

OPINION

Smile-Inducing Holiday Gifts Wrapping A Tough 2020



Swaira Shabir

The Proceeds From The Sale Of The Gifts Support World Vision Fund, Which Addresses Specific, Urgent Needs That Empower People Out Of Poverty.

It would be a profound understatement to say that 2020 has been a tumultuous and chaotic year. For all too many, it has been downright devastating. Despite the dol-drum, disappointments and heartache, people far and wide are endeavoring to embrace the spirit of the holiday season and find joy where they can. This includes bestowing thoughtful and heartfelt gifts on friends, family, colleagues and others of care and concern in our sphere.

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The Third Wave Of Pandemic And The Present Educational Status Of Tharparkar!



Shewa Ram Suthar

Tharparkar has always faced so many troubles, already Tharparkar's education situation is far behind and in the present situation of the COVID-19, the education situation of the district suffered and affected more than other districts of Sindh.

Presently, the third wave of the pandemic, from the first and second waves, has proved to be extremely dangerous all over the world. Its outbreak is spreading in many neighboring countries and Pakistan is also at greater risk due to climate change.

As a result, educational institutions in the country are also being closed due to lockdown, which will further affect the education of the Tharparkar district. There are a total of 3846 primary schools in the Tharparkar district.

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Abdul Samad



20 years ago, the utilization of feed antibiotics and some other antimicrobial compounds used as performance enhancers became the target of increasing public criticism and political controversy (particularly in the EU countries).

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E-Stamping System Generates Rs 320bln Revenue From PU, Sindh & KP

Chairman Faisal Yousaf claimed that the e-Stamping System had improved revenue collection in addition to assisting in the eradication of fraud and forgery.

More than Rs. 320 billion has already been collected in Punjab, Sindh, and Khyber Pakhtunkhwa under the e-Stamping System, which was developed by the Punjab Information Technology Board (PITB) in collaboration with the Board of Revenue (BoR) for the convenience of citizens.

Over 16.1 million e-Stamp papers have also been printed. This was revealed at a meeting

to review progress that was presided over by PITB Chairman Faisal Yousaf. PITB DG e-Governance Sajid Latif and other top officials were present at the meeting.

The attendees of the meeting were informed that 15 million stamp papers issued in Punjab generated Rs. 308 billion in revenue, Rs. 10 billion from 4 lakh stamp papers issued in Sindh, and Rs. 240 million from 5,000 stamp papers issued in Khyber Pakhtunkhwa.

In this instance, Chairman Faisal Yousaf claimed that the e-Stamping System had improved revenue collection in

addition to assisting in the eradication of fraud and forgery.

The Punjab Information Technology Board has suggested an online system after the Government at the highest level became aware of the problems with the current system.

This e-stamping system's primary goal is to stop fraudulent activities related to paper and processes as well as leakage of government funds. It also aims to store information electronically and create a central database to streamline the verification process.

The citizen won't need to

make multiple trips to pay the stamp duty anymore because under the new system, electronic stamp papers can be obtained from any designated branch of a schedule bank. The buyer's information (land area, location, covered area, commercial/residential, etc.) and system-built DC valuation tables will be used to determine the stamp duty amount.

The names of the buyer, seller, and person purchasing the stamp papers will be entered into the system along with their CNICs, which will be instantly verified online against the NADRA database.

Pakistan Generates 3mln Tons Of Plastic Waste In 2022: MoCCC



The MoCCC informed a Senate panel that Pakistan generated approximately three million tons of plastic waste in 2022, with the figure expected to rise to 12 million by 2040.

The Ministry of Climate Change and Coordination (MoCCC) informed a Senate committee on Tuesday that Pakistan had

joined the Global Plastic Action Partnership to reduce plastic waste and work on various waste recycling projects.

The Global Plastic Action Partnership (GPAP) is a multi-stakeholder platform dedicated to putting pledges to reduce plastic pollution and waste into action.

The MoCCC also informed a Senate panel that Pakistan generated approximately three million tons of plastic waste in 2022, with the figure expected to rise to 12 million by 2040 if no immediate action was taken. Instead of banning plastic, the chairman of the committee believes that efforts should be made to find a suitable substitute.

Senator Seemee Ezdi presided over a meeting of the Senate Standing Committee on Climate Change. The officials also informed the panel that the ministry was collaborating with international partners to develop environmentally friendly solutions for recycling plastic waste.

Senator Asad Ali Junejo raised a public concern about tailpipe emissions in cars and their effects on climate change, which the committee discussed.

According to Junejo, recent studies have shown that transportation and industry play a significant role in deteriorating climate effects...[Read More](#)

Pak Students To Compete In Destination Imagination Event's Finals In US

According to TIS in Karachi, the team, which ranged in age from 5 to 11 years old, "won several awards, demonstrating their exceptional creative and problem-solving skills."

A team of seven young Pakistani students is set to compete in the global finals in the United States, after winning the technical challenge at the Destination Imagination educational event in Dubai, UAE.

According to The International School (TIS) in Karachi, the team, which ranged in age from 5 to 11 years old, "won several awards, demonstrating their exceptional creative and problem-solving skills."

The students won the piece-by-piece technical challenge category, in which they had to create and solve a hydraulic puzzle.

For the challenge, the young team "worked tirelessly for weeks to build, design, and test their innovative solutions."

"Their hard work paid off, and the students were the event's 'Youngest team,' lifting the first position cup with the highest instant challenge score in the event's history," said Taymur Mirza, the head of TIS.

Destination Imagination (DI), a nonprofit organization dedicated to teaching students the creative process through hands-on science, technology, engineering, arts, and mathematics (STEAM) challenges, organized the event.

Over 50 schools from around the world took part in the event, which will be held in Dubai in late March 2023. Javeria Siddiqui...[Read More](#)

Trucking Based Startup Trella Quietly Decides To Leave Pakistani Market

Despite the company's success, the sudden and abrupt nature of its exit makes the situation even more bleak.

Trella, a trucking startup, has quietly decided to exit the Pakistani market. Bloomberg reports that the company's decision was prompted by the "deteriorating economic condition," and that they began their exit "last month in March when they stopped taking orders."

The company has not yet made the decision public, and representatives have not responded to Profit's request for comment. This raises questions about Trella's departure.

"These exits are not just limited to Pakistan," says Fahad Rauf, Head of Research at Ismail Iqbal Securities.

Globally, capital allocation is being reconsidered. Pakistan's

business environment is also unfavourable at the moment, as the country's economy is contracting. It appears that Pakistan's growth will remain subdued in the coming years."

Trella is a trucking startup based in Egypt that was founded

in November 2018 by Ali El Atrash, Muhammad El Gareem, Omar Hagrass, and Pierre Saad. In 2021, the company raised \$42 million from investors, including A.P. Moller-Maersk Aventure S's arm. The company has operations in Egypt...[Read More](#)



CN-Pak Water Cooperation Can Help To Cope Climate Change Issues

"Pakistan is one of the top ten climate-vulnerable countries. Water scarcity is one of the consequences of climate change," said Dr. Muhammad Ashraf.

"Pakistan is one of the top ten climate-vulnerable countries. Water scarcity is one of the consequences of climate change. China-Pakistan water cooperation can help Pakistan cope with climate change and its resulting disasters by managing water sources through the application of technical means," said Dr. Muhammad Ashraf, Chairman of the Pakistan Council of Research in Water Resources (PCRWR), according to a report published on Sunday by Gwadar Pro.

The UN Children's Fund (UNICEF) reported last month that more than 10 million people, including children, still lack access to safe drinking water following the catastrophic flood in 2022. Flooding, the worst in 30 years, is threatening even the soil and vast groundwater reserves. Pakistan has a chronic water shortage, which has been exacerbated by the floods.

The China-Pakistan Youth Exchange Community has been providing food, temporary shelters, and drinking water stations in the worst-affected areas since the floods began....[Read More](#)

QS ImpACT Arranges Session To Remember Late Legendary Social Scientist



Mr. Siddiqui earned a full-time Master of Economics degree from the SU, Jamshoro. For ten years, he worked as a school teacher, teaching mathematics, economics, and English.

QS ImpACT Pakistan hosted an Iftar drive for orphan-age children in memory of the late legendary educationalist Nisar Ahmed Siddiqui, a legendary social scientist of Sindh on April 11, 2023.

He had a fantastic personality. Mr. Nisar Ahmed Siddiqui was appointed Director (Vice Chancellor) of the Sukkur Institute of Business Administration in 2004 after gaining extensive experience in management, administration, and academia at the national and international levels.

Mr. Siddiqui earned a full-time Master of Economics degree from the University of Sindh, Jamshoro....[Read More](#)

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Swaira Shabir

With this, many have asked for my recommendations on holiday gifts (gadget) ideas that can make our lives increasingly "at home" more enjoyable and comfortable, or that will generally make daily life better. This whether at home or cautiously out-and-about—this year or well into the next as normalcy hopefully resumes. Here are some of my favorite gift-worthy finds of the year across various categories, assuring there is something for everyone



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***** GADGETRY *****

The Aventon Level Step-Through Ebike (www.Aventon.com)

The Aventon Level Step-Through Ebike is the daily commuter's dream bike. It is specifically designed for the urban commuter and is engineered to give riders back their freedom, helping them escape the bumper-to-bumper traffic of their daily morning commutes to and fro. Whether that's going to work, school or anywhere else on the regular, the Level Step-Through Commuter Ebike adds a sense of thrill to the start of the day. Its peppy handling and electric motor technology provides speeds of up to 28 miles per hour on pedal assist! Arrive to school or work on time and without feeling drained ... or even breaking a sweat. The Level

Commuter is a class III Ebike and features both pedal assist and throttle settings that gives the rider the option to skip pedaling altogether. It boasts a 750-peak watt (500 watt sustained) brushless rear hub motor that makes going up hills a breeze. With its 48-volt integrated lithium-ion battery, the Level Ebike ranges roughly 40 miles per charge on average, which the rider can track with the large mounted backlit LCD display. Additionally, the Level Ebike comes loaded with added components providing commuters with functionality they look for. This includes tailor-made fenders keeping both the bike and rider clean and protected from flying debris, a rear rack to haul essential cargo, an on-board suspension fork for a more comfortable and smoother ride over those uneven roads. This EBike is also a dream for those more leisurely outings as well.

ULTRASON Performance 880 & ULTRASON SIRIUS (www.Manfrotto.com)

For the audiophile in your life, the ULTRASON Performance 880 headphones fulfill the highest demands on sound brilliance courtesy of it S-Logic and S-Logic Plus Technology. Unlike other headphones that push sound into the ear, the ULTRASON S-Logic technology reflects sound off the surface of the outer ear in different directions before it enters the auditory canal—creating a natural surround sound experience. This, coupled with the S-Logic Plus Technology, provides a spatially improved perception of voices and instruments with stereo sound signal. In other words, it features amazing sound clarity to give you concert like sound from a set of traditional headphones. This technology also allows a reduction of sound pressure levels at the eardrum—up to 40 percent less strain that significantly reduces the risk of hearing damage. The heart of the closed headphones is a 40mm titanium-coated transducer. The clear high-frequency range

draws every nuance of the music, while the bass range draws drums and effects impressively, without placing them too much in the foreground. To ensure maximum comfort for continuous listening, the headphones feature a metal headband and earpads with memory foam that adjust to fit your head and minimize external noise. The metal shielding technology also reduces the amount of radiation received by the headphones by up to 98 percent. The ULTRASON SIRIUS is a module that converts every pair of headphones in the Performance series into a Bluetooth headset. You simply disconnect the cable from your Performance model and plug the SIRIUS Bluetooth module in its place. Enjoy your music via Bluetooth aptX technology with complete freedom of movement. The design of SIRIUS Bluetooth receiver is tailored precisely to the headphones of the Performance series. The strongly curved shape is based on the design of the headphones and hugs precisely on their housing. With an easy plug-in-and-go design, the frequency of human hearing is also transmitted.

Time Since Launch (www.CWAndT.com)

Potentially my favorite gadget find of this year! When John Glenn became the first American astronaut to orbit Earth, the only piece of technology on his body (other than a spacesuit) was a 12-hour stopwatch. Soon after launch, Glenn started his stopwatch in sync with tracking stations across the world. At that moment, Mission Elapsed Time (MET) began counting up from zero. A launch timer was not only required for a successful mission, in order to calculate position, but it also created a shared global time zone. Quietly situated at the center of a tremendous collaborative feat of human innovation, the launch clock marks an arbitrary Moment Zero—a moment shared by humans scattered all over the world and one hurtling

through space. Use this very long-scale timepiece to mark the beginning of your own personal epoch. It could begin when you get married, have a baby, quit smoking, launch a rocket or on an ordinary Tuesday morning. Your specific epoch is safeguarded within this unique timepiece designed and over-engineered to outlive you. Suspended in a durable, borosilicate glass tube and sealed with gasketed aluminum end-caps, two LCDs show the days, hours, minutes and seconds since "launch." This timepiece is built to count for 2,738 years, with batteries that will last 20-40 years and that can be swapped out without losing track of time. Time Since Launch is a product that was designed by Che-Wei for his senior thesis at the MIT Media Lab, where he went on to become the winner of the 2003 SOM fellowship and the Young Alumni Achievement Award from Pratt Institute.

StrongBoard Balance Fitness Balance Board (www.StrongBoardBalance.com)

Here's a fantastic device to foster fitness at-home. StrongBoard Balance is today's premier balance board. Perfect for all ages and fitness levels, it is portable and electricity-free and employs patented multi-spring technology that promises users will never find a point of stabilization. Compressing under any weight-bearing load, including the human body, StrongBoard's springs are both reactive and dynamic.

Simply standing on StrongBoard requires total core engagement.

The biomechanics of spring technology coupled with the rigid platform require users to find their true center of gravity.

StrongBoard is easy and safe to maneuver both on and off and its flat platform protects joints and surrounding ligaments from unnatural supination or strain, allowing the user to mimic real-life movements in all positions. StrongBoard weighs 15 pounds and may also be used as a weight

for bicep, tricep, chest and abdominal exercises. In addition to the muscular and skeletal benefits, use of the StrongBoard requires the muscles to communicate with the brain, effectively opening, healing restoring and strengthening delicate neural pathways. StrongBoard delivers profound results to all levels of fitness enthusiasts, creating desired changes in how users look and feel, as well as improvement in balance, core strength, agility and posture.

Eggtronic Laptop Power Bank (www.Eggtronic.com)

Here's a perfect gift for the "power hungry" set. The Eggtronic 20,000mAh Laptop Power Bank can help keep your various gadgets charged up when there isn't a wall outlet to be found. The portable charger comes equipped with two USB-A ports to not only recharge phones and tablets, but with its 45W Power Delivery USB-C port it can quickly recharge compatible laptops as well. The power bank is covered in soft, water-repellent linen canvas with a soft touch frame around the side as well as a built-in LCD display that tells you the remaining battery life in one clear number, so you won't be unexpectedly left without power. With 63W total output over three ports, the Eggtronic Laptop Power Bank can charge three devices simultaneously.

Plus, the two high power fast charge ports deliver power at two-times the speed of normal chargers. It also features a slim and portable profile, covered in soft waterproof linen canvas and a soft touch frame.

The LCD display even shows the remaining battery life at a glance. It's a handy companion to have whether out-and-about and even in the house in areas where outlets are scarce.

obVus Solutions Laptop Tower Stand (www.obVus.me)

The obVus Laptop Tower Stand is an ergonomically designed, height-adjustable that turns a laptop into sit/stand/desk...**Read More**



All of the biggest technological inventions created by man - the airplane, the automobile, the computer - says little about his intelligence, but speaks volumes about his laziness.

--Mark Kennedy
Author



Shewa Ram Suthar

Similarly, we have also created some mismanagement by the supervisory team who are leaking this information and telling teachers when they will visit their school, despite paying shocking visits at the school but they are giving a default visit. We have failed to regularize teachers and improve the standard of education but there is still a long way to go



The Third Wave Of Pandemic And The Present Educational Status Of Tharparkar!

Tharparkar has always faced so many troubles, already Tharparkar's education situation is far behind and in the present situation of the COVID-19, the education situation of the district suffered and affected more than other districts of Sindh. Presently, the third wave of the pandemic, from the first and second waves, has proved to be extremely dangerous all over the world. Its outbreak is spreading in many neighboring countries and Pakistan is also at greater risk due to climate change.

As a result, educational institutions in the country are also being closed due to lockdown, which will further affect the education of the

Tharparkar district. There are a total of 3846 primary schools in the Tharparkar district.

The decision to close 3846 primary schools in the Tharparkar district will have a significant impact on the literacy ratio and the number of children who have enrolled this year and last year. The Tharparkar district is very prominent in its cultural context and currently, it lags behind in terms of education. If we look at the data on all four sides of district, Tharparkar's literacy rate is much lower than in other districts, Looking at the border districts, the north side of Tharparkar is Mirpurkhas, which has a literacy rate of 39.78%, and Umarkot whose literacy rate is 38.56%. And in the east, there is a neighbor-

ing country of India's two cities, Jaisalmer with a literacy rate of 58.04%, and Barmer whose literacy rate is 56.53%. While Tharparkar has a low literacy rate of 18.36 % which is not even half as in other neighboring districts.

Tharparkar covers 19638 sq km. This district, which will have 3846 government primary schools, will be a finger-counting school which will help to increase the literacy rate of the district. There are many schools whose buildings are utilized for other purposes i.e. livestock farming, local bhetak, and other social activities.

There are many schools whose teachers are doing business. They also have shops outside the school. At school time they will also have a long jeep for rental pur-

poses, these teachers will do everything right except teaching properly in their schools. During school hours he is in the shop all day, and then when an officer's jeep appears or sounds, he always gets to school within a minute. And then the supervisor or monitoring officer will pay tribute to the same teacher that you are doing a great job in a very tough area. There are many teachers in this area who are responsible for the low quality of education and poor school development, they are fooling both the government and the parents of the children enrolled in its school.

Similarly, we have also created some mismanagement by the supervisory team who are leaking this information and telling teachers when they will visit their school, despite pay-

ing shocking visits at the school but they are giving a default visit. We have failed to regularize teachers and improve the standard of education but there is still a long way to go.

The third wave of Coronavirus is rapidly spreading worldwide and It is recommended to visualize the education system. Since February 2020, the education has been completely destroyed in the backward areas of Sindh especially in Tharparkar because in 2020, schools were closed for more than five months and now the situation is exploding again and the government is continuing to close schools like last year.

In all of this, the Tharparkar district has suffered the most where there is no alternative

to physical studies, Today in the 21st century, there are many villages in the Thar desert where there is no electricity, roads and mobile phone network. Other countries have different policies from one region to another so that everyone can get the environment they need but we have the same policy for both highly developed and under-developed areas. Due to this, backward areas are leaving behind the same situation in Tharparkar district where the rate of absence of teachers is high.

The Government of Sindh should develop a regional wide strategic plan that does not affect the basic education of children especially in deep desert villages where children can get physical education through social distancing.



Merilee Kern

"It's important to establish a protocol and methodology that managers and employees understand and agree to follow," she says. "Instead of dreading the 'annual review' meeting, a PD is a two-way conversation that both parties can look forward to. It's one that builds, versus diminishes, rapport and trust. The PD is intended to engage both parties in positive ways and add real value."



Emotional Intelligence Skills: Its Components And Importance

Emotional intelligence skills is the ability to be aware of your emotions and surroundings, the ability to express emotions and the management of emotions.

Emotional intelligence skills makes a difference, which is the ability to be aware of your emotions and surroundings, the ability to express emotions and the management of emotions. This concept consists of two opposite words: emotions and intelligence.

Is there any intelligence in emotions, or we can bring emotions in intelligence? Daniel Goleman wrote a book, Emotional Intelligence: why it can matter more than IQ. In this book, one can learn how to manage his emotions in daily life and professional life.

It has been argued that IQ is a genetic given, which can not be changed, and a high IQ is not a key to success. Many times, people with low IQ perform well.

WHAT ARE EMOTIONS?

Don Hockenbury and Sandra E. Hockenbury in their book "Discovering Psychology" describe emotions as a complex psychological process that involves three components: a subjective experience, a physiological response, and a behavioral expressive response.

Psychologist Paul Ekman, in 1972, described that there are six basic emotions that every

human being has: anger, fear, disgust, happiness, surprise and sadness.

Five components of emotional intelligence skills

SELF-AWARENESS

Learning and understanding one's emotions are called self-awareness. Through self-awareness, one can learn about one's emotional feelings and the reasons behind them.

SELF-REGULATION

It is capacity to take good decision on the basis of careful observation and make responsible choices.

EMPATHY

Empathy is an ability to value other people's emotions and understand them. An empathic person appreciates other people's opinions.

DECISION-MAKING

Management of emotions in certain situations and environments. Self-regulation saves us from poor decision-making.

SOCIAL SKILLS

It is required in every relationship. A person with good social skills can understand the needs of good relationship and create good bonds.

Core components of Emotional Intelligence Skills

Why emotional intelligence skills are important?

As we know, humans need social connectivity to build a good relationship and through

this, they can experience the fullness of life.

Emotional intelligence skills can help us to become good friends, partners, parents, and good human beings. Developing

emotional intelligence is key to all good relationships.

Emotional intelligence allows individuals to overcome the internal and external conflicts.

It reduces anxiety, and stress

and improves the quality of life.

Other people feel safe, connected and understood around the person who has higher emotional intelligence.

It is equally important to

understand one's feelings.

How to increase Emotional Intelligence skills?

Self-evaluation is key to understanding oneself. It provides self-awareness and clears the thought process. By asking a simple question to oneself, an individual can evaluate one's mental and physical health.

It is important to note one's reactions during stress and anger situations. How do you respond to tense situations? How do you handle your emotions?

Do you consider others before taking any action?

These questions and cues help to understand in accessing and managing emotions.

Mostly, self weaknesses are not visible to individuals. To analyze the weaknesses, one should ask questions from peers, friends, family etc.

Seek feedback and accept criticism.

Assessment is also a daunting task, and changing oneself is more difficult.

Many helpful tools can make it easy to adapt to manage emotions. For example, chat chains are an emotional learning game that helps to initiate a conversation or vulnerable dialogue that is difficult in real life.

Playing this game will help to identify the one's weaknesses and strength. Other than this, learning to motivate yourself, maintaining a positive attitude, noticing about how your behavior affects others, and be assertive while communicating.



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It has been argued that IQ is a genetic given, which can not be changed, and a high IQ is not a key to success. Many times, people with low IQ perform well



Abdul Samad

In recent years, a number of those products have been described by the general term 'eubiotics', which is said to the Greek term 'eubiosis', pertaining to an optimal balance of microflora in the gastrointestinal tract. the most purpose of using such eubiotics is to maintain the intestinal eubiosis, which can result in an improved health status and performance in farm animals



Misuse Of Antibiotics In Poultry And Their Replacement

20 years ago, the utilization of feed antibiotics and some other antimicrobial compounds used as performance enhancers became the target of increasing public criticism and political controversy (particularly in the EU countries). As the first country in Europe, Sweden banned the utilization of antimicrobial growth promoters as early as 1986.

Introduction
The utilization of avoparcin as a growth promoter was banned first in Denmark (May 1995), subsequently in Germany (January 1996) and eventually in the remaining EU countries by April 1997. Based on various safety concerns and partly as a precautionary measure, the EU Council of Ministers suspended the authorization of 4 other feed antibiotics (spiramycin, tylosin, virginiamycin, Zn-bacitracin) by July 1999, and two quinoxaline derivatives (carbadox, olaquinox) by September 1999. By January 2006, an EU ban on the utilization of the four remaining feed antibiotics, namely flavophospholipol, avilamycin,

salinomycin-Na and monensin-Na (for beef only) became effective. This total ban on the utilization of antibiotics as growth promoters has been integrated into an EU regulation concerning feed additives (No. 1831/2003). Before the implementation of this whole ban on the use of antibiotic growth promoters, some experts attempted to assess possible effects on rate of growth and feed conversion efficiency and discussed possible alternatives after the ban (Brufau, 2000; Verstegen & Schaafsma, 1999; Wenk, 2003; Witte et al., 2000). Serious problems were expected, particularly in early weaned piglets, with a mean reduction in daily weight gain of 8 per cent and a 5 per cent increase in feed consumption per gain. Additionally, a dramatic deterioration within the general health status of piglets was expected, leading to a marked increase in prophylactic use of various therapeutic antibiotics. This trend has indeed been observed in many countries after the implementation of this general ban. Following tremendous modernization within the past two decades, Pakistan's poultry pro-

duction currently ranks because the eighth largest in the world. However, there's growing concern about the potential overuse and misuse of antibiotics, which could lead on to antibiotic resistance and negative implications for public health. There's a need for novel, effective, and affordable alternatives to traditional antibiotics, but they're difficult to replace because of their use for treatment, prevention, and improving growth.

Eubiotics:
Alternative products for replacement of antibiotic growth promoters Before discussing which currently approved feed additives could be used as effective alternatives for replacement of antibiotic growth promoters, it might be helpful to approach this topic from a scientific point of view, taking under consideration their principal mode of action. There's currently no doubt that their efficacy is primarily based on antimicrobial effects and their ability to influence and partly modify the composition and overall concentration of intestinal microflora. Taking this into consideration, we will see how various new and some

traditional feed additives claim to affect the composition or activity of intestinal microflora, like organic acids, probiotics, prebiotics, volatile oil compounds, and Zn and Cu compounds. In recent years, a number of those products have been described by the general term 'eubiotics', which is said to the Greek term 'eubiosis', pertaining to an optimal balance of microflora in the gastrointestinal tract. The most purpose of using such eubiotics is to maintain the intestinal eubiosis, which can result in improved health status and performance in farm animals.

Organic acids
Organic acids and a few of their salts have been added to compound feeds, for several years, particularly for early weaned piglets. The potential of diet acidification so as to overcome digestive insufficiency and post-weaning problems in piglets has been studied for a long time.

The efficacy of acid, acid, acid, carboxylic acid, carboxylic acid and also of some salts (Ca-formate, Na-formate) has been demonstrated. Of these compounds are officially approved in the EU as feed

preservatives, however, a number of them are used primarily for the stabilisation of health status and performance enhancement at dietary inclusion levels of 0.5 to 2.0 per cent (Gabert & Sauer, 1994; Partanen & Mroz, 1999). In order to reduce dietary inclusion levels and enhance their efficacy at economically feasible costs, either blends of organic acids or coated forms have appeared on the market in recent years. Various hypotheses regarding the mode of action and beneficial effects of organic acids are described in the literature, such as: Improvement of palatability and reduction of diet pH; Antimicrobial and preservative effects within the feed; Reduction of gastric pH and enhancement of pepsin activity; Effects on microflora in the gastro-intestinal tract, reduction of coliforms and diarrhoea; Increased digestibility of nutrients.

Since July 2001, potassium diformate has been approved as a feed additive within the EU and included in the zootechnical additive group. In May 2003, carboxylic acid has been approved as a feed additive for

growing-finishing pigs at the inclusion levels of 0.5 to 1.0 per cent and included within the acidity regulator group. Thanks to its specific metabolism, this organic acid shows multiple beneficial effects (Broz, 2004). Dietary supplementation leads to a decrease in urinary pH accompanied by a reduction in ammonia emission and improved growth performance. Since November 2006, carboxylic acid at the inclusion level of 0.5 per cent has also been approved to be used in weaned piglets, as a zootechnical additive. Thanks to its antibacterial activity and slower absorption, dietary carboxylic acid is also capable of significantly reducing the density and metabolic activity of intestinal microflora in piglets (Kluge et al., 2006).

Broz & Paulus, 2006). Balance trials have confirmed significant beneficial effects on the apparent ileal digestibility of dietary energy and nitrogen, also as a significant increase in nitrogen retention. During a series of performance trials, carboxylic acid at 0.5 per cent has repeatedly resulted in significant improvements in piglet growth rates after weaning.



Umer Farooq

Climate change can affect our health, ability to grow food, housing, safety, and work. Some of us are already more vulnerable to climate impacts, such as people living in small island nations and other developing countries



Climate Change Threatens The Food Security Of World

A climatic data element is a measured parameter that helps to specify the climate of a specific location or region, such as precipitation, temperature, wind speed, and humidity.

In the below discussion, we will discuss how climate change affects food security around the world and causes an increase in poverty, hunger, and society's crimes. Climate change like floods, earthquakes, rainfall, humidity, and temperature increases are the main issues of present agriculture production that contribute to affecting food security around the world.

Climate is the average weather in a given area over a longer period of time. A description of a climate includes information on, e.g., the average temperature in different seasons, rainfall, and sunshine. Also, a description of the extremes is often included. Part of the Hall of Planet Earth. Energy from the sun drives climate by heating Earth's surface unevenly.

Ice also reflects incoming sunlight, cooling the poles even more. The temperature difference sets the ocean and atmosphere in motion as they work together to distribute heat around the planet.

A climatic data element is a measured parameter that helps to specify the climate of a specific location or region, such as precipitation, temperature, wind speed, and humidity.

How does the climate change? Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil, and gas.

Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures. Examples of greenhouse gas emissions that are causing

climate change include carbon dioxide and methane.

These come from using gasoline to drive a car or coal to heat a building, for example. Clearing land and forests can also release carbon dioxide. Landfills for garbage are a major source of methane emissions. Energy, industry, transport, buildings, agriculture, and land use are among the main emitters.

Greenhouse gas concentrations are at their highest levels in 2 million years

And emissions continue to rise. As a result, the Earth is now about 1.1°C warmer than it was in the late 1800s. The last decade (2011–2020) was the warmest on record. Many people think climate change mainly means warmer temperatures.

But the temperature rise is only the beginning of the story. Because the Earth is a system where everything is connected, changes in one area can influence changes in all others.

The consequences of climate change now include, among others, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms, and declining biodiversity. The Earth is asking for help.

People are experiencing climate change in diverse ways

Climate change can affect our health, ability to grow food, housing, safety, and work. Some of us are already more vulnerable to climate impacts, such as people living in small island nations and other developing countries.

Conditions like sea-level rise and saltwater intrusion have advanced to the point where whole communities have had to relocate, and protracted droughts are putting people at risk of famine. In the future, the number of "climate refugees" is expected to rise.

Every increase in global warming matters

In a series of UN reports, thousands of scientists and government reviewers agreed that limiting global temperature rise to no more than 1.5°C would help us avoid the worst climate

impacts and maintain a livable climate. Yet policies currently in place point to a 2.8°C temperature rise by the end of the century.

The emissions that cause climate change come from every part of the world and affect everyone, but some countries produce much more than others. The 100 least-emitting countries generate 3 percent of total emissions. The 10 countries with the largest emissions contribute 68 percent.

Everyone must take action on climate change, but the people and countries creating more of the problem have a greater responsibility to act first.

We face a huge challenge but already know many solutions

Many climate change solutions can deliver economic benefits while improving our lives and protecting the environment. We also have global frameworks and agreements to guide progress, such as the Sustainable Development Goals, the UN Framework Convention on Climate Change, and the Paris Agreement.

Three broad categories of action are: cutting emissions, adapting to climate impacts, and financing required adjustments. Switching energy systems from fossil fuels to renewables like solar or wind will reduce the emissions driving climate change.

But we have to start right now. While a growing coalition of countries is committing to net zero emissions by 2050, about half of the emissions cuts must be in place by 2030 to keep warming below 1.5°C. Fossil fuel production must decline by roughly 6 percent per year between 2020 and 2030.

Growing coalition

Adapting to climate consequences protects people, homes, businesses, livelihoods, infrastructure, and natural ecosystems. It covers current impacts and those likely in the future. Adaptation will be required everywhere.

Floods

Floods can happen for several reasons, many of which coin-

cide. However, excessive and heavy rainfall is one of the leading causes of floods, mainly when flash floods occur.

Floods occur when the rate of rain in low-lying areas and urban settings exceeds the capacity of the ground to absorb it.

Extreme rainfall in river courses also contributes to flooding. This is because it causes water to flow down riverbanks and spill over onto adjacent land. Floods may result from sea overflow, which is also referred to as a storm surge.

This happens when weather events cause seawater to overflow onto the land in coastal regions. Storm surges have been known to cause sea levels to rise by 20 feet. Rapid melting of snow and ice results in a similar surge in sea level, and blocks of melting ice can obstruct a river's flow, a condition known as ice jams.

Recorded on Earth

Let's take a look back at the top 6 most devastating floods ever recorded to have occurred on Earth.

Rank	Flood	Name
1	Great Drowning of Men (1219): British Isles, The Netherlands, Germany	
2	The Johnstown Flood (1889)	Johnstown, Pennsylvania
3	1887 Yellow River Flood	Qing, China
4	Yangtze River Flood (1931)	China
5	1975 Banqiao Dam Failure	Henan, China
6	The North Sea Flood (1953)	The Netherlands, Belgium, England, and Scotland

How do floods affect agriculture?

The standing crops become submerged and cause a big loss in production; seedlings become damaged, and the crops at their final stage become logged, causing a loss like that of the floods in Pakistan in 1992, 2010, and most recently 2022 Dec that caused a 40 to 50 % reduction in the yield of cotton, so we imported almost 7 to 8 million bales of cotton.

Increase temperature

Earth's temperature has risen by an average of 0.14° Fahrenheit (0.08° Celsius) per decade since 1880, or about 2° F in total. The rate of warming since 1981 is more than twice as fast: 0.32° F (0.18° C) per decade.

This causes the reduction in total yield and shrivelling of grain, like in 2022 wheat losses in Pakistan due to heat, and recently, after heavy rains, increased temperatures cause a favourable environment for rust and other diseases. We think that a human can not bear such a great fluctuation in the environmental climate; how can a plant survive in this worst condition.

Rainfall

Irregular rain falls in the world cause a decrease in the productivity of agriculture because standing crops are submerged and cause a loss in yield after rain and wind have damaged the crops. We saw in this chapter of history a lot of well established civilizations suffer damage due to climate change.

Desertification

Desertification is the process by which vegetation in drylands, i.e., arid and semi-arid lands, such as grasslands or shrublands, decreases and eventually disappears.

Human activities that contribute to desertification include the expansion and intensive use of agricultural lands, poor irrigation practices, deforestation, and overgrazing. Additional savannas, grasslands, and woodlands are common indications of desertification in arid and semi-arid areas.

Well-known examples of this occurrence include Europe's Adriatic Sea, the Middle-East's Saharan Desert, and China's Taklamakan Desert.

Loss of biodiversity by worsening the living conditions of many species. Food insecurity around the world is due to crop failure or reduced yields. The loss of vegetation cover and therefore food for livestock and humans. Increased risk of zoonotic diseases such as COVID-19.

Estimated loss of agriculture due to climate change

It is predicted that by 2040, as the temperature goes up, agricultural production will reduce by around 8–10% (Craddock-Henry et al., 2020). Our research model, which includes the use of the crop growth simulation method, estimates a reduction in crop yield, particularly in rice and wheat.

Agriculture is a major source of GHGs, which contribute to the greenhouse effect and climate change. However, the changing climate is having far reaching impacts on agricultural production, which are likely to challenge the food security of the world in the future.

Food security in the world relies on both sufficient food production and food access and is defined as a state in which all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life' (FAO, 1996).

The principal barrier in world to food security is currently food access. Globally, sufficient food is produced to feed the current world population, yet more than 10% of the population is undernourished.

Climate change is likely to contribute substantially to the food security of the world in the future by increasing food prices and reducing food production. Food may become more expensive as climate change mitigation efforts increase energy prices. Water required for food production may become more scarce due to increased crop water use and drought.

Competition for land may increase as certain areas become climatically unsuitable for production. In addition, extreme weather events associated with climate change may cause sudden reductions in agricultural productivity, leading to rapid price increases.

For example, heat waves in the summer of 2010 led to yield losses in key production areas, including Russia, Ukraine, and Kazakhstan...[Read More](#)



Faiza Bashir

Cannabis has been used for centuries to treat a variety of ailments. Cannabis was used to treat pain, inflammation, and digestive issues. Today, cannabis is used to treat a wide range of conditions, including chronic pain, nausea, glaucoma, and seizures



Pharmacological Importance Of Cannabis (Bhang)

Cannabis has a long history of medicinal application, and its various compounds have been studied extensively.

The topic of the pharmacological importance of Cannabis sativa, commonly known as bhang, has been gaining a lot of attention in recent years due to the increasing popularity of medicinal marijuana.

Cannabis has a long history of medicinal application, and its various compounds have been studied extensively. This article will provide a comprehensive overview of the pharmacology of cannabis, including its histo-

ry and sources, cannabinoid chemistry, medicinal uses, and side effects.

History and sources of cannabis

Cannabis has been used in Pakistan for centuries, primarily for its medicinal and psychoactive effects. Cannabis originated in Central Asia and spread to the Middle East, North Africa, and Europe. Cannabis is commonly known as "charas" in Pakistan, which is derived from its Persian name, "churus." In Pakistan, cannabis is widely used in traditional medicine, and it is known as "bhang" or "ganja."

Cannabis contains

over 400 known compounds, including over 60 cannabinoids. Cannabinoids are the main active components of cannabis, and they are divided into two main categories: phytocannabinoids and endocannabinoids.

Phytocannabinoids are produced by the cannabis plant, while endocannabinoids are produced naturally by the human body. The most well-known cannabinoid is tetrahydrocannabinol (THC), which is responsible for the psychoactive effects of cannabis. Other important cannabinoids include cannabidiol (CBD), cannabitol (CBN), and cannabigerol (CBG).

Medicinal Uses of Cannabis

Cannabis has been used for centuries to treat a variety of ailments. Cannabis was used to treat pain, inflammation, and digestive issues. Today, cannabis is used to treat a wide range of conditions, including chronic pain, nausea, glaucoma, and seizures. It is also used to manage the symptoms of multiple sclerosis, HIV/AIDS, and cancer. In addition, cannabis is used to treat anxiety, depression, and insomnia.

Pharmacology of Cannabis

The pharmacological effects of cannabis are caused by the interaction of its various compounds with the body's endocannabinoid system.

The endocannabinoid system

is responsible for regulating numerous physiological and psychological processes, such as pain, mood, memory, and appetite. When cannabis is consumed, its cannabinoids interact with the endocannabinoid system, resulting in a range of effects, including pain relief, relaxation, and increased appetite.

Side effects of cannabis

Cannabis can produce a range of side effects, including dizziness, paranoia, and anxiety. In addition, cannabis can impair cognitive function and motor coordination. It can also interact with certain medications, so it is important to consult a healthcare provider before

using cannabis. Long-term use of cannabis can lead to addiction and withdrawal symptoms.

Conclusion

Cannabis sativa has a long history of medicinal applications, and its various compounds have been studied extensively. This article has provided a comprehensive overview of the pharmacology and importance of Cannabis sativa, including its history and sources, cannabinoid chemistry, medicinal uses, pharmacology, and side effects. Cannabis has a wide range of medicinal applications, but it can also produce a range of side effects. It is important to consult a healthcare provider before using cannabis.



Access To Digital Tech In Africa: Challenge For Underserved Communities

Only 17 of the 24 countries reported have data protection legislation in place, and some have data protection bills in various stages of implementation.

Access to digital technology in Africa remains a significant challenge, particularly for people with disabilities and underserved communities, according to a Paradigm Initiative report on the state of digital rights and inclusion on the continent.

The Paradigm Initiative's 2022 Digital Rights and Inclusion Report Londa is a pan-African organisation that connects underserved young Africans with digital opportunities and ensures their rights are protected.

The report stated that women

and girls' access to digital opportunities in Africa, including information and communication technology (ICT) education, needs to be improved. According to the report, despite government efforts to bridge the digital divide and build digital economies, men continue to outperform women in a variety of indices ranging from adoption and use of ICT tools to employment opportunities.

"Despite progress in closing the gender gap, men continue to outperform women in a variety of indices ranging from adoption and use of ICT tools to employment opportunities."

"The imposition of prohibitive levies and taxes, which emerged as a common theme

during the period under review, further hampered general access, as seen in Ghana, Malawi, and Uganda, amongst others," according to the report. Ms. Jackie Okello, the author of the Kenyan report, stated that Kenya lacks a concrete law governing internet access.

However, she stated that the country has a broadband strategy that outlines the government's plans for facilitating broadband access in areas where the internet is not available.

The report also condemns the imposition of prohibitive levies and taxes, which emerged as a common theme during the review period and further impeded general access, as

seen in Ghana, Malawi, and Uganda.

The Universal Service Fund (USF) is mentioned in 22 of the 24 countries mentioned in the report: Zimbabwe, Zambia, Tunisia, Uganda, Togo, the Gambia, Tanzania, Sudan, Rwanda, Nigeria, Malawi, Kenya, Ethiopia, the Central African Republic, Benin, South Sudan, Namibia, and Botswana.

However, data on the amount of money raised, transparency, and impact vary greatly across the 22 countries.

The Londa report also discusses data privacy and governance issues, as well as the lack of accountability and oversight mechanisms for digital identification systems...[Read More](#)

AfroTech Executive To Discuss Africa's Growth In Technology Industry

Africa's fintech sector, leaders, and pioneers will gather in Washington, D.C. on April 12, to discuss solutions for changing the industry.

African founders and tech entrepreneurs are aiming to build a promising future by securing millions of dollars for climate change initiatives and creating innovative technology. Global events, such as AfroTech Executive D.C., are taking notice of this powerful movement and bringing it to the forefront. On May 11, executives will gather to discuss Africa's growth in the technology industry.

Prosper Africa, the leading US-Africa trade and investment initiative, has partnered with the Africa Fintech Summit ahead of AfroTech Executive D.C. Africa's fintech sector, leaders, and pioneers will gather in Washington, D.C. on April 12, to discuss solutions for changing the industry.

In light of the rising tech trailblazers, AfroTech is highlighting African startups that are not only making waves but are gearing up to make a lasting impact....[Read More](#)

Prof Masanja, The First Tanzanian Woman To Get Phd In Mathematics



Prof. Masanja is the first Tanzanian woman to get a PhD in Mathematics and the first female Maths professor in the country.

She was also the first black woman from Sub-Saharan Africa to be enrolled in the Fluid Mechanics course at the Technical University of Berlin. Germany has

played a big role in promoting females in Science, Technology, Engineering, and Mathematics (STEM).

Prof. Masanja retired last year as a fulltime professor of Mathematics from the Nelson-Mandela African Institution of Science and Technology (NM-AIST) School of Computational and Communication Science and Engineering (CoCSE)....[Read More](#)

AC3 To Receive AACR Team Science Award At Annual Meeting 2023



The AC3 is a multi-institutional collaborative network that focuses on studies of cancer risk and outcomes among populations of African ancestry.

The American Association for Cancer Research (AACR) Team Science Award will be given to the African-Caribbean Cancer Consortium (AC3) at the AACR Annual Meeting 2023, which will take place April 14-19 at the Orange County Convention Center in Orlando, Florida.

The AC3 is a multi-institutional collaborative network that focuses on studies of cancer risk and outcomes among populations of African ancestry. The network is led by Camille Ragin, PhD, MPH, Fox Chase Cancer Center's Associate Director of Diversity, Equity, and Inclusion.

"Our AC3 team's commitment and scientific diversity are what give us impact. We are a multidisciplinary group of basic, translational, and clinical scientists who support initiatives in nations of the African diaspora, according to Ragin, who is also a professor in Fox Chase's research programme on cancer prevention and control." "We have investigators in the United States, the Caribbean, and Africa. We are dedicated to training minority scientists to bring a variety of perspectives and hypotheses to more quickly advance cancer prevention and treatment discoveries." In collaboration with Eli Lilly and Company, the AACR offers the Team Science Award....[Read More](#)

Investment In African Science Needed To Address Challenges: Kariuki



Kariuki is convinced that Africa requires scientific innovation to address the continent's problems, such as infectious diseases and food insecurity, and that funding for this is critical.

Accelerating investment in

African science will equip Africa to address local community challenges and prevent a talent exodus from the continent, according to Thomas Kariuki, executive director of the Science for Africa (SFA) founda-

tion. According to Kariuki, investment in African science research had increased prior to COVID-19, but had been dampened by the pandemic. While increased collaboration among African countries has resulted in more scientific research in many countries, the region's overall output remains low, he tells SciDev.Net. Kariuki is convinced that Africa requires scientific innovation to address the continent's problems, such as infectious diseases and food insecurity, and that funding for this is critical. "The continent is still stuck in a place where we strongly believe that science and innovation can address those challenges..."[Read More](#)

Kenya Assumes To Lead Role In Mobilizing Climate Action Across Africa

The African Climate Summit also provides an excellent opportunity to highlight nature conservation and wildlife protection as critical tools for combating climate change.

Kenya is taking the lead in mobilising climate action in Africa and beyond. Last month, leaders from IFAW's climate and Africa programmes met with Kenya's Ministry of Environment, Climate Change, and Forestry to discuss the upcoming African Climate Summit and Kenya's innovative plans to conserve and protect wildlife as valuable natural capital in the fight...[Read More](#)

Researchers Discover Painted Lady Butterflies' Winter Spending



Talavera and an international team of researchers conducted fieldwork in Sub-Saharan Africa during the months of December and January from late 2017 to early 2020.

Every year, painted lady butterflies born in Europe begin their epic journey south to Africa. Researchers now know where these long-distance travellers spend their winter vacation on the continent.

After flying across the Sahara in the fall, the orange-and-brown-winged insects set up camp and breed in savannas and highlands across central Africa from December to February,

according to a study published April 10 in the Proceedings of the National Academy of Sciences.

The butterflies and their caterpillar offspring feast on a variety of plants as the rainy season brings greenery to the region, until their wintering spots dry up. The butterflies then migrate north to Europe.

The last unknown piece of the roughly 15,000-kilometer migration of painted lady butterflies (Vanessa cardui), says Gerard Talavera, an entomologist and evolutionary biologist at the Botanical Institute of Barcelona....[Read More](#)

HERA Radio Telescope Sensitivity Boosted To Reveal Cosmic Dawn Secrets

HERA Radio Telescope Sensitivity Boosted To Reveal Cosmic Dawn Secrets

A team of researchers from North America, Europe, and South Africa doubled the sensitivity of the Hydrogen Epoch of Reionization Array (HERA) radio telescope. They hope to discover the secrets of the early universe with this breakthrough.

Astronomers have made significant progress towards unravelling the mysteries of the cosmic dawn. A network of 350 radio telescopes in South Africa's Karoo desert is making rapid progress towards detecting the "cosmic dawn" – the period after the Big Bang when stars first lit up and galaxies began to flourish.

"Teams from all over the world have been working for decades to make the first detection of radio waves from the cosmic dawn."

While such a detection remains elusive, HERA radio telescope findings represent the most precise pursuit to date," says Adrian Liu, an Assistant Professor at McGill University's Department...[Read More](#)

Kenya Plans To Use 500,000 Acres Idle Land For Maize Production

Kenya is looking for a model in which public land is leased to private investors for food & cash crop production that is less reliant on rain-fed agriculture & more reliant on irrigation.

Kenya's Ministry of Agriculture will fund key state corporations to convert 500,000 acres of idle land to maize production, even as the government seeks to lease out more unutilized farms to the private sector.

Harsama Kello, the country's Agriculture PS, stated that they had mapped out land belonging to Kenya Agriculture Livestock Research Organisation, Kenya National Youth Service, Kenya Prisons, and Agriculture Development Corporation to be cropped.

Mr. Kello stated that plans are already in the works to have the Agriculture Finance Corporation (AFC) lend to these state agencies in order for them to grow maize and alleviate annual shortages. "We have identified 500,000 acres that we will finance through AFC to enable these government agencies to convert their idle land to food production,"

he said.

This is the first time the government has stated that it intends to use parastatals to grow more food on idle land.

The government of former President Uhuru Kenyatta had passed a Cabinet resolution to lease the land to the private sector. The PS stated that they would continue to lease the land to private investors and private companies capable of farming large tracts of land.

Mr. Kello stated that the funds to be loaned to these entities would be used to mechanise farms and purchase farming equipment to ensure that vast swaths of land produce enough maize over the next two years.

He stated that the process of having these corporations use idle land and lease it to private investors had begun. Mr. Kenyatta's administration approved a policy for the large-scale commercialization of public land used for maize production.

The policy, which was adopted in May, aims to provide a framework for the use of idle public-sector land for large-scale commercial agricultural production. Kenya is looking for a model in which public land is leased to private investors for food and cash crop production that is less reliant on rain-fed agriculture and more reliant on irrigation.

