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Seeds of soybean have been used in Asia for centuries to prepare a variety of fresh fermented and dry foods

Laiba Habib

Opinion on page 03

OPINION

Soybean Regarded As Healthiest Food Ever Produced

Eza Fatima

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A significant oil seed crop is soybean. 40% of it is protein, and 20% is oil. Soybean is regarded as the healthiest food ever produced. increased consumption of proteins, such as soybean meal.

Due to its high protein content, soybean has historically been referred to as the "meat of the field" or "meat without bones." Cancer prevention uses genistein, an isoflavone phytonutrient found in soybean.

Nutritional elements:

Copper (78%), manganese (71%), phosphorus (60%), iron (49%), omega-3 fats (43%), fiber (41%), magnesium (37%), vitamin K (37%), and potassium (25%), are all found in one cup of soybeans (172 g), which has 298 calories.

Page No 03

Soybean Considers As The Modern Meat

Minahil khalid

A species of legume known as the soybean (Glycine max.) has been domesticated for thousands of years and is well known as a staple food in many civilizations all over the world.A species of legume known as the soybean (Glycine max.) has been domesticated for thousands of years and is well known as a staple food in many civilizations all over the world. On account of its high nutritional content, it is best compared to meat. It is also able to compete with the rising prices of meat in Pakistan. It is the best alternative to meat for people. It is considered modern meat.

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Role Of Oilseeds In Food Security Of Pakistan

Waqas Mushtaq

Pakistan is a landlocked country located in South Asia. It has a population of around 207 million people and an area of 902,913 square kilometers.

Oilseeds are a vital component of the food security of Pakistan. They are used for the production of edible oils, biodiesel, animal feed, and other products. The country has the world's second-largest oilseed production, after China.

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Pakistan's Economy Can Grow Faster With AI: President

"This (AI) offers Pakistan's economy a faster growth path than the world's fastest bullet train. The world will be our oyster if we board the AI train," said President.

The President asserted that almost no industry or profession could advance without embracing artificial intelligence (AI), cloud computing, and information technology (IT). President said this on Thursday at the "4th Pakistan Artificial Intelligence Summit 2023" in Islamabad.

The president claimed that because artificial intelligence (AI) ensures rapid economic growth, it has surpassed human intelligence as the second-most significant component in every economic sector.

"This (AI) offers Pakistan's economy a faster growth path than the world's fastest bullet train. The world will be our oyster if we board the AI train."

He emphasised the enormous opportunities that cyber security and data analytics present for organisations and people, and he added that the move towards 4G and 5G was a significant development for Pakistan's swift economic development.

"Over the next five to six years, 80 million professionals will be needed globally in the field of cyber security. There is a lot of data available, but there aren't enough experts to analyse it and use it effectively," the president said.

Information and communication technology (ICT) experts have mixed opinions about the government's efforts to improve AI despite repeated statements from high-ups, with some expressing confidence and others maintaining scepticism.

Speaking to the media, startup investment expert Kapeel Kumar said that Pakistan's AI industry was advancing because the country's policy had been crafted in a way that gave private businesses a significant amount of sway.

However, "With no emphasis on AI education, the government's readiness is still an issue, which raises serious concerns about the future development of this industry. We cannot achieve our objectives and create long-term sustainability without educating young people in the field of information technology " he added.

The COVID-19 pandemic has highlighted the urgent requirement for implementing digital technologies, a green transition, and AI-based models to address public health management challenges that could arise after a pandemic.

Kumar stated that despite Pakistan's large population and wealth of natural resources, the country had lagged behind other countries in the development and adoption of AI technology.

"Unfortunately, Pakistanis are slow in the race for AI supremacy," Kumar added. He described it as a serious concern and said that if Pakistan did not take coordinated action to stay competitive in the rapidly changing global economy, it ran the risk of falling behind.

In an interview, JS Global ICT analyst Waqas Ghani Kukaswadia said that artificial intelligence systems could be used to monitor incidents and establish management standards and procedures. They could also be employed to guarantee cyber security and ward off online fraud. The JS analyst stressed that governments may use AI technologies to handle big data to conduct research to identify common resident needs...***Read More***

Technology In Health Sector Is Need Of The Day: Minister

The use of modern technology in the health sector, according to provincial health minister, is essential today & city is introducing an online treatment facility that will be very helpful.

The use of modern technology in the health sector, according to the provincial health minister, is essential today, and the city is introducing an online treatment facility that will be very helpful to the patients.

He made these remarks at the Pakistan Society of Internal Medicine's annual conference, which was held in conjunction with the launch of contemporary virtual hospital technology. Pakistan's health has improved, according to the provincial health minister, thanks to The Health Bank (THB) Global.

The development initiatives that have been announced in the field are admirable. According to the minister, the virtual hospital will give each patient individualised care both at home and online. Modern technology has revolutionized the health sector in numerous ways.

THB Global's CEO, Zarmina Jafar, stated that after Singapore, Dubai, Karachi, and Kuwait City, our offices in Lahore are now committed to assisting people in leading comfortable, healthy lives at home.

He claimed that people did not have enough time to frequently visit hospitals when a virtual hospital could offer them a variety of online treatment options and send doctors to their homes for examinations. According to Dr. Sohail Chughtai, Chief Med Tech Innovation Officer, the

path forward for the treatment of diseases has been found, and memoranda of understanding have been signed with numerous institutions. Other speakers at the conference included Prof. Drs. Farhan Isa Abdullah, Soumya Iqtidar, and Bilal Ahmed. The Pakistan Medical Association (PMA) has voiced its concern regarding the lack of various medications, particularly life-saving medications, throughout Pakistan. Dr. Abdul Ghafoor Shoro, the secretary general of PMA (Centre), claims that PMA has warned the government that a shortage of medicines may result from the closure of LCs because they import the raw materials used to make them. As drug manufacturers' problems grew worse and patients and their families suffered from the lack of their necessary medication, he urged the government to address the issue.

Gwadar Coal Power Plant To Provide Power To Industries Once Finished

According to recent reports, the Industrial and Commercial Bank of China (ICBC), the country's biggest commercial bank, provided financing for the plant.

Initially conceived in 2016, the Gwadar coal power plant is expected to cost USD 542.32 million. The state-owned China Communications and Construction Group subsidiary CIHC Pak Power, a Chinese company, will build it. According to recent reports, the Industrial and Commercial Bank of China (ICBC), the country's biggest commercial bank, provided financing for the plant.

The Gwadar Free Zone (GFZ), a special economic zone at Gwadar port that is a part of the China-Pakistan Economic Corridor (CPEC), the USD 62 billion bilateral infrastructure and connectivity project between China and Pakistan, is intended to provide power, on a priority basis, to the industries being established there once it is finished.

Shah Jahan Mirza, managing director of the Pakistan government-owned Private Power and Infrastructure Board, told The Third Pole that his organisation is pressuring the Chinese company to complete its financial closure by December 31, 2023, and to begin construction as soon as possible so that it can be finished by 2025. The greatest obstacle to the development of Gwadar, he claimed, is a lack of electricity.

The majority of Pakistan's energy comes from fossil fuels. The country's Finance Division estimates that as of April 2022, coal, gas, and oil made up just under 60% of all installed generation capacity. In the fiscal year 2022, only 3% of electricity was produced using renewable non-hydro sources.

Pakistan's Nationally Determined Contribution (NDC), which constitutes its climate commitment under the Paris Agreement, aims to generate 60% of renewable energy, including hydropower, by 2030. Additionally, the NDC states that "new coal power plants are subject to a moratorium beginning in 2020." Xi Jinping announced in 2021 that China would not build any new coal-fired power projects abroad and would increase support for low-carbon energy in developing countries...***Read More***

Sunwalk Group Plans To Invest US$2B In Pakistan Telecom Sector

China's Sunwalk Group plans to invest US$2 billion in Pakistan telecom sector, according to a number of reports.

In order to build an optical fibre network that will eventually cover a region of 100,000 kilometres, China's Sunwalk Group plans to invest US$2 billion in Pakistan telecom sector, according to a number of reports.

In order to discuss investments in telecom infrastructure, optical fibre cable (OFC), and rights of way (RoW), a high-level delegation from the Sunwalk Group reportedly met with Pakistan's minister for IT and telecom this week.

A multinational private Chinese company called Sunwalk that specialises in telecommunications and technology has created a number of telecom and communication infrastructure projects in China and obtained a Telecom Infrastructure Provider (TIP) licence in Pakistan.

The delegation was informed during the meeting by Pakistan's minister that discussions with the Ministry of Railways and Highways Authority regarding the right of way for laying OFC are still ongoing.

He gave the delegation the assurance that all the barriers in this area would be quickly removed. According to the Economic Times in India, relations between China and Pakistan currently seem to be positive.

In fact, less than two weeks ago, the Commercial Bank of China (ICBC) approved the rollover of US$1.3 billion in facilities for Pakistan. Pakistan currently has high inflation, problems with its foreign exchange reserves, a current account deficit, and its currency is depreciating.

In addition to offering internet and broadband services, it also offers cellular telephone, card payphone, and, since Pakistan Telecommunication Company Limited (PTCL) was privatised, fixed-line telephone services.

Pakistan telecom sector has experienced significant growth in the recent years as a result of an increase in e-commerce, which increased demand for connectivity, particularly during and after the COVID-19 pandemic.

This chance assisted in building the industry's network and infrastructure, but operational difficulties like power outages, problems with stability and security, rising fuel prices, and high operating costs persist.

Climate And Environment Working Group's Second Meeting Concludes

The second meeting of the Climate and Environment Working Group was concluded in Islamabad on March 16, 2023, by representatives from the United States and Pakistan.

The delegations were led by the Minister of Climate Change for Pakistan, and Monica Medina, the Assistant Secretary for the Bureau of Oceans and International Environmental and Scientific Affairs at the U.S. Department of State.

Environmental and climate change issues, such as water management, climate-smart agriculture, and energy transition, are of interest to officials and experts. The two governments pledged to work together on issues related to climate, air quality, biodiversity, waste management, and plastics recycling through the Climate and Environment Working Group.

These are the outcomes of the U.S.-Pakistan Climate and Environment Working Group meeting on March 16, 2023. Fertilizer Efficiency: In order to assist Pakistani farmers use fertiliser more effectively and efficiently, reduce environmental pollution, and lower costs for farmers, the U.S. Department of Agriculture will launch the "Fertilizer Right" programme there in 2023. This four-year, $4.5 million project will work with local partners.

Real-time Flood Forecasting: To improve the capacity for flood forecasting, the U.S. Army Corps of Engineers will right away start exchanging snowpack assessments with a number of Pakistani government agencies. These analyses estimate the snow-covered areas and snowpack water volumes in Pakistan's five principal watersheds—the Upper Indus, Kabul, Chenab, Sutlej, and Lower Indus.

Reducing Carbon Emissions: Since 2017, Pakistan has benefited from USAID's efforts in preventing 55 million tonnes of carbon dioxide emissions, which has helped the nation reach its target of reducing greenhouse gas emissions by 30% by 2030.

Climate Smart Agriculture: To increase the resilience of Pakistani farming communities facing climate change, the U.S. Agency for International Development (USAID) will introduce a new, five-year Climate Smart Agriculture programme in Pakistan in 2023.

The initiative will promote climate-smart farm management techniques, boost the adoption of digital technology, and support the expansion of Pakistani agricultural technology companies.

Climate Finance Development Accelerator: In 2023, USAID will introduce a programme called the Climate Finance Development Accelerator to help Pakistan increase its use of clean energy. Through policy changes, public education campaigns, and a strengthening of the private sector's role, it will also serve as a catalyst for funding for initiatives aimed at climate mitigation and adaptation....***Read More***

Researchers Urged To Provide Protection To Wild Animals

Dr. Shahid Munir, believes that researchers from various fields should collaborate to provide protection to wild animals and raise awareness of the issues of environmental pollution.

The chairman of the Punjab Higher Education Commission (PHEC), Prof. Dr. Shahid Munir, believes that researchers from various fields should collaborate to provide protection to wild animals and raise awareness of the issues associated with environmental pollution.

He was speaking at the opening session of the 41st International Pakistan Congress of Zoology, which was being held over three days and was being organised by the Punjab University Institute of Zoology in conjunction with the Zoological Society of Pakistan.

Distinguished scientists, researchers, faculty members, and students from around the world were present, along with the dean of the PU Faculty of Life Sciences, Prof. Dr. Javed Iqbal Qazi, the president and secretary of the Zoological Society of Pakistan, Prof. Dr. Abdul Rauf Shakuri, and students.

For his work in the Department of Life Sciences, Prof. Dr. Zulfiqar Ali of the PU Institute of Zoology received the Best Zoologist of the Year Award, and Prof. Dr. Muzaffar Ahmed received the Lifetime Achievement Award. Dr. Munir congratulated the recipients of the awards and declared that the biological sciences were the focus of the 20th century.

He continued by saying that because of the way times had changed, zookeepers were no longer solely responsible for the protection of wild animals. He exhorted the scientists at PU from various scientific disciplines to contribute to research on genetic changes in Pakistan.

He suggested that expanding the livestock industry could boost the nation's economy and expressed the hope that during the three-day congress, researchers would share their research and experiences to raise the standard of living for both people and animals. Additionally, Drs. Javed Iqbal Qazi and Abdul Rauf Shakuri spoke.

Later, a five-person delegation from the Kingdom of Saudi Arabia's Umm Al-Qura University, led by Vice President Prof. Dr. Fahd bin Ahmed Al-Zahrani, paid a visit to Punjab University. The director of external links, Dr. Sobia Khurram, and the dean of the PU Faculty of Information and Media Studies were also present. The delegation received gifts as mementos.

Chinese Hybrid Canola Seed HC-021C On Rise In Pakistan

Due to its high profitability and advantageous effects on human health, Pakistan has increased the cultivation of Chinese hybrid canola seed "HC-021C".

Due to its high profitability and advantageous effects on human health, Pakistan has increased the cultivation of Chinese hybrid canola seed "HC-021C".

China's cooperation is helping to advance cultivation. Both the farmers' bottom lines and the nation's economy benefit from it.

In order to increase the cultivation and production of the recently discovered variety of Chinese hybrid canola seed, a Chinese company organised a Canola Field Day in Gujranwala with the help of Nasir Cheema, a well-known canola grower and former MPA. A sizable number of cultivators and farmers took part in the activity.

Every year in March, a Chinese company hosts a field day for farmers where they teach them cultivation techniques to improve crop production and breeding for nearby farmers. It oversees technical support as well. Canola crop cultivation in Pakistan with Chinese cooperation is a component of the Belt and Road Initiative's "CPEC" main corridor.

In Pakistan, canola is the most significant brassica crop cultivated for oil seed. It has a high oil content of 44-46%. Additionally, its meal contains 38-40% of protein with a full spectrum of amino acids.

ZhaU Xusheng, Director of QF Seeds China and Head of Canola Cultivation Project in Pakistan, said during the event that this project will boost production and lower import costs. He claimed that "HC-021C" is more disease-resistant and has a shorter growth period in comparison.

He insisted that it has zero trans fat or cholesterol and that its oil content is 10% higher than that of all local mustards. He also stated that it yields more than 37 m3 per acre. The most beneficial canola oil is "00 canola."

According to a report, Pakistan imported edible oil worth approximately 3.6 billion between 2021 and 2022, making up 89 percent of the country's total supply. However, only 11 percent of edible oil is produced in Pakistan. That is why it places a significant strain on the nation's economy.

SBBU Hosts Conference On Environmental Challenges, Material Science

SBBU organised 2 international conference on subject of "Environmental Challenges & Material Science," & both domestic and foreign scientists participated in significant numbers.

Shaheed Benazir Bhutto University SBBU organised a two-day international conference on the subject of "Environmental Challenges and Material Science," and both domestic and foreign scientists participated in significant numbers.

Vice Chancellor Dr. Amanat Ali Jalbani made a statement during the opening speech of the conference on the subject of "Environmental Challenges and Material Science" that researchers and the students can greatly benefit from holding such conferences.

During the opening session, renowned Turkish scientist Dr. Hussain Kara gave an online lecture on the environmental issues related to the oil industry to attentive conference attendees. Turkish scientists also responded to questions.

At the conference, authors from the National Center of Excellence in Analytical Chemistry presented their papers. A paper on the pesticide chemicals in food that was presented by the Iranian professor Mehboob Sherani was well-received by the audience. Senior scientists presented their research papers at renowned universities in Karachi, Faisalabad, Lahore, and other research institutions.

A session on America's largest scholarship, the Fulbright, was also held on the occasion, and it undoubtedly benefited young people.

During this session, questions from students were addressed.

Dr. Liaquat Ali Zardari, the conference's host, and Dr. Muhammad Afzal Kamboh thanked the conference's other scientists and the international guests at its conclusion.

Materials science is an interdisciplinary field for researching and discovering the materials. Materials engineering is the engineering field of designing and improving materials and finding uses for materials in other fields and industries.

The intellectual origins of materials science stem from the Age of Enlightenment, when researchers began to use analytical thinking from chemistry, physics, and engineering to understand the ancient, phenomenological observations in metallurgy and mineralogy.

Materials science still incorporates elements of physics, chemistry, and engineering. As such, the field was long considered by academic institutions as a sub-field of these related fields.

Paymob, Raptr Partner To Bring Avenues For Content Creators In Pakistan

Raptr Games is a startup gaming platform and game payments company based in Singapore and operating in Pakistan.

Imran Khan, the CEO and founder of Raptr Games, said, "We at Raptr have been fervently working to introduce Esports and new revenue streams for gamers and game content creators in Pakistan. Our most recent product is Raptr.gg, a cutting-edge streaming platform and payment system designed specifically for gamers in Pakistan."

In order to incorporate various payment methods and financial technology solutions, Paymob, one of the top financial services enablers in the Middle East, North Africa, and Pakistan (MENA-P), has partnered with Raptr Games, a startup gaming platform with headquarters in Singapore.

The partnership will enable smooth and real-time payments from viewers to their preferred streamers in addition to making it easier for local gaming content creators in Pakistan to monetize their streams. Additionally, Paymob will offer integrated reporting and settlement options to increase the transparency and visibility of the gaming industry.

According to him, "by collaborating with a reputable financial services provider like Paymob, we can ensure that our users have the flexibility to send and receive payments seamlessly while creating gaming content—a feature that was unavailable to Pakistani gamers and viewers.

Raptr Games is a startup gaming platform and game payments company based in Singapore and operating in Pakistan. Raptr recently closed its pre-seed round, funded by local and international investors and focusing on the growing gaming market in Pakistan and the region.

When launching Raptr, the company sought a partner that could enable a seamless and reliable multi-channel payments experience for its users to make it simple for streamers and content creators to monetize their work, thereby making Paymob a natural fit.

Raptr Games will make it possible

for streamers to withdraw their money using a variety of methods, such as debit cards and digital wallets.

Hundreds of streamers have already registered for the streaming platform's early access on their website and are eagerly awaiting its official launch.

"We are excited to partner with Raptr Games and enter the e-sports and gaming space in Pakistan," said Fawad Abdul Kader, Country Manager of Paymob Pakistan.

"By working together, we hope to make it easier for the online gaming community and content producers to collect easy, secure payments and optimise their work for a wider audience.

Our primary goal is to offer standardised reporting and settlement options for Pakistan's growing e-gaming industry " he added.

E-sports and gaming are popular pastimes among young people in Pakistan, where the market is worth $250 million a year

. Over the past few years, there have been numerous large-scale e-sports competitions, with professional gamers from Pakistan becoming world champions on a number of well-known platforms like Tekken, Valorant, DOTA, KOF, and many others.

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"Programming today is a race between software engineers striving to build bigger and better idiot-proof programs, and the Universe trying to produce bigger and better idiots. So far, the Universe is winning."

--Nick Cook

Eza Fatima

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It is a leguminous plant that is planted to help Rhizobacteria boost soil fertility by fixing nitrogen. It is growing despite its limited production. Although soybeans mostly consist of protein, they also have significant amounts of carbohydrates and fat.

3.5 ounces (100 grams) of boiling soybeans have the following nutritional value:

172 calories
Water: 63%
grams of protein: 18.2
8.4 grams of carbs
3 grams sugar
6 grams of fiber
9 grams of fat
1.3 grams are saturated.
1.98 grams of monounsaturated fat
5.06 grams of polyunsaturated fat

Soybeans are among the finest sources of plant-based protein. Soybeans contain 36–56% of their dry weight in protein. Around 31 grams of protein are present in one cup (172 grams) of boiling soybeans.

Soy protein has a high nutritional value.

The two main protein groups in soybeans are glycinin and conglycinin, which together account for about 80% of the total protein makeup.

Intake of soybeans, the healthiest food, prevents disease. May lower the risk of cancer. Cancer is one of the leading sources of death in modern society.

Reduced bone density and an elevated risk of fractures, particularly in older women, are characteristics of osteoporosis. Consuming soy products could lower your risk of developing osteoporosis.

One of soybean's main benefits, which is also one that few people are conscious of, is that it can aid in reducing the symptoms of sleep disorders. Soy products, according to health professionals, may reduce the prevalence of insomnia and other sleeping problems.

Consuming soybeans is an effective way to manage and avoid diabetes. Several studies have shown that soy can increase the body's insulin sensors.

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Minahil khalid

In conclusion, although both soybeans and meat have significant levels of protein, soybeans have a higher protein content than some varieties of meat. Why soybean should be preferred to meat?

Soybean Considers As The Modern Meat

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The modern meat soybean, well known for its high protein content, is indigenous to East Asia. Currently, the top two producers of soybeans in the world are the United States and Brazil. In Pakistan, there is going to be a revolution in agriculture.

Soybean, a complete protein:

Soybeans are considered a complete protein because they contain all nine essential amino acids that our bodies cannot produce on their own and must be obtained through our diet.

nine essential amino acids are:

1. Histidine
2. Isoleucine
3. Leucine
4. Lysine
5. Methionine
6. Phenylalanine
7. Threonine
8. Tryptophan
9. Valine

Nutritional Value of Soybeans:

According to the Dietary Guidelines for Americans, you should consume 10 to 35 percent of your daily calories as protein. On a 2,000-calorie diet, that translates to between 50 and 175 grams of protein per day. For both men and women, 46 grams of protein per day is the recommended dietary allowance.

FATS: There are about 9 g of fat per 100 g of soybeans, or 12% of the total calorie content.

FIBERS: Around 8 g of fibers, or 32% of the total amount of carbohydrates, are present.

PROTEINS: In 100 grammes of cooked soybeans, 36 grams of proteins are present. In addition to all of this, it also supplies a variety of micronutrients such as vitamins, iron, magnesium, and potassium.

SOY PROTEIN VERSUS MEAT PROTEIN:

Protein is a vital nutrient that is necessary for our bodies to develop, repair, and remain healthy.

It is well acknowledged that meat, especially fish, chicken, cattle, and mutton, is a good source of protein.

The protein content varies depending on the type of meat. For instance: beef has a protein content of 20–25% and is high in fat and cholesterol, especially in high-fat cuts like ribeye or T-bone steak, poultry has a protein content of 20–30%, fish has a protein content of 20–60%, and soybeans have a protein content of 35–40%.

In conclusion, although both soybeans and meat have significant levels of protein, soybeans have a higher protein content than some varieties of meat. Why soybean should be preferred to meat?

Health: soybeans are low in saturated fats and cholesterol and contain phytochemicals called isoflavones, which have been shown to have numerous health benefits. They have been found to reduce the risk of heart attacks by lowering LDL (bad cholesterol) and improving blood vessel function.

Soybeans are a healthier alternative to meat because they are low in fat and free of cholesterol. This is a great option for those looking to reduce their fat and cholesterol intake.

Environmental advantage: the production of meat, especially beef, has a much larger carbon footprint compared to soybean farming. As the world's population increases, the high demand for protein has led to deforestation, water pollution, a significant source of greenhouse gas emissions, and other negative environmental impacts.

Less use of resources: Meat production also uses more resources, such as land, water, and energy. So by selecting the modern meat soybean, we may help reduce the impact on the environment and make sustainable food choices.

Disease prevention:

Cardiovascular diseases are caused by a high intake of saturated fatty acids present in meat. Colon and breast cancer risks would increase with increased consumption of red and processed meat. A diet high in animal protein would lead to type 2 diabetes, kidney disorders, and osteoporosis.

Diabetes type 2: Soybean consumption has been linked to reducing the risk of diabetes type 2. They can improve insulin sensitivity, which helps prevent type 2 diabetes.

VALUE ADDITION OF SOYBEAN:

Soybean oil is highly sought-after because of its neutral flavour, high smoke point, and heart-healthy fatty acid profile.

Soy proteins: Highly nutritious ingredients used to provide a variety of meat alternatives, such as tofu, tempeh, etc.

TOFU: It is known as soybean curd. It is made by coagulating soy milk and pressing the resulting curds into blocks. It is high in protein and is used in a number of dishes, from stir-fries to soups and salads.

Soy milk is a plant based alternative to dairy milk that is rich in proteins and calcium. It can be used as a base for a variety of food and beverage products, including coffee, smoothies, and baked goods.

Soy flour: It helps in the formation of bread, pasta, and crackers. Let's introduce this meaty plant to our native Pakistan in light of everything we've covered thus far. Let's utilise this wonderful masterpiece of nature.

CONCLUSION:

At the end, we can say that the modern meat soybean is a crop that can replace meat not only in its nutritional content but also in terms of its availability and cheap rates. So when Pakistan is facing inflation and food insecurity.

Environmental advantage: the production of meat, especially beef, has a much larger carbon footprint compared to soybean farming. As the world's population increases, the high demand for protein has led to deforestation, water pollution, a significant source of greenhouse gas emissions, and other negative environmental impacts

Waqas Mushtaq

Role Of Oilseeds In Food Security Of Pakistan

Pakistan is a landlocked country located in South Asia. It has a population of around 207 million people and an area of 902,913 square kilometers.

Oilseeds are a vital component of the food security of Pakistan. They are used for the production of edible oils, biodiesel, animal feed, and other products. The country has the world's second-largest oilseed production, after China.

Pakistan is a landlocked country located in South Asia. It has a population of around 207 million people and an area of 902,913 square kilometers.

The country is resource-poor and has a high population growth rate. It is also one of the most affected countries by climate change.

The country has to import around 60% of its oil and over 50% of its food. Oilseeds are a source of dietary protein, essential fatty acids, vitamins, minerals, and other nutrients. They are also a source of oil and fats. The oilseeds sector is an important component of the food security of Pakistan.

1. Oilseeds in Pakistan: production, import and export

The country has an annual production of about 1.5 million metric tons of oilseeds. The main oilseed crops in Pakistan are soybean, groundnut, rapeseed, and mustard. Soybean is the most important oilseed crop, accounting for more than 50 percent of the country's total production. The country has a long history of oilseed production. The first oilseed mill in the established in 1892.

2.Role of oilseeds in the food security of Pakistan

Food security is an important issue in Pakistan and the role of oilseeds in this regard is significant. Pakistan is a country that is heavily reliant on food imports and oilseeds are a major contributor to this.

In fact, oilseeds are the sixth largest export commodity of Pakistan. The oilseeds industry has been growing rapidly in recent years and this is due to a number of factors.

Firstly, there is a growing demand for oilseeds in the global market.

Secondly, there is a growing population and this is leading to an increase in the demand for food. Thirdly, there is a growing middle class in Pakistan and this is leading to an increase in the demand for food products.

Fourthly, there is a growing agrarian sector in Pakistan and this is leading to an increase in the demand for oilseeds. Fifthly, there is a growing infrastructure in Pakistan and this is leading to an increase in the demand for oilseeds.

A large part of the food security problem in Pakistan is the fact that the country imports over 60% of its food requirements.

The import bill for food has been on the rise for the last few years, and it is expected to touch Rs 1.5 trillion by 2020. This is mainly due to the growing middle class and the increasing food demand of an expanding population.

Pakistan is one of the world's top 20 oilseed producers and the oilseed market is estimated to be worth $16 billion by 2020. The country ranks first in the world in terms of rapeseed production, with an estimated production of 4.2 million metric tonnes in 2013-14.

The oilseed sector is expected to grow at a CAGR of 7.5% from 2014-2020. The sector is benefitting from rising global demand for edible oils. In addition, the sector is also benefiting from the government's commitment to promote agro-based exports.

Laiba Habib

Potential Of Soybean For Sustainable Agriculture

Seeds of soybean have been used in Asia for centuries to prepare a variety of fresh fermented and dry foods.

Sustainable agriculture means that kind of agriculture that has the potential to meet the needs of the present generation without compromising the needs of future generations, and the balance between economy and environmental care should also be maintained, soybean is such a species of legume. It is widely grown for its edible beans.

Seeds of soybean have been used in Asia for centuries to prepare a variety of fresh fermented and dry foods. Soybean is originally from China. Soybean was introduced to Pakistan as an oil seed crop during the early 1960s.

Soybeans gained importance because of their high protein content (about 48–50% protein). Swelling, solubility, and viscosity are responsible for its wide use in industrial processes.

Soybean is a highly nutritious crop.

They are sources of various vitamins and minerals, including vitamin K1, folate, copper, manganese, phosphorus, and thiamine. It is used in animal food and feed products and industrial applications. The crop is also known to have a positive impact on soil health and fertility.

Soybeans have reduced the use of synthetic fertilizers, because this crop is known to fix nitrogen in soil. It can also suppress weed growth and reduced the need for herbicides. Soybean is a good rotation crop that can help break disease cycles, improve soil structure and enhance water retention.

It proves to be the most popular means of relief from PCM (protein calorie malnutrition), as protein is beyond the means of many people to afford (from animals). Currently, soybean cultivation in Pakistan has a small acreage. Khyber Pakhtunkhwa, Punjab, and Sindh are areas where it is cultivated. The new soybean lines can produce 480–720 kg per acre in an intercropping system at the University of Agriculture Faisalabad.

Although the soil and climatic conditions of Pakistan are suitable for soybean cultivation, due to a lack of breeding and genetics work, it is not gaining popularity. Pakistan has been importing around 2million tons of Soybean annually for last eight years from US and Brazil.

Soybean accounted for 1.87% of the total import flow to Pakistan, which cost about Rs 1,232,104 million during April 2022. The need of the hour is to develop soybean varieties and germplasm for use as genetic resources for companies and for direct on farm production. Soybean is a profitable crop as well. It's per acre cost is about 42–78 dollars per acre, depending on target yield and tillage practices. Challenges in soybean production in Pakistan include weather fluctuation, pest and disease pressure, market volatility, and the need for continuous improvement in production practices. As world population continues to grow, the demand for soybeans is likely to grow. Moreover, the soybean crop has the potential to contribute to climate change mitigation by sequestering carbon in the soil. However, to achieve these goals there is a dire need of continuous research, innovations, collaboration among farmers, researchers and policymakers.

Uswa Nazir

Flowering is triggered by day length, often beginning once days become shorter than 12.8 hours. This trait is highly variable, however, with different varieties reacting differently to changing day length Soybeans form inconspicuous, self-fertile flowers that are borne in the axil of the leaf and are white, pink, or purple

Growing Stages Of Edible Bean Under Changing Climate

The soybean, soy bean, or soya bean (Glycine max) is a species of legume native to East Asia, widely grown for its edible bean, which has numerous uses.

The soybean, soy bean, or soya bean (Glycine max) is a species of legume native to East Asia, widely grown for its edible bean, which has numerous uses.

Traditional unfermented food uses of soybeans include soy milk, from which tofu and tofu skin are made. Fermented soy foods include soy sauce, fermented bean paste, natto, and tempeh.

Fat-free (defatted) soybean meal is a significant and cheap source of protein for animal feeds and many packaged meals. For example, soybean products, such as textured vegetable protein (TVP), are ingredients in many meat and dairy substitutes.

Soybeans contain significant amounts of phytic acid, dietary minerals, and B vitamins. Soybean vegetable oil, used in food and industrial applications, is another product of processing the soybean crop. Soybean is the most important protein source for feeding farm animals, which in turn yield animal protein for human consumption.

Classification

The genus Glycine may be divided into two subgenera, Glycine and Soja. The subgenus Soja includes the cultivated soybean, G. max, and the wild soybean, treated either as a separate species, G. soja, or as the subspecies G. max subsp. soja. The cultivated and wild soybeans are annuals. The wild soybean is native to China, Japan, Korea, and Russia.

The subgenus Glycine consists of at least 25 wild perennial species, for example, G. canescents and G. tomatillo, both found in Australia and Papua New Guinea.

The perennial soybean, the edible bean, belongs to a different genus. It originated in Africa and is now a widespread pasture crop in the tropics. Like some other long-domesticated crops, the relationship of the modern soybean to wild-growing species can no longer be traced with any degree of certainty. It is a cultivar with a very large number of cultivars.

Germination

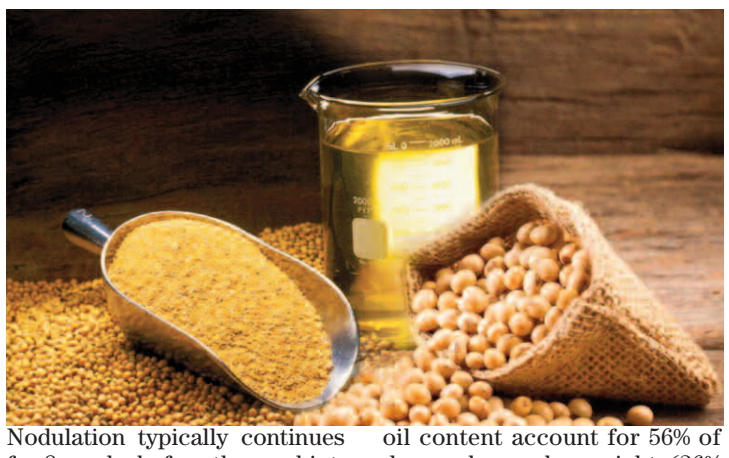
The first stage of growth is germination, a method that first becomes apparent as a seed radicle emerges. This is the first stage of root growth and occurs within the first 48 hours under ideal growing conditions.

The first photosynthetic structures, the cotyledons, develop from the hypocotyl, the first plant structure to emerge from the soil. These cotyledons both act as leaves and as a source of nutrients for the immature plant, providing the seedling nutrition for its first 7 to 10 days.

Maturation

The first true leaves develop as a pair of single blades. Subsequent to this first pair, mature nodes form compound leaves with three blades. Mature trifoliolate leaves, with three to four leaflets per leaf, are often between 6 and 15 cm (2+ 1 / 2 and 6 in) long and 2 and 7 cm (1 and 3 in) broad.

Under ideal conditions, stem growth continues, producing new nodes every four days. Before flowering, roots can grow up to 2 cm (3 / 4 in) per day. If rhizobia are present, root nodulation begins by the time the third node appears.



Nodulation typically continues for 8 weeks before the symbiotic infection process stabilizes.

The final characteristics of an edible bean plant are variable, with factors such as genetics, soil quality, and climate affecting its form; however, fully mature soybean plants are generally between 50 and 125 cm (20 and 50 in) in height, with rooting depths between 75 and 150 cm (30 and 60 in).

Flowering

Flowering is triggered by day length, often beginning once days become shorter than 12.8 hours. This trait is highly variable, however, with different varieties reacting differently to changing day length Soybeans form inconspicuous, self-fertile flowers that are borne in the axil of the leaf and are white, pink, or purple.

Though they do not require pollination, they are attractive to bees because they produce nectar that is high in sugar content Depending on the soybean variety, node growth may cease once flowering begins. Strains that continue nodal development after flowering are termed indeterminates and are best suited to climates with longer growing seasons. Often, soybeans drop their leaves before the seeds are fully mature.

The fruit is a hairy pod that grows in clusters of three to five; each pod is 3–8 cm (1–3 in) long and usually contains two to four (rarely more) seeds that are 5–11 mm in diameter. Soybean seeds come in a wide variety of sizes and hull colors such as black, brown, yellow, and green. Variegated and bicolored seed coats are also common.

Seed resilience

The hull of the mature edible bean is hard, water-resistant, and it protects the cotyledon and hypocotyl (or germ) from damage. If the seed coat is cracked, the seed will not germinate. The scar, visible on the seed coat, is called the hilum (colors include black, brown, buff, gray, and yellow), and at one end of the hilum is the micropyle, or small opening in the seed coat which can allow the absorption of water for sprouting.

Some seeds, such as soybeans, which contain very high levels of protein, can undergo desiccation, yet survive and revive after water absorption. A. Carl Leopold began studying this capability at the Boyce Thompson Institute for Plant Research at Cornell University in the mid-1980s.

He found soybeans and corn to have a range of soluble carbohydrates that protected the seed viability. Patents were awarded to him in the early 1990s on techniques for protecting biological membranes and proteins in the dry state.

Nitrogen-Fixing Ability

Like many legumes, soybean, the edible bean, can fix atmospheric nitrogen due to the presence of symbiotic bacteria from the Rhizobia group. Together, protein and soybean oil content account for 56% of dry soybeans by weight (36% protein and 20% fat, table). The remainder consists of 30% carbohydrates, 9% water, and 5% ash (table). Soybeans comprise approximately 8% seed coat or hull, 90% cotyledons, and 2% hypocotyl axis or germ.

Nutrition

A 100-gram reference quantity of raw soybeans supplies 1,866 kilojoules (446 kilocalories) of food energy and is composed of 9% water, 30% carbohydrates, 20% total fat, and 36% protein (table).

Soybeans are a rich source of essential nutrients, providing in a 100-gram serving (raw, for reference) high contents of the Daily Value (DV), especially for protein (36% DV), dietary fiber (37% DV), iron (121%), manganese (120%), phosphorus (101%), and several B vitamins, including folate (94% DV) (table). High contents also exist for vitamin K, magnesium, zinc, and potassium.

For human consumption, soybeans must be cooked with heat to destroy the trypsin

(serine protease inhibitors). Raw soybeans, including the immature green form, are toxic to all monogastric animals.

Protein

Most soy protein is a relatively heat-stable storage protein. This heat stability enables soy food products requiring high temperature cooking, such as tofu, soy milk and textured vegetable protein (soy flour) to be made. Soy protein is essentially identical to the protein of other legume seeds and pulses.

Soy is a good source of protein for vegetarians and vegans or for people who want to reduce the amount of meat they eat, according to the US Food and Drug Administration.

Although soybeans have high protein content, they also contain high levels of protease inhibitors, which can prevent digestion. Protease inhibitors are reduced by cooking soybeans and are present in low levels in soy products such as tofu and soy milk.

The Protein Digestibility Corrected Amino Acid Score (PDCAAS) of soy protein is the nutritional equivalent of meat, eggs, and casein for human growth and health. Soybean protein isolate has a biological value of 74, whole soybeans 96, soybean milk 91, and eggs 97. All spermatophytes, except for the family of grasses and cereals,

contain 7S (vicilin) and 11S (legumin) soy protein-like globulin storage proteins, or only one of these globulin proteins. S denotes Svedberg, sedimentation coefficients.

Oats and rice are anomalous in that they also contain most of the soybean-like protein. Cocoa, for example, contains the 7S globulin, which contributes to cocoa's taste and aroma, whereas coffee beans (coffee grounds) contain the 11S globulin, responsible for coffee's aroma and flavor.

Wahab Wahab

The country's establishing feed industry has shifted to importing whole grain instead of soybean meal from the United States and Brazil. The detailed information on soybean grain and products imported to Pakistan is given in There is huge potential to tap the local demand for soybeans by commercialising the soybean crop in Pakistan

The Present And Future Of Soybean Production In Pakistan

Soybean is an annual oilseed crop of the family Leguminosae and mainly grown for edible seeds. It is the most economical source of protein (40%) for human food and animal feed.

Soybean is an annual oilseed crop of the family Leguminosae and mainly grown for edible seeds. It is the most economical source of protein (40%) for human food and animal feed. The seeds also contain 18–22% edible oil and fulfil the demand of the food industry. In Pakistan, soybean oil production increased to 260 (Tons) in 2017 as compared to 240 (Tons) in 2016.

In 2016, the global soybean crop was planted on 120.48 million hectares, and 351.74 million metric tons of the seed were produced. The USA is the largest producer with 117.20 million metric tons followed by Brazil with 114 million metric tons and Argentina with 57.80 million metric tons (MMT).

According to the USDA estimate, worldwide soybean production for 2017–18 is expected to reach 347.4 million metric tons. 1 Today, most of the world's soybeans are crushed or processed into soybean meal and oil. It is estimated that 2% of soybean production is consumed directly by humans as food, which amounts to approximately 3 MMT.

In 2014-15, Pakistan imported approximately 1.0 million tonnes of soymeal worth $150 million USD for poultry and livestock. In 2015-16, the demand slightly rose to 1.1 million tons of soybean grain worth $1.02 billion to fulfil the growing needs of the poultry and solvent industries.

The country's establishing feed industry has shifted to importing whole grain instead of soybean meal from the United States and Brazil. The detailed information on soybean grain and products imported to Pakistan is given in There is huge potential to tap the local demand for soybeans by commercialising the soybean crop in Pakistan.

Moreover, the crop has been neglected for one reason or another, resulting in a decline in the area under cultivation. Soybean crop and two other non-conventional oilseed crops, viz., sunflower and safflower, were introduced in the mid-sixties, and commercial cultivation began in 1970–71.

In 1977–1978, coordinated research was started at the Pakistan Agricultural Research Council (PARC) and provincial research institutes, and eight soybean varieties were developed. Efforts were being made to commercialize soybean crop among farmers. Mainly issues like lack of marketing of produce and its by-products, absence of adequate skills, knowledge and production technology and low economic return hindered soybean commercialization.

Most importantly, the unavailability of high yielding, climate-ready, and pest resistant soybean varieties is the major bottleneck in crop adoption.

There is huge potential for soybean production under favourable agro-climatic conditions in potential areas of Pakistan. With a strong agricultural system and diverse ecologies, the crop can be incorporated into existing spring and summer cropping patterns.

Strong government policies for promotion of local soybean production coupled with adequate research and development to make locally produced raw material competitive both in terms of value and quality will help increase reliance on the time-consuming and costly imports

Various crop rotation combinations, i.e., rice, soybeans, cotton, wheat, Soybean Wheat, Wheat-Sorghum/Millet-Fallow-Soybean-soybean-wheat, and intercropping soybeans with corn, sorghum, cotton, or sugarcane are proposed as being potentially successful. In the rainfed area (Barani), most of the land remains fallow after wheat harvest until October or mid-November, which can be efficiently utilized for soybean production.

In addition to grain production, soybeans are a leguminous crop that increases soil fertility and helps enhance the yield of the next crop. PARC is working with the Ministry of National Food Security and Agricultural Research to provide a platform for promoting and improving high yielding adaptable soybean varieties in the country through research; and enhance the technical capabilities of staff involved in basic seed production and development of new varieties.

Under this program, the organization is running a project on commercialization of soybean crop at National Agricultural Research Centre (NARC), Islamabad, Pakistan along with provincial partners. The project aims at increasing yield and production of the crop through improved cultivars and new mechanised production technology.

Developments of new, high-yielding, adaptable soybean varieties will offer new opportunities to small farmers whose land remains fallow after the wheat crop in the Kharif season. Under fast unfolding agro-climatic changes and weather patterns, there is a direct need to develop new varieties with higher yield potential that possess resistance against a number of diseases.

Strong government policies for promotion of local soybean production coupled with adequate research and development to make locally produced raw material competitive both in terms of value and quality will help increase reliance on the time-consuming and costly imports.

Wide scale soybean production in Pakistan will not only ensure a sustainable supply of raw material to the feed industry but also improve the socio-economic conditions and livelihood of farmers. It would further encourage the farmers to cultivate soybeans and increase local production for the animal and poultry feed industries as well as the private soy industry, which are the permanent consumers of this crop.

Asim Jamil

A study published in the journal Global Change Biology in 2016 found that soybean protein content decreased by an average of 7.9% in response to elevated CO2 levels. This reduction in protein content can have negative implications for both animal and human Inutrition, particularly in developing countries where soybean is an important source of protein

Effect Of Climate Change On Soybean Yield And Quality

Elevated carbon dioxide levels may increase yield, but can also reduce soybean protein content, which negatively affects its nutritional value.

Climate change has significant effects on soybean yield and quality due to its sensitivity to changes in temperature, precipitation, and carbon dioxide levels.

High temperatures can reduce flowering and pod development, resulting in lower yields and decreased protein and oil content. Drought and excess rain can limit water availability and reduce yield and quality.

Elevated carbon dioxide levels may increase yield, but can also reduce soybean protein content, which negatively affects its nutritional value. In summary, while increased carbon dioxide levels may partially offset some negative impacts, climate change expected to have an overall negative impact on soybean yield and quality.

Soybean (Glycine max) is an important crop worldwide, with a long history of cultivation dating back to ancient China. It is a major source of protein and oil, with various applications in the food, animal feed, and biofuel industries.

The United States, Brazil, Argentina, and China are the leading producers of soybeans, accounting for more than 80% of global production. Soybeans are typically grown in warm, humid climates and require a growing season of 90 to 150 days.

Soybean oil is widely used for cooking, as well as in the production of a wide range of food products, such as margarine, mayonnaise, and salad dressings. In addition to food, soybean has numerous industrial applications. Soybean meal, which is the byproduct of soybean oil production, is an important ingredient in animal feed, providing a cost-effective source of protein for livestock.

The use of soybeans as a source of biofuels has also gained increasing attention in recent years as a potential solution to the challenge of reducing greenhouse gas emissions. Several key factors affect soybean growth and yield including temperature, precipitation, and carbon dioxide levels.

Other important factors include soil type, nutrient availability, disease and pest pressure, and planting density and timing. Temperature is a critical factor in soybean growth and development. . Elevated CO2 levels can increase the rate of photosynthesis and improve plant growth, which may lead to increased soybean yields.

However, high CO2 levels can also reduce the protein content of soybeans, which negatively influences their nutritional value. Increased CO2 concentration can lead to increased photosynthesis and growth, which can ultimately increase soybean yields.

A study published in the journal Global Change Biology in 2016 found that soybean protein content decreased by an average of 7.9% in response to elevated CO2 levels. This reduction in protein content can have negative implications for both animal and human nutrition, particularly in developing countries where soybean is an important source of protein.

Studies have found that elevated CO2 levels can reduce the protein content of soybeans by up to 20%, depending on the variety and growing conditions. High temperatures during critical growth stages can reduce flowering and pod development, ultimately leading to lower yields and decreased protein and oil content.

Several important research directions that could build on the current understanding of the effects of elevated CO2 concentration and temperature on soybean yield and quality: Investigating the interactive effects of multiple environmental stressors: While much of the research has focused on the individual effects of elevated CO2 and temperature, there is a need to investigate the combined effects of multiple stressors on soybean yield and quality. . Future research could investigate the long-term impacts of elevated CO2 concentration on soil quality and the potential feedbacks between soil quality and soybean yield and quality.

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France To Implement Age Verification For Social Media Platforms

In France, social media platforms like Facebook & TikTok will be required to verify their users' ages and obtain parental permission for anyone under the age of 15.

The implementation of age verification and parental permission for social media platforms and pornographic websites is getting closer in France. The National Assembly passed the legislation on March 2nd with a huge majority; the Senate now has to approve it and sign it into law.

In France, social media platforms like Facebook and TikTok, as well as adult websites, will be required to verify their users' ages and obtain parental permission for anyone under the age of 15. Additionally, if their children are under 15, parents will have the authority to delete their social media accounts.

Although in theory parental control is a good idea, tech companies will find it difficult to implement reliable verification techniques.

Due to the requirement for personal data tracking and biometric technology, the new law may also result in data protection and privacy issues. Similar worries about the implementation of porn ID laws are being voiced in Louisiana and other US states.

Since 2020, when it made porn sites deny access to minors, France has been working on age verification for online transactions. Since the law doesn't specify how to implement age verification, tech companies are concerned about technical solutions and online privacy regulation as the government works to expand that legislation to all social media platforms.

France is testing a double anonymity system in March 2023, which requires users to verify their age or digital identity on a third-party site or platform.

Double anonymity sounds like a good attempt at privacy protection, but the proposed legislation doesn't mention exact implementation criteria or how data should be handled. Each tech company is supposed to take its own measures to comply with the law, which is likely to incur some costs.

However, we're talking about personal information that can be abused for data harvesting or cybercriminal activity like phishing, so the matter can't be left to anyone's discretion.

The French Junior Minister for Children stated that facial recognition and credit cards could be used for age verification. This raises some serious privacy and security concerns, since current facial recognition technology can be heavily misused and abused.

Under the guise of protecting children, politicians in France, the UK, and the US are calling for more regulation of online and digital technology. Although the EU's GDPR was a positive step...***Read More***

GMV To Create Galileo Second Generation System Test Bed

The G2STB project, which capitalises and builds on the legacy of important G1G legacy system tools, will ensure a seamless transition from the Galileo G1G to G2G.

Technology multinational GMV has been given a contract by the European Space Agency (ESA), acting on behalf of the European Union Agency for the Space Programme (EUSPA), and in the name of the European Union as represented by the European Commission (COM), for the development of the Galileo Second Generation System Test Bed (G2STB).

In support of its role as Galileo System Development Prime, the G2STB will offer ESA a crucial system verification and validation facility, enabling a variety of Galileo system monitoring, troubleshooting, prototyping, and experimentation activities.

The G2STB project, which capitalises and builds on the legacy of important G1G legacy system tools, will ensure a seamless transition from the Galileo First Generation (G1G) to Second generation (G2G). One of the crucial infrastructure components that ESA is creating in particular for the proper operation of the Galileo Second generation satellites is the G2STB.

With numerous technological advancements, this new generation of satellites represents a significant advancement for the Galileo constellation. To guarantee that the crucial technological components needed in the G2G ground segment are adequately covered, ESA has prepared new procurements.

The Time and Geodetic Validation Facility and the Galileo System Evaluation Equipment (GALSEE) are two existing G1G facilities that the G2STB will eventually replace and upgrade with cutting-edge capabilities (TGVF-X). During the Galileo Exploitation Phase, the latter, which GMV developed and has been running for the past ten years, was crucial in monitoring the Galileo signals and system validation activities...***Read More***

Use Of Biofuels Can Reduce Emissions Up To 90%: Report

The use of biofuels and synthetic fuels, according to a report this week by Aircraft Leasing Ireland, could cut emissions by up to 90% when compared to aviation kerosene.

The use of biofuels and synthetic fuels, according to a report this week by Aircraft Leasing Ireland, could cut emissions by up to 90% when compared to aviation kerosene. Thanks to our growing renewable energy sector and the use of residues from agriculture and forestry, the authors of the report contend that Ireland is well positioned to develop and produce what they refer to as sustainable aviation fuel. To make these purported new energy sources a reality, it seeks government assistance, or subsidies. Few issues are as complicated as decarbonizing the aviation sector, and one of the most straightforward solutions currently being advocated is turning vast tracts of farmland into fuel to satisfy the industry's insatiable appetite for energy. Extreme weather events brought on by climate change, as well as the ongoing conflict in Ukraine...***Read More***

EU Competes US & China To Lead Clean Technology War

By 2030, clean technology is projected to have a global market value of 600 billion euros ($630 billion), more than tripling what it is today.

To counterbalance state-backed competition from the US and China, the EU on Thursday unveiled plans to encourage businesses within the bloc to produce more clean technology there.

According to plans that some claim to be protectionist, Brussels informed European businesses producing green technologies like solar and wind energy that obtaining permits

and manufacturing will be made simpler.

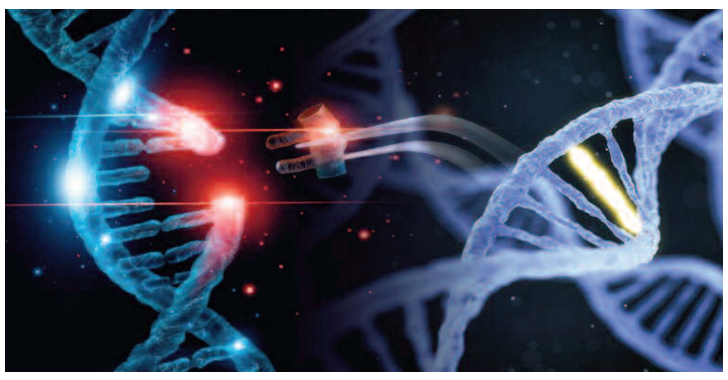
By 2030, the EU's executive body, the European Commission, wants at least 40% of clean technology to be made in the EU.

The goal was mentioned in draft legislation for the Net Zero Industry Act that was released on Thursday in support of the EU's goal to have a "climate neutral" economy with zero emissions of greenhouse gases by 2050.

The commission says public tenders will be evaluated based on green criteria that could favour European companies in order to achieve its goals by ensuring businesses obtain permits more quickly.

"We'll keep doing business with our partners. Although more should be produced in Europe, not everything will "Frans Timmermans, vice president of the commission, told reporters in Brussels. A disagreement within the commission over whether to include nuclear power, a low-carbon energy source, delayed the release of the Net Zero Industry Act proposal...***Read More***

Seamless Therapeutics Receives Funding To Advance Gene Editing Platform



Seamless Therapeutics has received $12.5 million in seed funding to advance a revolutionary gene editing platform based on programmable precision designer recombinases.Seamless Therapeutics, a TU Dresden spin-off, has received $12.5 million in seed funding to advance a revolutionary gene editing platform based on programmable precision designer recombinases. With the help of a seed round co-led by Wellington Partners and Forbion and non-dilutive funding from the BMBF (GO-Bio funding), the proprietary platform and pipeline can mature in preparation for the first clinical evaluation....***Read More***

Sunhero Raises €10M To Expand Solar Power To Homes In Europe

Sunhero, a Berlin-based company with a Barcelona headquarters, has recently raised €10 million to expand the use of solar energy in homes across Europe.

Sunhero, a Berlin-based company with a Barcelona headquarters, has recently raised €10 million to expand the use of solar energy in homes across Europe. The need for sustainable and renewable energy sources is growing.

People, businesses, and governments all over Europe are searching for more environmentally friendly, cost-effective, sustainable energy, and self-sufficient energy sources. One option that is very promising and whose market is expanding quickly is solar power. Christopher Cederskog, co-founder and CEO of Sunhero, says, "Customers' demand for independent and clean energy has rapidly increased in Spain as a result of recent policy changes, the growth of EVs, and international geopolitical conflicts. The conditions are ideal for solar power. We have the ability to revolutionise the market and offer superb solutions...***Read More***

Climate Change Expected To Reduce Farming Production By 50%: EEA

The Intergovernmental Panel on Climate Change (IPCC) recently released a report on climate change and land, and the EEA assessment is consistent with its key findings.

The effects of climate change are anticipated to reduce farming production by 50% over the following 30 years (EEA). The report concentrated on significant issues related to climate change that affect agriculture in the European Union (EU) and its outlook going forward according to a report by the European Environmental Agency.

Additionally, it provided an overview of how EU policies and programmes address adaptation to climate change and provided examples of workable and effective adaptation measures.

The Intergovernmental Panel on Climate Change (IPCC) recently released a report on climate change and land, and the EEA assessment is consistent with its key findings.

Climate impacts have resulted in poorer harvests and higher production costs, which have an impact on the price, quantity, and quality of farming products in some parts of Europe, claims the report. While there are areas of northern Europe where crop conditions are expected to improve due to climate change, crop productivity in southern Europe is expected to decrease.

"The yields of non-irrigated crops like wheat, corn, and sugar beet are predicted to decline in southern Europe by up to 50% by 2050, according to projections using a high-end emission scenario. By 2050, there might be a sizable decline in farm income, with significant regional variations."

"In a related scenario, it is predicted that by 2100, farmland values in some southern European countries will fall by more than 80%, possibly leading to land abandonment. Additionally, trade patterns are impacted, which has an impact on agricultural income.

In the EU, food security is not in danger, but rising food demand globally could raise food prices in the coming decades, the report said. In Europe, the negative effects of climate change are already apparent. Extreme weather, such as the recent heatwaves that affected many areas of the EU, is already costing farmers and the EU's agriculture industry money. Although longer growing seasons and better crop conditions may result from future climate change, according to EEA...***Read More***