained by trained professionals. The bottom line is fire can be a tool for conservation, but only when used in the right way.

By **Sumukh K A**



Update for the day #979 | International Mother Language Day

International Mother Language Day is a worldwide annual observance held on 21 February to promote awareness of linguistic and cultural diversity and to promote multilingualism. First announced by UNESCO on 17 November 1999, it was formally recognized by the United Nations General Assembly with the adoption of UN resolution 56/262 in 2002. Mother Language Day is part of a broader initiative "to promote the preservation and protection of all languages used by peoples of the world" as adopted by the UN General Assembly on 16 May 2007 in UN resolution 61/266 which also established 2008 as the International Year of Languages. The idea to celebrate International Mother Language Day was the initiative of Bangladesh. In Bangladesh, 21st February is the anniversary of the day when the people of Bangladesh (then east Pakistan) fought for recognition for the Bangla language. It is also celebrated in West Bengal, India.

21 February was declared to be the International Mother Language Day by UNESCO in 1999. It has been observed throughout the world since 21 February 2000. The declaration came up in tribute to the Language Movement done by the Bangladeshis (then the East Pakistanis).

History:

When Pakistan was created in 1947, it had two geographically separate parts: East Pakistan (currently known as Bangladesh) and West Pakistan (currently known as Pakistan). The two parts were quite different from each other in sense of culture, language, etc. The two parts were also separated by India in between.

In 1948, the then Government of Pakistan declared Urdu to be the sole national language of Pakistan even though Bengali or Bangla was spoken by the majority of people combining East Pakistan (now Bangladesh) and West Pakistan (now Pakistan). The East Pakistan people protested, since the majority of the population was from East Pakistan and their mother language was Bangla. They demanded Bangla to be at least one of the national languages, in addition to Urdu. The demand was raised first by Dhirendranath Datta from East Pakistan on 23 February 1948, in the constituent Assembly of Pakistan.

To demolish the protest, the government of Pakistan outlawed public meetings and rallies. The students at the University of Dhaka, with the support of the general public, arranged massive rallies and meetings. On 21 February 1952, police opened fire on rallies. Salam, Barkat, Rafiq, Jabbar and Shafiur died, with hundreds of others injured. This is a rare incident in history, where people sacrificed their lives for their mother tongue.

Since then, Bangladeshis celebrate the International Mother Language Day as one of their tragic days. They visit the Shaheed Minar, a monument built in memory of the martyrs and its replicas to express their deep sorrow, respect, and gratefulness to them.

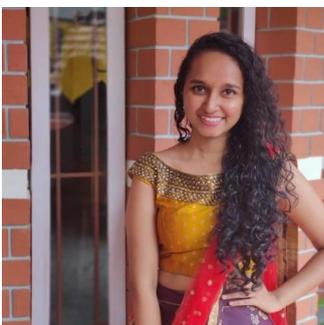


Shaheed Minar (Martyr monument)

International Mother Language Day is a national holiday in Bangladesh. The resolution was suggested by Rafiqul Islam and Abdus Salam, Bengalis living in Vancouver, Canada. They wrote a letter to Kofi Annan on 9 January 1998 asking him to take a step for saving the world's languages from extinction by declaring an International Mother Language Day. Rafiq proposed the date as 21 February to commemorate the 1952 killings in Dhaka during the Language Movement. "21st February – The International Mother Language Day".

Rafiqul Islam's proposal was introduced in the Bangladesh parliament and in due course (at the behest of Prime Minister Sheikh Hasina) a formal proposal was submitted to UNESCO by the Government of Bangladesh. The process of shepherding the proposal through UNESCO's regulatory system was undertaken by Syed Muazzem Ali, then Bangladesh ambassador to France and Permanent Representative to UNESCO, and Tozammel Tony Huq, his predecessor, who was then a Special Adviser to UNESCO Secretary General Federico Mayor. Finally, on 17 November 1999 the 30th General Assembly of UNESCO unanimously resolved that "21st February be proclaimed International Mother Language Day throughout the world to commemorate the martyrs who sacrificed their lives on this very day in 1952.

By **Keerthana**



Update for the day #980 | Frivolous litigation

Frivolous litigation is the use of legal processes with apparent disregard for the merit of one's own arguments. It includes presenting an argument with reason to know that it would certainly fail, or acting without a basic level of diligence in researching the relevant law and facts.

Frivolous litigation may be based on absurd legal theories, may involve a superabundance or repetition of motions or additional suits, may be uncivil or harassing to the court, or may claim extreme remedies. A claim or defense may be frivolous because it had no underlying justification in fact, or because it was not presented with an argument for a reasonable extension or reinterpretation of the law.

In most cases, frivolous lawsuits are filed for purposes of generating media attention or generate buzz by advocacy groups who wish to bring attention to an issue.

Here are a few ludicrous company lawsuits of the last decade:

1) Red Bull apparently does not give wings

Benjamin Careather, an American man filed a case against Red Bull stating that the drink did not give him wings. The commercial of Red Bull actually clearly claims to give wings to a person. It can be interpreted in such a way that it gives great energy to a person. The misleading part which Benjamin used in the lawsuit was that the energy drink does not offer as much energy as advertised, as a 250ml can of Red Bull has less caffeine than a cup of coffee.

The case had its final result in the year 2014. Red Bull agreed to pay the man \$13 million as compensation. The company did not want a lot of hassle and so they agreed to a settlement yet they claim that they have never promoted false or deceptive things, said the company.

2) The greed of 2 cents might cost you a lot more

The big giant Walmart was sued for its carelessness with the consumers for merely 2 cents. Mary Bach was shopping at Walmart and she purchased a packet of "Brown N Serve" sausage. The product was listed for 98 cents. Although, at the till the product was scanned for \$1. Bach pointed out the cashier's mistake and got her refund. When Mary went to the store later in the week and purchased the same product, a similar thing happened again. She was furious and realized that the company was making a fool of their customers. Thus, she decided to file a case against them and won \$100 and compensation of \$80 for the case charges.

3) Starbucks

Chicago woman Stacy Pincus filed a \$5 million class-action lawsuit against Starbucks in April 2016, claiming the company puts too much ice in its cold drinks. The lawsuit accused Starbucks of advertising iced drinks as 24-ounce beverages when the cup only contained 14 ounces of fluid. Named the most frivolous lawsuit of 2016 by the U.S. Chamber of Commerce Institute for Legal Reform, the \$5 million lawsuit was dismissed by a Chicago federal judge in late 2016.

4) Beck's Beer

In 2013, several Beck's beer aficionados filed a class-action lawsuit against Anheuser-Busch, seeking upward of \$5 million, because they claimed deceptive packaging caused them to believe the beverage was manufactured in Germany. Production was moved to St. Louis in 2012, but

“made in the U.S.A.” was almost non-existent on the label. The court ruled in the plaintiffs’ favor, and U.S. Magistrate Judge John J. O’Sullivan approved a settlement for customers who purchased Beck’s beer products from May 1, 2011, to June 23, 2015. Those with receipts were able to file a claim for up to \$50 per household or up to \$12 without a receipt.

Consequences for filing a frivolous lawsuit:

Most courts are overwhelmed by legitimate lawsuits. Fortunately, judges have the authority to sanction lawyers and fine plaintiffs who file frivolous lawsuits. In addition, a defendant in a frivolous lawsuit can turn around and sue the plaintiff for malicious prosecution. A claim for malicious prosecution is a tort action, and damages include the costs of having to defend against the baseless lawsuit.

By **Chaithra Sree G**



Update for the day #981 | Sepoy Mutiny

The Indian Mutiny, the Indian Rebellion of 1857, or the Indian Revolt of 1857 are the other names of this historical event embossed in our Indian Independence movement. The events of 1857 have been considered the first outbreak of an independence movement against British rule.



Background

By the 1850s the East India Company controlled much of India. A private company which first entered India to trade in the 1600s, the East India Company had eventually transformed into a diplomatic and military operation. Large numbers of native soldiers, known as sepoys, were employed by the company to maintain order and defend trading centers. The sepoys were generally under the command of British officers.

In the late 1700s and early 1800s, sepoys tended to take great pride in their military prowess, and they exhibited enormous loyalty to their British officers. But in the 1830s and 1840s, tensions began to emerge. A number of Indians began to suspect that the British intended to convert the Indian population to Christianity. Increasing numbers of Christian missionaries began arriving in India, and their presence gave credence to rumors of impending conversions.

Under a British policy called the "doctrine of lapse," the East India Company would take control of Indian states in which a local ruler had died without an heir. The system was subject to abuse, and the company used it to annex territories in a questionable manner. As the East India Company annexed Indian states in the 1840s and 1850s, the Indian soldiers in the company's employ began to feel offended.

A New Type of Rifle Cartridge Caused Problems

The mutiny broke out in the Bengal army because it was only in the military sphere that Indians were organized. The pretext for revolt was the introduction of the new Enfield rifle. To load it, the sepoys had to bite off the ends of lubricated cartridges. A rumour spread among the sepoys that the grease used to lubricate the cartridges was a mixture of pigs' and cows' lard; thus, to have

oral contact with it was an insult to both Muslims and Hindus.

Violence Spread During the Sepoy Mutiny

On March 29, 1857, on the parade ground at Barrackpore, a sepoy named Mangal Pandey fired the first shot of the uprising. His unit in the Bengal Army, which had refused to use the new rifle cartridges, was about to be disarmed and punished. Pandey rebelled by shooting a British sergeant-major and a lieutenant.

In the altercation, Pandey was surrounded by British troops and shot himself in the chest. He survived and was put on trial and hanged on April 8, 1857.

Major Incidents of the Sepoy Mutiny

Throughout May and June 1857 more units of Indian troops mutinied against the British. Sepoy units in the south of India remained loyal, but in the north, many units of the Bengal Army turned on the British. And the uprising became extremely violent.

Incidents became notorious:

- 1) **Meerut and Delhi:** In a large military camp (called a cantonment) at Meerut, near Delhi, a number of sepoys refused to use the new rifle cartridges in early May 1857. The British stripped them of their uniforms and put them in chains. Other sepoys revolted on May 10, 1857, and things quickly became chaotic as mobs attacked British civilians, including women and children. Mutineers traveled the 40 miles to Delhi and soon the large city erupted in a violent revolt against the British.
- 2) **Cawnpore:** A particularly horrific incident known as the Cawnpore Massacre occurred when British officers and civilians, leaving the city of Cawnpore (present day Kanpur) under a flag of surrender was attacked. The British men were killed, and about 210 British women and children were taken prisoner. A local leader, Nana Sahib, ordered their death. When sepoys, abiding by their military training, refused to kill the prisoners, butchers were recruited from local bazaars to do the killing.
- 3) **Lucknow:** At the town of Lucknow about 1,200 British officers and civilians fortified themselves against 20,000 mutineers in the summer of 1857. By late September British forces commanded by Sir Henry Havelock succeeded in breaking through. However, Havelock's forces did not have the strength to evacuate the British at Lucknow and were forced to join the besieged garrison.

The Demise of the East India Company

The East India Company had been active in India for nearly 250 years, but the violence of the 1857 uprising led to the British government dissolving the company and taking direct control of

India. Following the fighting of 1857–58, India was legally considered a colony of Britain, ruled by a viceroy. The uprising was officially declared over on July 8, 1859.

Another significant result of the mutiny was the beginning of the policy of consultation with Indians. The Legislative Council of 1853 had contained only Europeans and had arrogantly behaved as if it were a full-fledged parliament. It was widely felt that a lack of communication with Indian opinion had helped to precipitate the crisis. Accordingly, the new council of 1861 was given an Indian-nominated element.

The financial crisis caused by the mutiny led to a reorganization of the Indian administration's finances on a modern basis. The Indian army was also extensively reorganized.

By **Anarghya Suvin**



Update for the day #982 | Agricultural Inventions

Agriculture is a very good example that has gone through a substantial technological shift in recent years. Precision agriculture in particular, involving drones, sensors, big data, environmental controls, farm management software, smart packaging and more have all resulted in a huge leap forward into the digital age.

Here we take a look at the five innovative agricultural technologies and practices that are changing agriculture across the world.

1) Bees and drones

If climate change continues, scientists warn that food shortages could be more likely which will drive up prices. For this reason, public health officials have been turning their attention towards shoring up food reserves and finding alternative ways of farming.

Drones have many uses in agriculture, but one problem that's been in the media a lot recently is around disappearing bees. Indeed some species are even at risk of extinction. This would be disastrous, as bees play a vital economic role as pollinators, helping maintain current agricultural production levels.

Lucky drones are now being used in experiments to hopefully supplement the pollination efforts that remaining bees are completing. Other ways that agriculture is starting to use drones includes automated crop harvesting, aerial drone photography and even potentially in future as delivery drones.

2) Artificial intelligence, automation and the Internet of Things

Ask anyone what they think the future of driving might be, and most people will talk about driverless cars where AI takes full control. What people generally think less about however, is driverless vehicles on farms.

Nevertheless Smart Ag, a company based in the USA, has announced its driverless tractor technology in the form of "AutoCart" software. Apparently this software will fully automate a grain cart tractor, providing farmers very welcomed assistance during the busy harvest season.

This innovative technological step will allow farmers to automate their existing equipment too, to maximise its capacity and efficiency.

The AutoCart software is actually a cloud-based platform, meaning that these automated agricultural vehicles will become part of the global internet of things (IoT). Essentially however, automated vehicles are only one small piece of IoT innovation and machine learning in agriculture.

A new AI system that uses a combination of voice recognition, machine vision, and temperature sensors for example is now being trialled to keep track of the health, wellbeing and location of pigs. Other cases of AI use include highly advanced disease detection in crops using a number of similar techniques.

It's all exciting stuff, but is clearly just the tip of the iceberg. Much of the true potential of AI has yet to even be realised with the field still being very much in its infancy.

3) Blockchain technology

Whilst many people will have heard of blockchain within the sphere of cryptocurrency finance, the agricultural world is starting to incorporate this innovative new technology in a different way.

Most of the earliest blockchain applications in agriculture were with regard to supply chains and traceability; the status of crops could be recorded and updated using blockchain, right from harvesting through to delivery. The true benefit of this for larger operations in particular is a secure, highly accurate ledger where nothing ever goes missing in transit. All crops that belong to a specific farmer can be traced in real time.

Blockchain can also be used for resource management, like tracking other sensors and equipment for example, or maintaining machinery records.

4) Urban agriculture and vertical farming

The big thing about urban agriculture in particular is how to make the best use out of what is often very limited farm space. Urban farms can by nature be quite small, and could literally just be an outdoor traditional community garden.

However they can still be very valuable, offering an environmentally controlled, self-contained pod. Sometimes they may even be stacked on top of each other - known as vertical farming. And despite the relatively small size, yields from vertical farming can be around ten times more efficient than traditional agriculture. Although vertical farming doesn't promise to turn the way we farm on its head, it can make huge strides in efficient, productive farming methods.

Traditional farmers could learn a lot from vertical farmers in their design and building structures, making the most of smart design to increase yield and reduce waste.

As the world's population continues to grow and take up more room, efficiencies in space and farming practices will become all the more essential for feeding ourselves. Unfortunately, no matter how intelligently we design and how high we build, humans are having a massive effect on the environment. Only the continuation of technical advancement in this sector can see us having any chance of keeping up with our own agricultural demands in future.

5) Genetic editing

Scientists have now started to utilise CRISPR/Cas9 to carry out genetic "surgeries". This allows them to identify and alter an organism's genome by replacing or removing specific genetic sequencing on a strand of DNA.

Now, CRISPR is being used to alter a cow's gut microbes with the aim of controlling the animal's size as well as reducing the amount of methane they produce. Adjusting the microbiomes of cows in this way could produce more meat on less food.

This in turn leads to industry efficiency and increased profitability.

Scientists have also begun to engineer crops that can thrive on less water and yield more food. Of course, when messing with genetics in any ecosystem unforeseen challenges could arise there - we'll have to be highly cautious that we don't create more problems than we solve.

By **Mounisha Ramesh**



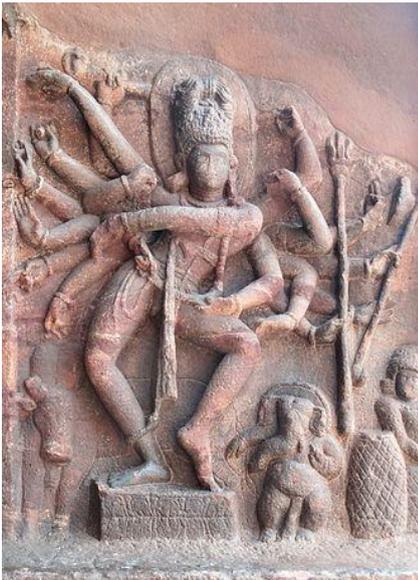
Update for the day #983 | Badami Caves.

The city of Badami in Northern Karnataka, formerly known as Vatapi, was the capital of one of the greatest and most enduring dynasties in Southern India – the Chalukyas. There were three branches of the Chalukyas, the first of them being the 'Badami Chalukyas', who reigned from here from 543-753 CE.

The valleys of the Mallaprabha and the Ghataprabha formed the very fertile heart of the farm-based economy of this early empire.

The four most important and spectacular caves at Badami are Caves 1 to 4, and these are situated in a soft sandstone escarpment in the hill at Badami. The sandstone is very fine quality banded yellow to red sandstone, with very fine banding, and is very amenable to carving and polishing. This has resulted in a high degree of detail and an exquisite finish. Caves 1 to 3 are Brahmanical Caves and Cave 4 is a Jain Cave. The caves were sculpted between the 6th and 8th centuries CE.

Cave 1:



It has an imposing entrance that is cut 18 metres above the surface and has a steep flight of stairs leading up to it. The verandah of the cave has two wings cut into the rock, and on the right is a fantastic, 18-armed image of Shiva dancing the tandava with his son Ganesh to his left and Nandi behind him. He is accompanied by a seated drummer.

The wing on the cave's right is short and has a trident-bearing Shaivite dwarapala (doorkeeper) portrayed there. The entire verandah sits on a plinth with ganas frolicking below. Two square-sectioned columns flank each side of the entrance. Inside the cave are some very interesting images.

One of the most prominent ones is that of Harihara flanked by their respective spouses, Laxmi and Parvati. There are also images of Ganesh and Kartikeya, the sons of Shiva, as well as other deities. The inner pillars are square-sectioned with cushion capitals and are reminiscent of the caves at Dharashiv and Elephanta.

Cave 2:



It lies above and to the east of Cave 1. It faces north and was made some time between the 6th and 7th century CE. There are 64 steps that lead up to the cave, which is dedicated to Vishnu. Images of Trivikrama and Varaha dominate this cave with gana panels.

The Trivikrama panel has an image of Vishnu as Vamana, the form taken by him before he reveals himself as Trivikrama. There are also many friezes from important Hindu texts, which include the Samudramanathana the Birth of Krishna and Krishna playing a flute.

Cave 3:



The cave is dedicated, in all probability, to Vishnu as most of the shrines within it are Vaishnavite. There are images of the Trivikrama, Varaha and Narasimha avatars of Vishnu, there is also an image of the wedding of Shiva and Parvati and the central mandapa has eight images of gods

carved into the ceiling.

One of the most impressive images here is that of a four-armed Vishnu seated on Sheshanaga. This is a very rare depiction.

Cave 4:



It is a Jain cave as can be seen from the Jain icons in it. The cave has images of Mahavira, Parshvanatha and Bahubali are seen here. Mahavira is shown sitting on a lion throne and is flanked by chauri-bearers. The sanctum has a Mahavira image bearing a 12th century CE Kannada inscription. The cave also has numerous yakshas and yakshis carved in it.

By **Harshith Mehta**



Update for the day #984 | The Curious case of Copper

Copper prices are on the rise and they're now reaching multi-year highs. The immediate explanation is rather straightforward. Copper prices are rising because countries are trying to negate the impact of the lockdown by spending on infrastructure. Meaning, as they open up the economy, they will need more industrial machinery, they'll need more automobiles and they'll need more copper. So of course, prices are on the rise. But some analysts believe there's something else happening here. They believe that this is the beginning of a great bull run—a period where copper prices will keep rising each day. But why would anyone think that?

Well, The argument goes something like this. Countries across the world are trying to move away from fossil fuels and are currently investing in a bid to build the electric infrastructure needed to power the future. Germany is adding solar capacity by the bulk. Denmark is investing in electric vehicle chargers. China is also doing its bit. And everybody's throwing money on new renewable energy initiatives.

But here's what most people aren't paying attention to. This infrastructure isn't going to build itself. These countries will need raw materials. And one thing they'll need in bulk? Copper. Solar panels require copper. Electric vehicles require copper. Windmills need copper. In fact, these things need a lot more copper than conventional infrastructure.

As a report from Jefferies note—

“Offshore wind is the most copper intensive, at around 15 tonnes per megawatt of installed capacity, due to extensive copper cable requirements.... This compares to onshore wind and solar at around five tonnes per megawatt and conventional power at around one tonne per megawatt... EVs (Electric Vehicles) require around 83kg of copper on average while most internal combustion engine vehicles contain less than 20kg of copper. In addition, EV charging points contain around 10kg of copper each.”

But the demand side of the equation is only one-half the problem. Globally, copper ore reserves are depleting at a pretty rapid rate. Mining companies are being forced to dig deeper and settle for lower-grade deposits. Extracting them is no easy task either. And this is only compounded by the fact that nobody's finding any copper deposits these days. Only 16 deposits were discovered over the past 10 years. These deposits together are estimated to hold about 8% of all copper found since 1990. 8% is not a lot. And at this point, you're probably wondering—Why isn't anybody doing anything about this? Why aren't they investing more here?

Well, they are trying. But they're being forced to venture into risky regions with unstable governments. The problem here is fairly straightforward. If companies do find something really amazing, they'll have to work with the government and avail permits to mine these areas. And in regions where rule of law isn't very robust, that proposition might never materialize. So you spend millions hoping you find copper deposits in risky jurisdictions only to be told you can't access them—It's not very exciting for most institutions.

So they've been doing the only thing they can. They are focusing on established assets—reserves where they've already done a fair amount of work. In fact, over the past few years, companies have been setting aside more money towards exploring existing reserves as opposed to finding new ones.

So here we have a unique situation.

Demand for copper will likely skyrocket in the near future. However, supply is likely to be a sticky point. And that means we might soon witness a copper squeeze—a point in time where demand far outstrips supply. What happens then?

Prices will have to rise.

Will, it actually rise?

That's a Suspense!

By **Yesh R Solanki**



Update for the day #985 | Understanding Starlink

Ever wonder how you can stream a live cricket match from hundreds of thousands of miles away in near real-time? Well, it's largely thanks to transcontinental cables laid out on the ocean floor. They're the conduits for data to pass through—the real physical highways for information to flow.

But cables are considered old school these days and there have been several attempts to find an alternative solution. And perhaps, the most ambitious attempt is Project Starlink—the brainchild of SpaceX and Elon Musk.

With Starlink, Musk is trying to eliminate physical cables altogether and instead, stream data using a constellation of satellites.



For months now, SpaceX has been launching hundreds of satellites. They eventually intend to send around 42,000 satellites into space.

These satellites will allow them to cover almost all of the earth's surface area and provide an uninterrupted flow of data—At least that's the promise. The service is in beta and for \$99 a month, you could get your hands on a Starlink kit which will include a pizza-sized dish antenna, a tripod, and a Wi-Fi router. That's all you need to get access to Space Internet.

In fact, this was one of Starlink's biggest promise. The ability to offer seamless internet access in the most remote parts of the world—where connectivity is always patchy at best. Will it be an affordable option?

We don't know. But there are many places cables can't go. Satellites meanwhile have no such restrictions.

However, that doesn't mean, Starlink has no potential downsides. The biggest bottleneck right now is the satellites themselves. Think about how these floating objects affect astronomers who peer into the night sky.

Also, this problem isn't going away anytime soon. SpaceX is one of the first entrants in a nascent market. But soon, many others will follow.

There is OneWeb, Telesat, Amazon's Project Kuiper.

Even the Chinese have plans to launch thousands of satellites en masse. So, we have an unregulated "space", some ambitious billionaires, and a generational technological leap that could bring new problems of its own.

By **Lavanya R**



Update for the day #986 | Non – Fungible Tokens

An NFT (non-fungible token) is a special cryptographically-generated token that uses blockchain technology to link with a unique digital asset that cannot be replicated.

Although the usage of NFTs has spread in various industries, they're synonymously associated with the gaming and digital collectibles sectors and are most commonly found as a specific Ethereum token built on the ERC-721 standard. However, in 2021, their use is starting to spread to other blockchains like Binance Smart Chain's BEP-721 protocol.

What Is Fungibility?

It refers to an asset's ability to be exchanged with a similar asset without sacrificing its value. Fungibility also defines an asset's characteristics, such as divisibility and value. For example, one \$10 dollar bill is identical to another \$10 dollar bill in terms of value. As such, when you borrow a \$10 dollar bill from someone, you don't have to return the exact same note, since another of its kind has the same value. An NFT crypto token has a distinct value from any other similar token. Individual characteristics dictate their uniqueness; hence, they are non-fungible, much like real-world assets like rare stones, works of art, and collector luxury items.

What Are Fungible Tokens?

Fungible tokens are tokens that are tradable for each other, and their value remains constant. For example, Bitcoin is a fungible token because it has the same value regardless of its owner or history.

Characteristics of Non-Fungible Tokens:

- 1) **Rare** – The value of NFTs comes from their scarcity. Although NFT developers can create any amount of non-fungible tokens, they often limit the tokens to increase rarity.
- 2) **Indivisible** – Although not set in stone, most non-fungible tokens are indivisible into smaller units. You either purchase the entire amount of, say, a digital art piece, or purchase no art at all.
- 3) **Unique** – This is perhaps the most significant characteristic of them all. NFTs have a permanent information tab that records their uniqueness. Think of this information as a certificate of authenticity.

Like this Nyan Cat meme from 2011, which got sold for \$590,000 in an online auction last week.



Non-Fungible Token Use Cases:

Gaming:

NFTs are popular in the gaming industry since these tokens solve some of its inherent problems. For example, top games such as Fortnite prohibit the sale of rare traits and accessories such as weapons and skins.

However, with NFTs, these features can easily be transferred and used in different games. As such, non-fungible tokens can help drive in-game economies.

Digital Assets

Think of **Decentraland**. Here, participants can buy virtual land. Another example that is closer to home is ENS (Ethereum Name Service), which uses NFTs for its .ETH domains to facilitate buying and selling.

Identity

NFTs are ideal for fighting identity theft. Examples of things that can be digitized to represent identity include academic qualifications, medical records and even our appearances.

Furthermore, digital artists can turn their work into NFTs for copyright purposes.

NFT's use to prove identity includes converting physical game tickets into non-fungible tokens to weed out counterfeits.

Top NFT Projects

Since the NFT subspace is growing exponentially, NFT-focused products and projects have also increased. They range from gaming networks to NFT marketplaces. Below are five of the top NFT projects today.

- 1) **OpenSea** – This is the leading marketplace for NFT art and collectibles. Listed items range from ENS to virtual pets and plots of land. Notably, the marketplace allows purchases using several virtual currencies such as ETH and DAI.
- 2) **Async.Art** - Async is another non-fungible token artwork marketplace that allows you to not only buy and sell your NFT but also to create one. That's not all. The platform has some programming features that enable art creators to easily define their artwork's appearance and behavior. In fact, it even allows buyers to buy sections or "layers" of a given artwork and customize them.

- 3) **CryptoKitties** – Although we've discussed this project above, it still deserves to be on the list of top NFT projects considering it brought the whole NFT game to the limelight.
- 4) **Ethereum Name Service (ENS)** – This is a domain name service project that came to life in mid-2017. The .ETH domain names are NFTs using Ethereum's ERC-721 standards and are tradable on NFT marketplaces.
- 5) **Decentraland** – Decentraland is a top NFT project focusing on a distributed virtual world. Here, participants can buy virtual land. Furthermore, each “inhabitant” has a special identifying digital passport.

It's important to note that the NFT space is still in its infancy. Therefore, expect to see new platforms edge out the current batch of top NFT projects in 2021.

As of now, the term NFT is slowly moving away from visions of gaming and CryptoKitties to the painting, DeFi, ticketing, digital identity and other use cases.

In fact, its application scope is only limited to the imagination of the cryptocurrency community and developers.

NFTs have created a mechanism to buy equity in creative content. If you are a fan of a creator and you love their content, you may want to support them by buying into a piece of it, which could potentially appreciate in value.

By **Sanmathi**



Update for the day #987 | Why Does February have Only 28 Days

Have you ever wondered why February is such an odd month? So why does the second month of the year is unique in itself and chose to stop at 28 or 29 days!. Romulus Founder and first king of Rome wanted to keep track of the increasing number of festivities, feasts, military ceremonies, and religious celebrations, and hence wanted a Calendar to organize all of them. Ancient astronomers had calculated the days which took for the earth to revolve around the sun or which can be called as "Tropical year " which was of 365.242 days. But for the Romans, tracking the moon was the convenient option to know what day of the year was it.

Second king of Rome Numa pompilus, who believed in a crazy superstition that the even numbers are bad, removed a day from all the even day months, so now all the months which has 30 days were only of 29 days which resulted in a 298-day calendar. Numa also wanted Rome to follow 12 lunar cycles and a lunar cycle consisted of 29.5 days which made the count of 354 days in a year. Hence to bring 298 days Calendar to 354 days Calendar he added two months after December, which was January and February.

Following his superstition, he wanted the year to have odd number days and hence he added one more day to make it 355 days in a Roman calendar But it was not possible to divide 355 days such that each month had an odd number of days hence February was chosen to be the only month with an even number of days and since Februarius (Latin) which when translated into English means purification, the month was dedicated to the purification of departed souls and hence the king was fine with 28 days.

But still, the problem existed, the new Roman Calendar was still short of " Tropical Calendar" , the seasons weren't in sync with the year causing confusion. By the time Julius Ceaser took over Rome, he implemented the Calendar which Egyptian followed which was 365 days or the solar Calendar. Ceaser added 10 days to every month having 29 days to make it to a total of 365 days. But since the tropical year is a bit longer than 365 days, Ceaser added a day once in every four years so that the solar Calendar could be formed and February was the one where one leap day was considered and hence it has 29 days on a leap year which comes once every four years.

By **Naren Pai**



Update for the day #988 | Niranjana Karagi's Nirnal – World cheapest portable water filter

According to UNICEF, less than 50% of the population in India have access to safely managed drinking water. As per WHO, more than 2,000 people die every day in India due to lack of clean drinking water. WHO also states that at least 2 billion people use a drinking water source contaminated with faeces and by 2025, half of the world's population will be living in water-stressed areas. These statistics show that an urgent collective action is required as life cannot sustain without safe drinking water.

Sometimes, the inspiration for the most brilliant of inventions can come from the most humbling of places. Such is the case for NirNal founder Niranjana Karagi hailing from Belgaum. While he was playing in a schoolyard nearby his home has invented and patented the world's cheapest water filter which costs Rs.30 and can be used for 100 times and fits any water bottle and this removes 99% of bacteria and other disease-causing water contaminants.

Niranjana now has many accolades to his name including Best Entrepreneur Award by Deshpande Foundation – Feb 2017, Best Entrepreneur Award by Visvesvaraya Technological University (VTU) – Jan 2017, Yuva Shilpi Award by Akhil Bharatiya Vidyarthi Parishad (ABVP).

It is a compatible, portable, reusable, healthy, and eco-friendly water purifier. A product that ensures 'Safe Drinking water' at an affordable price. This acts as a filter when the water oozes out of Nirnal fixed to the bottles. It is easy to use, imparts taste, and also adds some essential minerals to the water. It uses activated charcoal, Filter cloth.



Niranjana did his schooling from St. Mary's school Belagavi and PUC from Govindram Seksaria Science College, Belagavi. Later completed Mechanical engineering from Angadi Institute of Technology and Management in Belagavi.

During his free time, he noticed some small children using the playground and filling up their plastic water bottles from a potentially unsafe tap. Bearing witness to the scene, Niranjana reflected sadly on this reality and felt that all children should have clean water despite their income or area of residence. It was certainly not a surprise for the young leader to think of such social issues, given his involvement in the LEAD program at AITM College Belagavi. But it was this particular

case that leads him to create something that would make a significant social impact for many people.

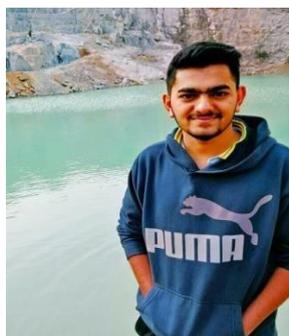
Water filtration became the main theme for Niranjan as he began to brainstorm ideas on providing a clean, low-cost source of water. Seeing as his research revealed the relatively high prices charged by competitors for filters, the future entrepreneur settled on creating a water filter that was both very affordable and portable for bottles. His first prototype used materials that were easily accessible around the house but after some assistance from LEAD, a second prototype was created that took Niranjan 4 painstaking months to perfect. The result was a small filter that could be fitted into any standard plastic bottle with an incredibly low cost of 20 rupees.

At that point, all the hard work put into the prototype paid off. Approval was given by the Food Divisional Officer stating that the filter could purify up to 100 liters of water. Furthermore, Niranjan turned to social entrepreneurship as a means of spreading his technology by agreeing to receive tier-ii incubation support in Belagavi by the Sandbox-IMER center. Sandbox Startups was instrumental to the founding of the NirNal enterprise, officially registered with the Ministry of Micro Small and Medium Enterprises in Belagavi. Furthermore, the incubation center gave him a platform to pursue his ideas for his product while gaining business knowledge about scalability and validity for the purposes of society. Complete with networking events, partnership opportunities, mentoring, and investor meetings, Sandbox Startups was an essential springboard to Niranjan's growth as a social entrepreneur.

The social impact of his product has been significant. With the distribution of his product to various villages, schools, and even India's military, it is evident that NirNal has been widely acclaimed for its ingenious and inexpensive technology. But on a personal level, Niranjan is happy with the fact that children could use his filter, knowing that they would always have a reliable source of water as they grow up. Niranjan's initial wish to provide clean water to everyone has become more and more of a reality through the means of his portable water filter. This reality was made possible for thousands of people as 15,000 units of his filter have already been sold.

Indeed, it is exciting to see how NirNal will scale with its water filters. Niranjan himself has stated that he would like to improve the unit even further while maintaining a low price, all while maintaining his goal of providing clean water to all rural people. If he were to truly succeed in his endeavors, there would be much cause for celebration for this ingenious invention.

By **Akshit K Jain**

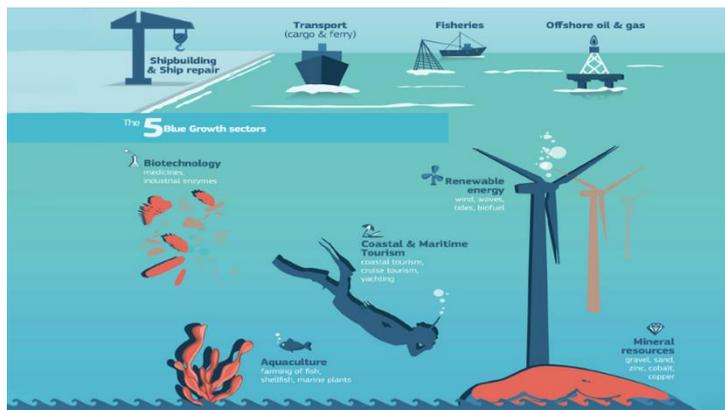


Update for the day #989 | The Blue Economy

“There must be a better way to make the things we want, a way that doesn’t spoil the sky, or the rain or the land” - Paul McCartney

Looking at India’s map, we sometimes forget that our boundaries extend well beyond the coastlines. We are blessed with a 7500 km long shoreline and more than 2 million sq. km of exclusive economic zones—ocean territories adjoining coastal areas where India can exercise its sovereign rights. Not many nations can boast of such statistics and not many countries have access to the kind of resources that we have. However, we have ignored the ocean altogether and failed to put these resources to good use. The government is now formulating a ‘blue economy policy’ that will hopefully remedy this problem and outline a strategy to put our enormous ocean resources to good use.

The world bank defines the “Blue economy” as a “sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem”. Meaning, we have to do it in a way that’s sustainable. And while it’s possible things might not work out exactly as intended, we have to be hopeful.



But which sectors are involved and who are the important stakeholders?

Well, it could be fishermen tugging their boats into the sea, people who earn a livelihood on beautiful beaches, businesses that cater to tourists along the pristine coastlines of Kerala and Goa, shipping companies and port operators and also energy companies who explore the deep seas in the hope of stumbling on oil deposits. The document calls for a mapping of the entire coastline including the extended ocean space to make sure different participants do not interfere with each other’s businesses.

The next challenge is to build relevant infrastructure that can harness the economic potential of oceanic resources. We have nine coastal states, 1,382 islands, and 199 ports built in these areas. Unfortunately, only 12 qualify to be called major ports. All of this existing infrastructure handles approximately 1,400 million tons of cargo each year. But there is still a lot to be desired. We need cruise terminals and marinas, we need shipyards that can build fishing trawlers, luxury cruise liners and container carriers. And we need them now.

The policy calls for an assessment of the fisheries department. In India, fishing largely means staying near the coastline, but mid and deep-sea zones are woefully underused. The new policy calls for incentivizing the use of these deeper areas to meet demand from both domestic sources and abroad. Having said that, the government also wants to have reasonable checks and balances in place to make sure people don't overfish and put the ecology out of balance. Maybe we could use the same tech to keep an eye out for areas that are indeed ripe for fishing and nudge fishermen away from unproductive areas.

Finally, there is the deep sea. The surface holds copious amounts of minerals and metal deposits. And while we would need major investments in the scientific exploration of oceans, this could be a source of great windfall. Speaking of wind, oceans also extend opportunities to tap into wind and tidal energy and that's another thing the draft document alludes to.

In summary, the policy highlights the vast potential hidden within the oceanic ecosystem and makes some good recommendations of how we can improve the lives of those living along the coastline whilst also preserving marine ecology.

By **Jahnavi RS**



Update for the day #990 | Attari Border Ceremony

The **lowering of the flag's** ceremony at the Attari -Wagah border is a daily military practice that the security forces of India (Border Security Force, BSF) and Pakistan (Pakistan Rangers) have jointly followed since 1959. The drill is characterized by elaborate and rapid dance like manoeuvres and raising legs as high as possible, which have been described as "colourful". It is alternatively a symbol of the two countries' rivalry, as well as brotherhood and cooperation between the two nations.



At the international border between India and Pakistan, the pomp and pageantry of the Beating Retreat and the Change of Guard within handshaking distance of the Indian and Pakistani forces makes for a most charming spectacle. Wagah, an army outpost on the Indo-Pak border – between Amritsar and Lahore, is an elaborate complex of buildings, roads and barriers on both sides. The daily highlight is the evening “Beating the Retreat” ceremony. Soldiers from both countries march in perfect drill, going through the steps of bringing down their respective national flags. As the sun goes down, nationalistic fervour rises and lights are switched on marking the end of the day amidst thunderous applause.

This ceremony takes place every evening immediately before sunset at the Wagah-Attari border, which as part of the Grand Trunk Road was the only road link between these two countries before the opening of the Aman Setu in Kashmir in 1999. The ceremony starts with a blustering parade by the soldiers from both sides, and ends up in the perfectly coordinated lowering of the two nations' flags. It is called the Beating Retreat border ceremony on the international level. One infantryman stands at attention on each side of the gate.



As the sun sets, the iron gates at the border are opened and the two flags are lowered simultaneously. The flags are folded and the ceremony ends with a brusque handshake between soldiers from either side, followed by the closing of the gates again. The spectacle of the ceremony attracts many visitors from both sides of the border, as well as international tourists. In October 2010, Major General Yaqub Ali Khan of the Pakistan Rangers decided that the aggressive aspect of the ceremonial theatrics should be toned down. The soldiers of this ceremony are specially appointed and trained for this auspicious ceremony. They also have a beard and moustache policy for which they are paid additionally.



Some interesting facts about the parade ceremony:

- 1) During Wagah Border Ceremony National Anthem is played, slogans of patriotism and dance is also performed on Bollywood songs. Apart from this, sometimes cultural programs are also organized. In this ceremony, people from other countries of the world along with Indian citizens participate.
- 2) At the time of the retreat the border looks like a battleground, as the procession is conducted with loud shouts and heavy foot stomping by the soldiers. A form of marching where soldiers lift up their legs very high is known as “Goose Marching”. This procession continues for 45 minutes
- 3) The Wagah Border Ceremony is a military practice carried out by the Indian Border Security Force and Pakistan Rangers. This ceremony has been organised+ every day since 1959. But when the warlike situation or border dispute between two countries intensifies this ceremony is postponed for some days.

- 4) There's no ticket. The ceremony is entirely free. The seats are allocated on "first come first serve basis". So, one needs to arrive here at 2.30 PM in winter and at 3 PM in summer. The border gate remains open from 10:00 AM - 4:00 PM. The Beating Retreat Ceremony starts at 5:15 PM in summer and 4:15 PM in winter.
- 5) The main objective of Wagah Border Ceremony is to maintain an atmosphere of mutual cooperation and harmony between the two countries.
- 6) On an average, the retreat ceremony saw a gathering of 10,000 people at the Attari-Wagah border every day. On weekends, it would increase to about 15,000 and on special occasions, such as Independence Day, the footfall would go up to as high as 25,000-30,000. That allowed a booming business for local garment sellers, dhaba owners, tattoo makers, flag painters and juice vendors, among others, dependent on the tourists.
- 7) Also, Wing Commander Abhinandan Varthaman who was flying a MiG-21 as a part of a sortie that was scrambled to intercept an intrusion into Jammu and Kashmir by Pakistani aircraft. He was released by the Pakistan government through the India-Pakistan border at Wagah on 1 March 2019.

By **Nikitha.M.A**





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