

TOGGLE

WEEKEND LIVING IN THE DIGITAL AGE

A publication of *The Daily Star*

WHO CARES ABOUT RENEWABLE ENERGY?



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Google rolls back Android 11 public beta

Beta Google has decided to postpone their upcoming June 3rd Android 11 public beta launch. In a tweet on Friday evening, Android's developer account said "We are excited to tell you more about Android 11, but now is not the time to celebrate." The tweet also said they will "be back with more on Android 11, soon," but did not specify a date. Although no reason was given, it can be speculated that the Google's decision is related to the recent series of protests that erupted all over US. These protests were in response to the death of one George Floyd, a black man unlawfully killed by an officer of Minneapolis Police Department through excessive use of force.



SpaceX makes history with first private manned mission to space

On Saturday, May 30th, SpaceX became the first private spacecraft to carry humans into orbit.

The launch, titled 'Demo-2', was the final demonstration mission in the human rating process of SpaceX's Crew Dragon and Falcon 9. Flying NASA astronauts Doug Hurley and Bob Behnken to the International Space Station, successful completion of this mission will certify SpaceX for regular transportation of people to space. This was the second attempt after an initial launch try last Wednesday was scrubbed due to weather conditions.

To date, SpaceX's Falcon 9 and Falcon Heavy rockets have succeeded in delivering multiple cargo payloads to orbit, but Behnken and Hurley are the first people to make the trip with the private spaceflight company.



Microsoft to replace journalists with AI

Microsoft plants to replace dozens of its MSN contract journalists with automated systems, US and UK media report.

In a statement, the US tech giant said "Like all companies, we evaluate our business on a regular basis. This can result in increased investment in some places and, from time to time, redeployment in others. These decisions are not the result of the current pandemic."

MSN, like most other tech companies, pays news organizations to use their content on its website. But it employs journalists to decide which stories to display and how they are presented.

Currently, the curation of stories along with selection of headlines and pictures are done by journalists. However, artificial intelligence is set to perform these news production task in the future.

Around 50 contract news producers set to lose their jobs at the end of June, but a team of full-time journalists will remain.

Microsoft said this is part of an evaluation of its business.

It should be noted that the attempt to replace human journalist with machines in nothing new. Xinhua – a Chinese news agency – has been experimenting with virtual news presenters since 2018.

NEW CARS THIS WEEK



The middle child of the Bimmer family, the seventh generation BMW 5 series finally got its big mustache update. In addition to the larger kidney grille, the car has grown by 1.2 inches and received a set of sleeker, more linear LED headlamps. The interior also received some minor touch-ups, along with a 12.3-inch digital gauge cluster becoming standard on all variants. The car also retains all of its four powertrains, with the range-topping version being the 4.4-liter twin-turbocharged V8 outputting 523 HP and 533 lb-ft of torque.



Moving from riches to rags, the budget-friendly small hatchback from Kia also got its mid-life makeover. Like the BMW, the Rio got fancy new LED headlamps along with a sleeker front fascia. But unlike the 5, Rio's front grille actually shrunk, being much narrower than before. Inside, it outdid the German Sedan's screen update by a factor of two, with a new 8.0-inch screen on the center console and a 4.2-inch digital display on the gauge cluster. Finally, Kia updated the 1.0-liter T-GDi engine with its 48V MHEV system, though this is mainly done to comply with European emissions standards.

EDITOR'S NOTE

All about saving

Everybody wants to save the world. Good news for you-now's the time to do so. This World Environment Day, Toggle explores the ways we can use technology to be the good guy. We talk about going paperless (erm, yeah), using renewable resources and all sorts of other cool ways to treat our planet right. Bonus points if you watch climate documentaries this week and use eco-friendly apps for a change. Don't know where to start? It's all there in this week's issue.

On a personal note, working with the core editing team for the week was a learning experience like no other. If you want supportive and encouraging mentors at your workplace, look no further. 10/10 would recommend it.

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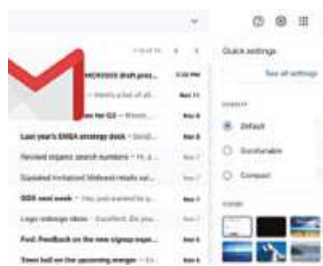
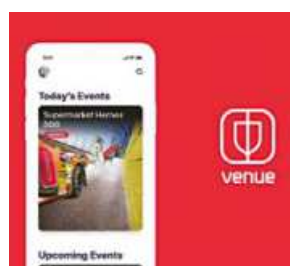
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TechBits



Cisco to acquire internet monitoring solution ThousandEyes

Facebook is launching Venue, a companion app for fans of live events



Gmail's new "quick settings" menu allows users to personalize their inbox

Hulu launches "Hulu Watch Party" for virtual viewing parties and chat



YouTube's new "Video Chapters" feature makes navigating longer videos simpler



How to go paperless to create an environment-friendly workplace

JINAT JAHAN KHAN

Making offices paperless is a good idea, not only to reduce environmental footprints but also to make the employees' lives and the office work easier. We've built habits around papers that cost us both our time and money. More paper consumption leads to more lost hours in creating documentations, among a myriad of other hassles. Here are some ways of going paperless to reduce office waste, store documents in a safer, smarter way, save employees' valuable time and obviously to save some trees.

Moving to digital documents

To tackle the mounds of paper documents, the cloud, an electronic system and common paperless document storage can be a convenient strategy to store and backup important documents and files in a secured way. Work in a team if you want to organize your stacks of paper files quickly. Create a unified system that can be accessed only by the employees. Let each department tackle their own files and set a goal for them to complete and enter the documents into the central management software. Determining an "expiration date" is important. Documents older than this date should be shredded so that the cloud doesn't get overloaded with the unnecessary files and slower the whole system. Off-site file storage lets you decide who can access the documents. In this way, you and your team can even work remotely into the paperless era.

Nowadays there are many scanner

apps available, such as CamScanner, Adobe Scan, Google Drive Scanner, Office Lens etc. Just scan the files with any of these, make PDF files, and upload them to the cloud. Consider switching to e-signatures. Furthermore, switching to digital banking can remove the clutter of mailed paper bills and the hassle of writing hundreds of checks.

Encouraging paperless meetings

Employees need to be encouraged to use their laptops, smartphones and tablets for meetings or for other situations where they need to take notes. They can embrace the option of using note-taking apps like Notion, Evernote, OneNote and many more. Instead of using paper handouts in a meeting, email each team member the digital files in advance and share the presentation through the cloud storage after the meeting. One important point is that some employees may brainstorm better when they doodle or take notes physically. So do encourage them for a paperless meeting, but don't force them as it can harm people's creative ways to function at full steam. If employees have their own tablets and digital-pens, even the process of doodling can be moved to the digital space.

Encouraging recycling and reuse

Concentrate on purchasing recycled, reusable, durable, and high-quality materials to encourage recycling and reusing. Provide recycling bins or containers where staff can put recycle items. Shred confidential documents with the help of paper cutting machine

before putting those in the recycling bin for safety purpose. Buying recycled paper for the printer is also an environment-friendly strategy. Consider using reusable mugs and towels instead of using paper cups and paper towels to promote a paperless office environment.

Being smart regarding office supplies

Printed documents and faxes are generally expensive and a bit inconvenient. Storing these paper documents is time-consuming and they are not accessible if you are not in the office. If you are going for digital documents, then reduce the use of the additional office equipment that needs paper such as printers, faxes and copiers. Be certain about whether the documents need to be printed or should be in an electronic record. Monitor office inventories and keep a track on the usage to ensure that the team is working according to the plan. It is impossible to go paperless totally. However, it can be minimized to make an environment-friendly workplace.

In the context of developing countries, the United Nations addresses how going paperless may seem particularly challenging, with fewer technological resources and overall resistance to change regarding the traditional ways of doing business. Nonetheless, as the benefits far outweigh the cost of implementation, private sector and government agencies should consider taking up paperless operations for future prosperity.



From trash to treasure

How the auto industry is upcycling landfill items into car parts

RAHBAR AL HAQ

Car headlights made from waste coffee beans. Thrown away plastic bottles that become car seat. What next? If there is one thing that can be said about humanity, it is that we love to create a mess in the most literal sense. On average we create 1.3 billion tons every year, and most of it is just simply thrown away. Automakers are stepping up to do their bit by turning waste into shiny new parts.



Coffee chaff headlight cover
MacDonald's, being one of the largest fast-food chains in the world, creates a lot of food waste. For example, it produces around 30 thousand tons of coffee chaff — the husk of coffee beans that peels off during roasting — every year. Previously, all that chaff used to end up in a landfill and later burned, contributing to the global CO2 emission. Enter the Ford Motor Company. Since 2019, the blue

oval entered a partnership with the golden clown to have all that waste transferred into their factory. There, they use the chaff as one of the components to build high-temperature plastic items, such as headlight cover. The resulting products are 20% lighter compared to normal plastic and take 25% less energy to build. It is still plastic though, meaning you can't just crush down your Ranger's headlamps to have a good old cup of joe.

Cloth sound-deadening panels

Let's face it, we all update our wardrobe every now and then. When we do, we discard our old clothes by either giving them away or just throwing them into the trash. Nissan found another use for them. Their budget-friendly EV the Leaf uses

sound-deadening panels made from worn away cloths. Nissan does this by shredding all these clothes to their raw fiber then compressing them into sheets. Nissan recycles almost 300 tons of clothing every month, reducing the need to make certain car parts from brand new materials.



Iceland moss cabin air filter

The cabin air filter is the component that prevents dust and other harmful particles from entering your vehicles. Generally, they are made out of paper, which is made comes from trees. But the innovative German EV start-up Sono Motors decided to get rid of the middleman plant trees right inside of your dashboard. Their Iceland moss acts

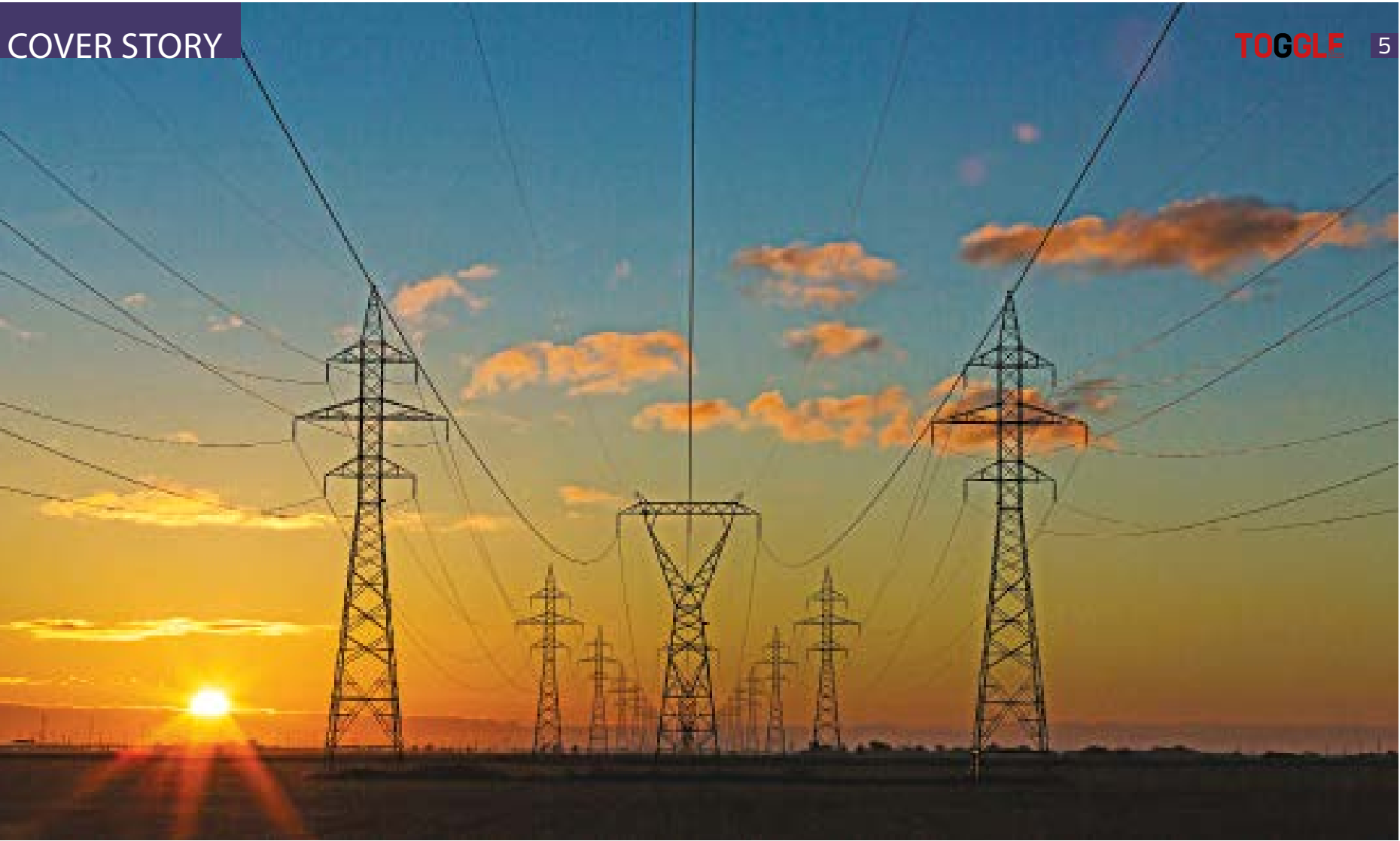
as both a natural air filter by binding dust particles from the air and acting as de facto air-cooler as it draws water from the air, effectively regulating humidity and maintaining a comfortable cabin environment. It should be noted that unlike normal air filters they can't be cleaned and have to be replaced after some time, though their biodegradability makes recycling much easier.



Plastic bottle seat upholstery

If you are even slightly concerned with climate change, the monumental problem of plastic waste should not be news to you. We produce around 300 million tons of plastic waste every year, about half of when are single used plastic items such as PET bottles. Such bottles are single-use by design and most are simply thrown away instead of being recycled. This is where car

manufacturers come in. Audi has begun programs to collect these bottles and turn them into seat materials. They shred these bottles into tiny little strips, melt them into a liquid paste, and then turn that paste into a spool of yarn. The said yarn is later woven into fabrics to decorate the interior of a brand-new Audi A3. Hip new petrolheads would consider this earth friendly label to be a plus point.



Big tech's big shift to renewable energy

NOSHIN SAIYARA

The tech industry has been making a big shift to using renewable energy in their offices and operational spaces in the past few decades. In 2019, the tech giants were the biggest corporate buyers of renewable energy. The hunger for efficient expansion of the tech giants has led to triple the amount of energy being produced by companies who are developing renewable energy. According to an economic forecast publication, global corporations have managed to buy enough clean energy in the last 12 years that will surpass the total energy production capacities of small countries like Poland or Vietnam. This has allowed these companies to expand our world of digital cloud-based services without murdering the chances of survival of our planet. However, the reason probably does not have as much to do with caring about greener earth, as it does with big tech's long-term survival in the market. Let us look at why and how the big tech is making its big shift to renewable energy.

Powering data centres

Amazon, Facebook, Google & Microsoft have become the biggest buyers because they use this energy to power their data centres. The data centres serve as the operational headquarters of the tech

industry, housing data analytics, and storage machines that require the use of massive amounts of light energy and electrical energy. They also need large coolers that keep the temperature stable, a source of emission of the harmful gas. These data centres were estimated to become the largest users of non-renewable energy by 2025, according to a forecast of consumption of power by a Swedish researcher, speeding up the process of reaching the extremity of fossil fuel. This prediction has now changed since the big tech started using renewable energy sources for their data centres. If the big tech companies did not change this practice of using non-renewable sources, their companies would face the problem of running out of enough sources to buy energy from after a few decades. Since most of their plans are based on long term longevity, it only made sense for the pioneers of the tech industry waited until energy sources became scarce, it would be way more costly for them to make the shift later on. By entering the green energy market early, they have avoided the heavy cost they may have incurred

that would threaten the expansion of their data centres, the very foundation of their services. Since the data centres are also considered to be a premium consumer of energy, and it has managed to survive functionally with renewable sources, this is working as a motivation for other smaller businesses and companies who were doubtful of renewable sources being efficient enough to sustain their business functionality.


Cheaper and localized sources

Going green has allowed them to use localized sources for energy, a source that manages to be both time-efficient and cheap. It's time-efficient because if you rely on localized sources, you will have quicker access to your source. It's cheaper because they can cut down on the costs of shipment. Google uses seawater from the Gulf of Finland for cooling its server in Hamina, Finland. This system uses no compressors or refrigerants for cooling, which are considered to be one of the primary contributors to harmful factors of the data centre system that threaten our climate. This system of using raw seawater has saved Google millions of dollars in shipment, maintenance, and energy source cost of cooling systems. Cooling systems are a non-negotiable

part of data centres because they are vital to maintaining the temperature of the devices that are processing and storing data at a very high frequency.

Change in server system: The green cloud


The tech companies that rely on the server system for the services have built the cloud system for that purpose. Google, Amazon & Facebook routinely lend their cloud services to other companies so that they can store their data in these cloud systems. This means that instead of relying on big black boxes that had previously stored all the information about the vendors of a food delivery business, the business will now rely on the existing cloud systems of the big tech by purchasing a portion of their servers. This trend has reduced the energy consumption of many businesses, as they do not rely on in-house servers that continuously consumed energy for maintenance and outsource the job to big tech in many cases. The demand for cloud services has allowed the big tech to expand their businesses with renewables and claim energy efficiency by creating the "Green Cloud", as they help reduce overall energy consumption in the net calculation of businesses across the world.



NOW YOU KNOW

Plug-in hybrids – the bridge toward a greener earth

As the world's effort against climate change ever grows stronger, so does its effort to reduce vehicle carbon emission. While pure electric vehicles are a step toward the right direction, their high price and long charging times limit their usability. A hybrid system, however, combines the best of both worlds. Vehicles such as the **Mitsubishi Outlander PHEV** have a carbon emission of just 46g/km, which is four times lower than its non-hybrid variant. Moreover, a PHEV can either recharge from home or fill up its tank from a fuel station. Making it both versatile and friendlier toward the environment.



Apps that help you support a greener earth

NOSHIN SAIYARA

While many of us wonder about what impact our tech-savvy world has left on the environment, we can use tech to help make the earth a little bit greener. Fighting climate change can often feel like a massive and overwhelming issue that cannot be tackled with individual efforts, but there are simple ways to support the greater initiatives fighting climate change and environmental pollution. Here are a few applications to aid you in that noble quest-



Ecosia- Browse & Plant Trees

Ecosia is a search engine browser, owned by Microsoft Inc., that you can install on your phone and/or add as an extension to your computer's default browser. It donates 80% of its profits from advertising revenue to tree plantation initiatives around the world. If you go to Ecosia's website, the exact number of how many trees are being planted thanks to its users,

which was up to 95,481,205 when the author was writing this article. All you need to do is use their search engine from time to time as you are browsing through on your phone or computer. Ecosia's blog claims that each search with Ecosia removes roughly one kg of CO2 from the air, which is an amount estimated from the donations they generate with ad revenues from your searches.



Joulebug

If you are looking for an application that will help you track your everyday eco-friendly habits, or even just to motivate yourself to do better, Joulebug is an app to use. This app will help you share your eco-friendly achievements with others who share your vision of a greener earth, an act that can motivate small habitual changes like avoiding the use of plastic or remembering to not waste energy. However, if you are looking towards a more collective effort,

Joulebug Enterprise is the application to use when you are trying to encourage your coworkers or your classmates to exercise more sustainable habits in your life. It allows you to design and complete challenges. Initially marketed as an app to encourage personal wellness, it has now customizable features that you can use to design any challenges like who generates the least amount of trash in your office a certain week or who wasted the least amount of paper.



WWF Together

If you are an animal lover who wants to educate themselves a little more about the species impacted by changing climate, WWF Together by World Wildlife Fund is a great app to use. The application features interactive stories of endangered animals and has 3D animations of the globe that helps you discover the distance between you and the endangered animals. It has been rated highly for the visual experience it provides you. Unfortunately, the application is only available for iOS users for now, but

a similar experience can be accessed through the World Wildlife Fund's website. Android users can try using NASA's Earth Now application, which gives visualizations of recent climate data from its satellites and you can virtually explore the earth to where changes are taking place. It is not as interactive as WWF Together, and not geared towards animal conservation either, however it serves as a good dupe if you are trying to have a visual experience to stay more connected with the news of climate change around the world.

Tech overhaul to lead Bangladesh's agriculture to the future

ISRAR HASAN

The current coronavirus pandemic has created giant seismic shifts in our day-to-day living and has presented us with a new set of challenges. As the pandemic rages on putting us in a quagmire, we have gradually seen technology playing an essential role during the crisis enabling greater connectivity between people through the creation of apps serving the role of shopping essentials and the tracking of corona cases alongside generous offers set by many leading tech firms to carry on both work and leisure activities on their respective application platforms.

As the economy wraps its head around the current crisis, it is also very important to take into one's stride that more dangerous crises might be turning up in the nearby future. In a time where social distancing is seen as a norm, we have seen the food system see shifts of its own. The food system itself is dependent on agriculture, which accounts for 14% of the gross domestic product. Thus, it plays a crucial role in food security for all of us whose lives are directly or indirectly dependent on it. In such case, agriculture or in this case, agribusiness has turned out to be a crucial and critical industry employing the role of technology to help agripreneurs to plan and create feasible environments for food production.

The food supply chain is a complex intricate web that ropes producers, consumers, pastoralists, and fishers together. Modern-day agriculture is driven by

evolving changes in digital tools and data. It is further bolstered by collaborations among farmers and researchers across the public and private sectors. A dynamic shift towards modernizing agriculture is possible by the new improvements in the use of both technology and technical know-how enabling the synthesis of agritech and agripreneurs to be game-changers in the future economy of both Bangladesh and the world at large.

Greater efficiency leads to greater sustainability

Agricultural policies evolve in response to changing needs of time and situations. Technology is a major aid in trying to bridge together the need for increases in production and supply of food. Innovative technology like blockchain could be used to create a digital and verified identity base of all the farmers alongside their transactional history linking them in an accessible network where relevant stakeholders like banks and insurance companies are present. It can provide farmers and entrepreneurs with a decentralized and secure transaction process. Being a write once-append only, distributed and decentralized system, it is helpful to

trace transactions and keep farmers in the loop with other platforms such as crowdsourcing ones that offer financial opportunities for farmers and entrepreneurs. A more transparent agricultural supply chain will allow us to highlight areas susceptible to unsustainable practices and farmers will be allowed to share information about their products freely with the customers and other businesses as well.

Artificial intelligence has also left a strong imprint in the field of agriculture as it has in other fields. The deployment of artificial intelligence is likely to enhance the flexibility of autonomous tractors, irrigation systems, and even drones well equipped with devices such as sensors, radars, and GPS systems. In addition to the blessings of artificial intelligence is the virtue of machine learning which is equally beneficial to the world food system. Analyzing crops beforehand increases the chances of having a better yield. Machine learning helps to take into account real-time and historical data alongside machine learning algorithms to enable proper decision making in areas, which need introspection. The methods are derived from the learning process. After a few learning experiences, the model can be used to make assumptions, categorize or classify them to test data. Through proper image processing and use of sensors to track weather conditions such as moisture or humidity, machine learning can help in improving overall

productivity.

Algorithms suited for the use in deep learning and computer vision help in the analysis of the data collected to report on important happenings. This, in turn, can help in a number of ways like the prevention of damage by diseases and an increase in yields.

Harnessing the power of tech

Social media and the use of mobile phone remains the easiest medium of accessibility of communication in the field of agriculture largely due to their conspicuous usage. With heightened use of smartphones with common apps, farmers can have untrammelled communication with farmers, traders, buyers and directly with consumers if needed.

With the help of modern technology, irrigation systems can be controlled from a phone or any electronic device. Painstaking journeys to the field no longer have to be taken. Apps such as 'Foursquare' can be used to monitor employees alongside cameras fit in places around the farm.

With a more detailed database and use of automated technology in agriculture, a systemic approach can indeed be taken to boost food production and security helping it to act as a boon in case there are more cases of impending concern in the future. Collaboration between the public and private sector alongside the promoting of agribusiness and agripreneurs would certainly contribute towards meeting this challenge.



Documentaries on climate change to watch on the world environment day

REHENUMA RAYSA

In this World Environment Day, where we are coming across various alarming news of Antarctica's snows turning green, coral bleaching, wildfire, climbing temperatures along with many other natural disasters or calamities as results of climate change, some people are still in denial and tagging climate change to be a hoax while this pressing matter still remains unfathomable to many. Here are some thought-provoking documentaries that can expand our knowledge on climate change and its impact to help us comprehend our duties.

Home (2009)

This stellar documentary, shot in an aerial view in different locations from 54 countries is a compelling documentary to learn about the elements of the earth, codependency and the process of these all existing simultaneously in a cycle with great narration and



amazing cinematography which are complementary to each other. Statements like "The engine of life is linkage, everything is linked and nothing is self-sufficient" aptly sums up the gist of the documentary by making us wonder how earth offers and provides so much to Homo sapiens to survive and thrive like no other species. It discusses the radical changes we have brought by exploiting natural resources along with how we have compromised and disrupted the climactic balance and then emphasizes on how solidarity among people and harmony between human and nature can reverse this horrifying change. The documentary leaves these thoughts dwelling in our minds long after it ends. It reminds us once again the world is our home and we need to become responsible in saving our habitat.

Chasing Ice (2012)

A riveting documentary on how a nature photographer James Bulog's belief that "the story is in the ice" made him track the disappearance of Arctic glaciers in 6 months difference and through this glacier calving event, he acknowledges the tension between the huge enduring power of glaciers and the fragility and vulnerability of them; even though they came from a great impassive place, they are now subjects to eventual decay and erosion due to global warming. This documentary addresses the threat of the extinction of wildlife; how with the ice melting and sea surface rising, we are losing species after species that are essential for biodiversity and ecological balance. The footages from the time-lapse camera recording drastic receding glaciers and snows provide apparent contrast

showing the changes in the landscape that indicates to the immediacy of climate change and the urgency to respond to this climate emergence. This Extreme Ice Survey does not let us turn a blind eye to the global warming issue.

Before The Flood (2016)

This gripping and informative documentary talks about how the greenhouse effect is changing our atmosphere for the worse by increasing the temperature and bringing extreme changes in the patterns of the weather where we are decimating the ecosystem. The documentary takes us on a journey with Leonardo DiCaprio where he tries to find out how much damage we have done and if there is any way to stop it. He urges us to think of the opportunities we have lost by asking us to imagine the world right now if we had taken the science of climate change seriously back then. The documentary also recommends some solutions to grapple climate change which is as real as it gets. The speech given by U.N. Messenger of Peace Leonardo DiCaprio at the end becomes more meaningful as he calls for collective action from the world to save the earth. It is high time we took necessary initiatives to amend our ways of living as it truly is up to all of us!

Other equally commendable documentaries like **An Inconvenient Truth** (2006), **The 11th Hour** (2007), **Chasing Coral** (2017), **Ice on Fire** (2019) etc. can also work as a headstart for you in starting watching documentaries on climate change to have an in-depth understanding of this gravely serious phenomenon.

us on f /Sandalina

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ঠিক যেমন রূপচর্চায় আভিজাত্য মানেই

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সোপ

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