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Contents



Dharmendra N Rai
Pg # 34



Dr. Sowmini Sunkara
Pg # 15



Dr. Praveen Singh
Pg # 24



Ajit Sarangi
Pg # 31

Publishers Note.....	04	Urban Gardening.....	31
Editorial.....	05	• Ajit Sarangi	
News.....	06	Vertical Farming.....	34
Farm Land.....	09	• Dharmendra N Rai	
Climate Change.....	10	Seeds.....	37
Online Meetings.....	11	• Ankur Agarwal	
Talking To.....	14	Renewable Energy.....	39
• Dr Digvijay Singh Rathore		• Vinay Jaju	
• Dr. Sowmini Sunkara		Agri Startups.....	41
Institution.....	18	Foreign Agriculture.....	44
• Dr. Hema Yadav, Director, VAMNICOM		• Climate-friendly farming: Greenland's melting glaciers offer an answer	
Horticulture.....	22	• Artificial intelligence has helped scientists to create the 'ultimate' chickpea	
• Balkrishna Dhondiba Pansare		Q&A.....	47
Hydroponics.....	24	Sustainable Agriculture and what else?.....	50
• Dr. Praveen Singh			
• Ashwin Sawant			

Farmers' prolonged protest and agitation come to an end!

Public opinion on farmers' issues now would get some clarity?

On the day of the great Sikh saint, Guru Nanak Dev day the government thought fit to withdraw the most draconian three laws on the farmers' issues. Those who had agitated were the farmers of three most agricultural states, Punjab, Haryana and Western UP which together contributes to the most successful agricultural production and export targets of the government.

All these three controversial laws were aimed at very substantial issues that were agitating the farmers for long. But what created the big why the biggest ever farmers one-year long protest that had not been seen in the country's history in the free India where, before that, we had always read about the many famine, hunger and poverty in the Indian agricultural sector about which no British historian had written in any depth and concern nor any of the other Indian historians gave much attention. Even in the post independent Indian writings, we had no any new perspectives on the farming issues, issues that ironically led A.O. Hume to found the Indian national Congress.

Now, gradually, the Indian economic history, we hope would be written in some broad perspective where the bulk of the Indian population are still dependent on agriculture for their livelihood. As per the latest statistics, India's agriculture today contributes just 14 percent of output to the Indian GDP while 40% of labor is still dependent on the agri sector only. We have to have great sympathy and humane concern with the Indian farmers even now for what triggered. The farmers agitation today to such an irrational length is the deep-rooted poverty and stagnation and thus more persistent hunger and under nutrition and poverty. We saw only too recently the reverse migration of rural labor on the occasion of the Corona Virus Outbreak and thus it was also a reminder of the India's backwardness and poverty and a sort of political negligence.

The point we want to highlight is not any political issue at all. The over-all Indian mindset that evolved with the history, from pre-mogul Times to the British days where the caste system and the religious pro-activities and social inequities always held down the lower social groups and only the tiny upper crust held all the privileges. Even now, we dare say, the democracy we pretend and practice is a sham as once we all seized power in the name of democracy we resort to much arbitrariness, we don't take the Constitutional provisions seriously.

Bureaucracy is spreading and taking hold much of the civil society activities, from administration to other areas, the hold of the retired bureaucratic officials are spreading with an iron grip all the civil liberty areas. Beware of this unhealthy social and political outlook. This is just a slight warning, in spite of so much fear and selfishness on the part of the well-off sections, the middle and upper classes.

We don't even care for the Parliamentary procedures. We issue ordinances to promote agricultural reform laws! We rush through Parliament without a debate as such. We don't refer to the Parliamentary committees. Why such rush and hurry? Why we so quickly forget democratic processes. At least this time, much suffering, a death of high number, about 700 farmers lost their lives, let us be more sympathetic. Let not narrow political dividends, elections in UP, Punjab and elsewhere dictate our policy making impulses. Let the vibrant democratic norms take hold our power wielders, let us demonstrate, a real change of mind and show much magnanimity when it comes to the down-trodden and the poor rural people.

Farmers even when they earn in big sums are after all are no match to the non-farmers, the urban migrants are much better today. So, we need deeper commitment and strong willed policy making thrust.

Let us spread a liberal and secular mindset. Let us lay the foundation and not the penchant for revenge. Jai Hind!

Agriculture & Industry Survey

Vol. XXXII No. 1
January 2022

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www.agricultureinformation.com

Office Address:
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C-2/286, 2 C Cross,
Domlur II Stage
Bangalore 560071
India

Published by
Vadamalai Media Private Limited

Regd Office: Pichanur,
Coimbatore, Tamil Nadu Printed,
Published & Edited by Mrs. Shenbi
on behalf of Vadamalai Media (P) Ltd.
Published from
C-2/286, 4th Main, 2-C Cross, BDA Layout,
Domlur II Stage, III Phase, Bangalore - 560
071 and Printed at Print-o-Graph, No.124,
Sultanpet, Bangalore.
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CLIMATE CHANGE & AGRICULTURE AND MUCH ELSE!

The new buzzwords for the current agri policy making!

Climate change is now a grave reality. There is a debate in the distant Glasgow. At the same time there is flood in Chennai and there is dire prediction the Chennai city might sink in the sea to the depth of 1.8 feet before the end of this century. What more reality we need than this NASA report?

It is time to think radically and do many things on many fronts. The COP 26 Glasgow Climate Change Summit that had sought to set a new “agenda of action, as one of its sessions” described, has really, with all qualifications and skepticism is really a breakthrough. We have to welcome the outcome of the very influential international leaders representing some 200 countries. There is much to discuss and debate till the next session billed for Cairo next year. Can the countries of the now say there is some time for rest till the next date arrives?

No, we can't say that within certainty. In fact, what we can say now is there is actually more urgency to clarify and conceptualize many new questions that have been thrown up now. The current scene of climate change with excessive rains. And flooding of Indian cities, more so right here in Chennai city, reminding the year of 2015. Specially, for us who are concerned with what happens to the climate change and the warming of the planet is what are the adverse factors from the agricultural sector with the alleged excessive leak of carbon gas emission coming out of the agri and other crops. This is a subject new for the vast mass of farmers who don't know all these issues so far. Now this issue has come to the frontline and also much other pollution causing agents.

Of course the headline grabbing issue was the stars, the two big countries, namely India and China the two populous countries still using coal, India still 70% coal in its power plants and also China, and negatively the bad name as the two most polluting economies. Also the unresolved question of what the two countries' stand and commitment to the agenda of action!

India's Prime Minister Mr. Narendra Modi in his characteristic boldness and risk-taking strength declared India would set the date of 2070. As the upper limits and thus won over the admiration of nations and thus this time India's highly rated international leader and statesman. India's International profile raised. Yes, this time India's international profile as the most responsible nation and leader of some hope and capability for the world. So, in a way we, Indians, can take some share at this proud moment. This is really a great

achievement indeed. But then to earn as a responsible nation India has to do much, besides diplomatically scoring a winning point. But then diplomacy is a new field for India and we Indians have also to earn the art of diplomacy in which the Western nations had shaped the course of world history since the famous Westphalia Peace treaty in the year 1648.

Today we live in the world with some, why, even much anxiety and with the nuclear weapons threat and also the new threat of climate change and many disasters the world have to live through. So, what role agriculture is going to play in the present and future?

Agriculture has actually come centre stage. And a whole lot of new innovations are called for, new seeds, new climate change resistant seeds and use of eco-friendly fertilizers introduction of new agri machinery, improved water saving irrigation through sensors, why even improved agri marketing, most of all really ensuring guaranteeing higher remunerative prices and less exploitative agro reforms are all there to be done. Really, the future of Indian agriculture calls for realistic agricultural land ownership laws are timely. As things are what we need to do to lessen the impact of the international climate change and global warming challenge is to understand science and technology in the agro and rural sector.

There would be progressive urbanization and also international migration. Indian population this generation has come to reality and they migrate at the very first opportunity. The inequity and inequality in society and politics is growing faster than before. Corruption is also growing. Internal institutions are becoming out of date, transparency in administration is diminishing. May be the only certain way to meet the climate change and other future challenges, to put it bluntly, in our opinions to improve governance internally in a more honest and truthful manner.

Are we not going back in the pursuit of our values in our living? Why there are known inequities? Why we refuse to adhere to our own constitutional mandate? Democracy essentially means fixed tens of acquiring and retaining power, isn't it so? Then why, the world over there is the tendency towards dictatorial tendencies?

The world needs dedicated leaders. Where are they? These are not silly questions.

Why do the political process in the international arena not driven by ethics? It is time world leaders shed their narrow focus and give up their adherence to raw power and the use of force. Why there are still wars in the world?

The UN must be strengthened and more international summits and G-7 meets. Only the economically strong nations can give decisive directions to the world. Of course we need new ideas and new insights. This can be given by many, especially by world thought leaders. Let us invite such thought leaders to the UN assembly and other firms. Such independent thinkers are also to be given top viability so that the politicians can shed their egos and learn to behave responsibly.

Nuclear weapons have to be eliminated and for this great men and minds must interact more visibly.

World's top buyer India trims palm oil imports to make space for soft oils

Indian refiners have been reducing palm oil purchases and raising soybean oil and sunflower oil imports after a steep rally in the tropical oil reduced its discount to rivals, industry officials told Reuters. Lower purchases by the world's top edible oil importer could weigh on palm prices, which have corrected 10% from a record high hit last month, but may support U.S. soyoil futures.

"Refiners usually give preference to palm oil as it trades at a substantial discount to soyoil and sunflower oil. As there is hardly any price difference now, they are switching to soyoil and sunflower oil," said Govindbhai Patel, managing director of trading firm G.G. Patel & Nikhil Research Company. Traditionally, palm oil accounts for two-thirds of India's annual edible oil imports of 13 to 15 million tonnes.

But Indian refiners are now slashing palm purchases after importing a record 1.26 million tonnes of palm oil in September, as the spread between palm and soy oil has narrowed to \$20 per tonne from more than \$120 a year ago, dealers said.

Crude palm oil is being offered at around \$1,395 a tonne, including cost, insurance and freight (CIF), in India for December shipments, compared with \$1,415 for crude soybean oil and \$1,445 for crude sunflower oil, traders said.

The narrowing gap has turned buyers to soy oil, which is often perceived to be superior in taste and quality to palm.

India's palm oil imports in November fell to 585,000 tonnes from 693,000

- Palm's discount to soyoil drops to \$20/T
- Refiners slash palm imports for Nov-Jan shipments
- Refiners replace palm oil with soyoil, sunflower oil
- Palm oil could regain market share from Feb onwards

tonnes in October, said Sandeep Bajoria, chief executive of Sunvin Group, a vegetable oil broker. Soyoil imports in November jumped to around 400,000 tonnes from 217,000 tonnes a month ago, while sunflower oil imports rose to 200,000 tonnes from 117,000 tonnes, Bajoria said.

India buys palm oil from Indonesia and Malaysia, with soyoil mainly imported from Argentina and Brazil. It purchases sunflower oil from Russia and Ukraine.

In December, palm oil imports would remain below 600,000 tonnes and soyoil imports could rise above 400,000 tonnes, Patel said. The spread between palm oil and soft oils is narrow for December and January shipments, but is widening from February onwards, said a Mumbai-based dealer with a global trading firm. "From February onwards, palm could start regaining market share. But imports would remain lower during the winter season," the dealer said. In winter, household palm oil consumption falls in India as the tropical oil solidifies at lower temperatures.

(Reporting by Rajendra Jadhav; Editing by Devika Syamnath)

Source : www.agriculture.com



Agri crops in 50.40 lakh hectare hit due to heavy rains & floods

Agriculture crops cultivated in about 50.40 lakh hectare of area have been affected across the country due to heavy rains, floods and landslides so far this year, with maximum damage reported in Karnataka, Parliament was informed.

Agriculture Minister Narendra Singh Tomar, in his written reply to the Lok Sabha, said about Rs 8,873.60 crore has been released as of November 25 from the State Disaster Response Fund (SDRF).

Additional assistance, over and above SDRF, is considered by the National Disaster Response Fund (NDRF) for natural calamities of severe nature and is approved based on the memorandum received from the state governments, he added.

As per the data placed before the Lower House, Karnataka has reported a crop damage in maximum area of 13.98 lakh hectare as of November 25, followed by West Bengal (6.90 lakh hectare), Rajasthan (6.79 lakh hectare), Bihar (5.80 lakh hectare), Maharashtra (4.55 lakh hectare) and Uttar Pradesh (3.61 lakh hectare). On a question that if the Centre plans to waive loans of farmers in the affected districts, Tomar said, "No sir."

He said the Indian Council of Agricultural Research (ICAR) provides training to farmers on effective flood management in flood plains and flood-prone ecologies of India.

Source : economictimes.indiatimes.com

India's plans for 20% ethanol-blending will cut sugar subsidy

India's plans to blend 20% ethanol with petrol from April 2023 will help cut sugar export subsidies, Oil Secretary Tarun Kapoor told reporters. India on Wednesday approved a proposal to achieve 20% ethanol-blending with gasoline by 2025, five years ahead of its previous target. Higher ethanol output will cut India's sugar production, reducing the need to give incentives for the export of the sweetener.

(Reporting by Nidhi Verma; Editing by Toby Chopra) - Source : www.agriculture.com

Cane arrear reaches Rs 4,445 cr in 2020-21 season, maximum in UP: Centre

Cane dues to be paid by sugar mills to farmers stood at Rs 4,445 crore during the 2020-21 season (October-September), with maximum arrears in Uttar Pradesh, Parliament was informed. During the 2020-21 season, a total of Rs 92,804 crore was to be paid towards sugarcane price to the farmers. Out of which Rs 88,359 crore has been paid and the balance Rs 4,445 crore dues are pending, as per the data placed before Lok Sabha by Minister of State for Food Sadhvi Niranjana Jyoti.

Of the pending dues during 2020-21 season, a maximum of Rs 3,752 crore cane dues is to be cleared by sugar mills in Uttar Pradesh, followed by Rs 394 crore in Maharashtra, Rs 64 crore in Chhattisgarh and Rs 63 crore in Haryana, the data showed. About



Rs 52 crore dues need to be cleared to farmers in Uttarakhand, Rs 44 crore in Gujarat, Rs 37 crore in

Andhra Pradesh, Rs 25 crore in Tamil Nadu and Rs 9 crore in Punjab in the said period, it added. The cane dues of Rs 130 crore are still pending for 2019-20 season, while Rs 365 crore for the 2018-19 season, the data showed.

The minister said the data regarding cane dues of the farmers are received from the concerned state governments.

The powers to enforce the provisions of the Sugarcane (Control) Order 1966 with regard to payment of cane dues to farmers is vested with state governments as they have necessary field information for its implementation, she said.

Source: economictimes.indiatimes.com

Rural wages: Kerala tops list, 15 states lag national average

A rural worker (men in the non-agricultural segment) in Kerala earned an average of Rs 677.6 daily for 2020-21, taking the top position among the states, according to statistics released by the Reserve Bank of India.

Rural workers in Kerala earn way more than their counterparts in more developed states like Gujarat and Maharashtra and over double the national average. A rural worker (men in the non-agricultural segment) in Kerala earned an average of Rs 677.6 daily for 2020-21, taking the top position among the states, according to statistics released by the Reserve Bank of India. While the national average is Rs 315.3, in Maharashtra, considered as the most industrialised state and a leading producer of farm products, a rural worker earns just Rs 262.3, according to the data sourced from Indian Labour Journal of the Union Government's Labour Bureau.

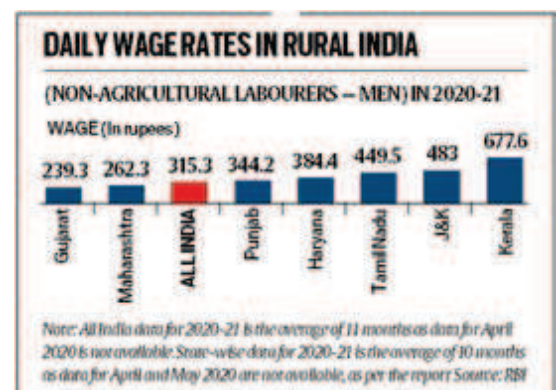
In Gujarat, considered a role model for development and industrialisation, a rural worker got Rs 239.3 during the year. While Uttar Pradesh's rural worker gets Rs 286.8, a rural worker in Bihar gets an average of Rs 289.3 daily. On the other hand, Kerala is followed by Jammu & Kashmir (J&K) where the rural worker got Rs 483 and Tamil Nadu Rs 449.5. Rural daily wage in 15 of 20 states are below the All-India average, indicating that consumption trend across the country could be in line with the movement daily wages. The wage data is available for 20 states.

There is also wide variation in per capita output generated across states. For 2020-21, Goa was at the top, with highest per capita net state domestic product (NSDP) of Rs 3,74,055, followed by Sikkim at Rs 2,57,999, Delhi at Rs 2,54,001 and Haryana at Rs 1,63,992. Bihar had the lowest per capita NSDP at Rs 31,017, behind Uttar Pradesh at Rs 41,023, Jharkhand at Rs 53,489, Meghalaya at Rs 56,471. Many states recorded a reduction in per capita NSDP in 2020-21 over 2019-20, possibly due to reduction in output because of the lockdown.

In the rural agricultural segment also, daily wage data shows similar state-wise pattern. In Kerala, daily wage in the agri sector is Rs 706.5, followed by J&K at Rs 501.1 and Tamil Nadu Rs 432.2. While the all-India average is Rs 309.9, Gujarat's agri worker get just Rs 213.1 and Maharashtra Rs 267.7 per day for 2020-21. In Punjab, it was Rs 357 and Haryana Rs 384.8. All-India data for 2020-21 is the average of 11 months as data for April 2020 is not available. State-wise data for 2020-21 is the average of 10 months as data for April and May 2020 are not available, as per the report.

The rural daily wage goes up in the construction sector. In Kerala, daily wage in construction is Rs 829.7 while the all-India average is Rs 362.2. In Tamil Nadu, rural construction worker gets Rs 468.3. In Maharashtra, a rural worker gets Rs 347.9. Migrant workers are the main workforce in Kerala. The total number of other state domestic migrants in Kerala was about 31 lakh during 2017-18, according to a study released by the Kerala State Planning Board in March. The KSPB report says interstate migrants in Kerala, on average, earn about Rs 16,000 per month, of which they are able to generate about Rs 4,000 (on average) per month as surplus income or savings.

Source : indianexpress.com





Over two lakh high-value tree saplings to be planted in Thanjavur farms under sustainable green cover scheme

Over two lakh high-value tree saplings will be planted in phase I of the Tamil Nadu Mission on Sustainable Green Cover on Farmlands in the district. The scheme, launched by Chief Minister MK Stalin last month, is being implemented under the National Mission for Sustainable Agriculture and under the sub-mission of Agro Forestry. “Under the scheme, a willing farmer will be given a maximum of 50 saplings per acre, free of cost, if he or she wants to plant them on the bunds of his field. If the farmer wants to plant the saplings in his field itself, 160 saplings per acre will be given,” an Agriculture Department official said.

The willing farmer has to register in the Uzhavan app under the section of benefit registration, providing details such as survey number and Aadhaar number, among others. An officer would inspect the field where saplings are to be

planted and an order would be issued for the farmer to collect the saplings from the nurseries of the Forest Department. A total of 2,02,800 saplings have been allotted for the first phase in Thanjavur district, officials said, adding that 52 per cent of the target has been achieved so far in terms of issuing orders to farmers to collect the saplings.

As many as 27 species of trees, including sandalwood, red sandal, teak, *Pterocarpus marsupium* (Vengai), neem, *Melia dubia* (Malai Vembu) and Pongame oil tree (pungai) are listed in the app. However, in Thanjavur district, only five species are being made available in the first phase. Teak saplings are made available in the largest number (1,75,600). The government is also providing Rs 7 per tree a year for three years from the second year after planting. P Govindaraj, a



farmer from Thozhagirippatti village, said, “If we have to buy a sapling, it would cost us anywhere between Rs 70 to Rs 80. But the government is giving it free of cost. So, it is being received well. I have taken teak saplings to plant in the bunds of my field. The time is apt as there have been rains and the saplings will come up quickly.”

Of the 14 blocks in Thanjavur district, Thanjavur, Budalur, Orathanadu and Tiruvonam are getting the highest allocation of 22,000 saplings each, as they have more rain-irrigated fields compared to other 10 blocks in the district. Papanasam block in the old delta area gets the lowest allocation of 9,800 saplings in the first phase.

Source : www.newindianexpress.com

Bayer initiates drone trials in Hyderabad for agriculture

Bayer, an enterprise with core competencies in the life science fields of healthcare and agriculture, conducted its first drone trial on Tuesday at its multi-crop breeding center in Chandipada, near Hyderabad.

Adopting digital technologies, such as drones, can help overcome these obstacles and support more targeted applications of insect, weed and disease-

control products. This ensures correct dosage and also limits the risk of accidental exposure to chemicals. Besides, drones also offer real-time agronomic advisory to farmers, enhancing farm productivity and fostering sustainability.

Engagement with government

Bayer has been working closely with the Government of India, Ministry of Agriculture and Ministry of Civil Aviation, industry bodies, regulators, policymakers and drone manufacturers over the last few years to introduce a conducive policy framework for the implementation of drone technology in Indian agriculture. The company secured approvals to conduct R&D and agriculture spraying operations to make the drone technology available for smallholders.

The Union Minister of Agriculture & Farmers Welfare, Narendra Singh Tomar in his message said, “India is making giant strides in technology and

digitalisation and adopting these for enhancing agricultural purposes is a step forward in our efforts to provide a strong impetus to farmers’ prosperity.”

Helping farmers through drones

D Narain, CEO & MD, Bayer Crop-Science Limited said, drones are operating in other small farmer countries in Asia and have the potential to deliver significant value to smallholders in India, as well as for the economy and the planet. The drone trial in Hyderabad showcases the potential of the future of farming. Bayer has partnered with innovative drone startup, General Aeronautics and conducted several in-house and external R&D trials with universities and central research institutions to generate data to make drone-based services available to farmers.

Based on the initial achievements of drone farming, growers may be able to explore the technology’s capabilities in aiding paddy, corn, sugarcane, wheat, vegetables, fruits and plantation crops and harvests in the future.

Source : telanganatoday.com





Five common mistakes to avoid while buying farmland in India

Land as a commodity has many uses and features, however owning a plot of the land brings with it a serious amount of paperwork and background checks. Legal formalities can be intimidating for some but once successfully completed, owning a managed farmland can be extremely rewarding and fulfilling.

Following are the common mistakes to be avoided while buying an agricultural land

IGNORING THE IMPORTANCE OF UN-DISPUTED LAND TITLES:

Checking the title of farmland is the fundamental observance that must be done prior to purchase. If the land's clear and marketable titles are not confirmed, would lead to legal complications. So, it is important to ensure that there are no disputes over the title and area, as these things would only add to the delay in acquiring the land. Farmland title verification should date back to a minimum of 40 years from the date of purchase. It also includes the careful perusal of mother deed documents.

ASSUMING ONE STATE LAW HOLDS GOOD IN ANOTHER STATE:

Agriculture in India is a state subject, which means that different states have different laws. Being unaware of the state agricultural laws could lead to a set of legal entanglements. Depending on the state in which the farmland is located, all the documents required while conducting the due diligence should be done according to the State laws in force. The land area and boundary is also verified with government survey records and physical verification.

Following is the list of the basic documentation required while doing the due diligence:

- Title Documents
- Encumbrance Cer-

tificate

- RTC – Record of Rights or Pahani
- Mutation Extract
- Family Tree History
- Patta Book
- Survey Documents include – survey sketch, Akarband extract, Hisa Tippiani book extract, Tippani, Phodi extract, Hudbust Register extract, atlas, and village map.
- Conveyance Deeds
- Khata Certificate
- Grant Certificates

FAILURE TO CONDUCT A PROPER PHYSICAL LAND SURVEY:

There is much more to land than its own history. Failing to physically verify the land could lead to a false assessment of the suitability of the land for agriculture. For example – if you are looking for agricultural land for sale in rural Bangalore then, just verifying the documents wouldn't suffice, rather physical verification of the land and its boundaries is also necessary.



NOT KNOWING THE SELLER:

To trace the origin of the property is one of the major purposes of extensive document verification. Tracing should always begin with scrutiny of the earliest document recorded.

For example – if agricultural plots are up for sale in North Bangalore, knowing about the history of the land-owners would tell you about the history of the land-use itself. It is necessary to do because you do not want to purchase the seemingly fertile land only to find out that is located in an environmentally sensitive zone or is under dispute.

A SHORT-TERM OUTLOOK AND FAILURE IN GOAL SETTING:

Most of the time, investing in agricultural land is about farm life experience and connecting with nature. But, it is also important to remember that it is still an investment you are making into your future, in sustainable farming, to grow your assets, and finally invest in the community and the planet. Similarly, Goal Setting is taken pretty lightly by agricultural enthusiasts.

Without setting, goals can lead you down a path of uncertainty and disappointment when you don't get the returns that you expected. While setting goals when investing in farmland is highly dependent on the type of return on investment you wish for. If you are specifically motivated by long-term return on investment then you can invest in Agroforestry, which will bear you a sweet fruit in the forthcoming years.

Source : krishijagan.com/



Want to cut down food-related emissions? Look at supply chains

During GreenBiz's VERGE 21 conference last week, conversations surrounding the food sector and its goal for reducing carbon emissions kept intersecting at one key point — the supply chain.

"All of these commitments are going to be cascaded into the suppliers," Julia Salant, head of sustainability innovation at EcoVadis, a sustainability ratings company, said during a VERGE 21 session on tracking carbon. "All of this will need to be translated into action within supply chains."

But supply chains for food products are inextricably complicated. Every ingredient in a food produced starts at an individual farm and can have many links until it gets to the retailer including passing through a processor, packaging middle man and a branded wholesaler. Knowing every input and output will be key to making the millions of tiny changes that lead to emissions savings.

"Some organizations don't have transparency down to the farm gate, because of the commodity exchanges and how supply chains are organized," said Tim Faveri, vice president of sustainability and shared value at Maple Leaf Foods, a packaged meat company in Canada. "So collaborating with other partners is going to be really, really important."

He emphasized the importance of working with companies that are upstream of the farmer, such as a fertilizer company, to encourage meaningful change from both sides. Food executives know that the key to reducing their companies' emissions lies in the data, transparency of and improvement in their supply chains. But an audience member at VERGE 21 brought up how the many requests for data and formats are a huge burden on the suppliers.

"Your Scope 1 is someone else's Scope 3." "Every company has its own dream questionnaire," answered Jason Kibbey, CEO of Higg, a supply chain management and measuring company. "We need to do a much better job because there's just too much data collection out there. We need to focus on impact and we need smart ways to make that data collection easier."

During the session, Kibbey reached out to fellow panelist Salant to suggest creating a standardized questionnaire that fulfills most of that dream one, so then suppliers would only need to fill in the gaps, removing duplicate work.

As grocery stores sit at the nexus of consumers and suppliers for food, they have a huge influence on what supply chains look like and can force suppliers to adhere to certain sustainability standards, according to Charlotte Linnebank, co-founder and executive director of Questionmark, a nonprofit focusing on researching healthy and sustainable food production. Even with suppliers that might be hesitant or feel they can't do enough.

"Sometimes a supplier is nervous to share information because maybe they're not doing that much in the space," said Chris Brooks, director of sustainability at Walmart. "But then I'd explain that it's better to show you're starting the journey than you're not on the journey at all."

Brian Lipinski, an associate in the food program at the World Resources Institute, outlined that supermarkets should be following in the footsteps of Tesco and Walmart, which use their scale to encourage suppliers to make more sustainable choices. These big players have the resources and contacts for extensive vertical collaboration and com-

munication. Brooks' dream, if he had a magic wand, is to get all Walmart's suppliers in the same room because as Kibbey said, "your Scope 1 is someone else's Scope 3."

Even food waste, which accounts for 8 percent of greenhouse gas emissions each year, is partly a supply chain issue, according to Lipinski.

"If a producer, for example, is not using proper storage techniques, that food might end up having a shorter shelf life because of what happened upstream, but then the waste shows up at that retail level," he said. "Different segments of the supply chain can influence each other but you only have control over what happens in your own boundaries." That is, unless you form strong partnerships at scale all the way down the supply chain. Strong partnerships can address more than just food waste. By working with millions of farmers, food companies can start to make a dent in carbon emissions.

"For farming and agriculture to be a big impact in climate change, it has to be a large acreage, because sequestration rates per acre are relatively low," Emma Fuller, science lead for carbon and ecosystem at Corteva AgriScience, a major player in the American agricultural chemical and seed industry, said during a VERGE 21 session on working with farmers to achieve net zero.

There are 282 million acres of row crop production in the U.S., according to Fuller. Partnering with farmers by educating them about carbon sequestration, making data collection understandable and creating an economic benefit for switching is the only way to bring regenerative agriculture onto all those acres.

Source : World Economic Forum

Online Meetings



www.agricultureinformation.com

Upcoming events

JANUARY 3, 2022

3:00 pm

Mr. Manik Patil on "Grapes cultivation economics and marketing"

5:00 pm

Dr. Mam Singh on "Protected cultivation of rose"

JANUARY 4, 2022 3:00

3.00 PM

Ms. Tripti Tiwari on "Commercial cultivation of black turmeric – monetary benefits for farmers"

5:00 pm

Ms. Punnam Veera Reddy on "Tissue culture teak plant production and their performance"

JANUARY 5, 2022 3:00

3.00 PM

Mr. Ansari on "My experience in manufacturing agriculture implements since 1955" To know more view <https://bit.ly/33WL5RY> <https://bit.ly/33Moszo>

5:00 pm

Mr. Jaykumar Alagundagi on "About mulching film- use in vegetable cultivation" To know more view <https://bit.ly/3eI27R>

JANUARY 6, 2022

3.00 PM

Dr. Srinivasan V on "Production technology in black pepper"

JANUARY 7, 2022

3.00 PM

Dr. Umesh Shriram Mundlye on "Rain water harvesting -- Appropriate solutions and sustainable schemes"

5:00 pm

Dr. Praveen Singh on "Hydroponics cultivation and marketing" To know more view <https://bit.ly/3mvYHdc>

JANUARY 10, 2022

3.00 PM

Ms. Mallika on "Old v/s New Fertilizers — Are we adapting to the new technology !"

JANUARY 11, 2022

3.00 PM

Mr. Manish Khandelwal on "Role of automation in rice milling industry" To know more view <https://bit.ly/3qpX4yP>

5.00 PM

Mr. Venkatachalam P on "Neem agro products"

JANUARY 12, 2022

3.00 PM

Mr. Yogesh Gawande on "Niyo spray pump - New method of spraying" To know more view <https://bit.ly/3Ewz1Dj>

JANUARY 13, 2022

3.00 PM

Mr. Ranjith Kumar on "Organic farming in moringa oleifera"

JANUARY 19, 2022

3.00 PM

Dr. Amol Kamalakar Bhalerao on "Climate change and career opportunities for sustainable growth"

JANUARY 25, 2022

5.00 PM

Dr. K. T. Chandrashekar on "Sandalwood cultivation – From nursery till marketing problems and opportunities"

JANUARY 28, 2022

3.00 PM

Mr. Vithal on "AQUASOL - A water testing kit" To know more view <https://bit.ly/3yVh6VQ>

5.00 PM

Mr. Sriram Prasad G – "Experiences of an IT engineer turned agri entrepreneur"

To participate in these online meetings please visit www.agricultureinformation.com and click on BECOME PREMIUM MEMBER



Recently Completed Meetings

Mr. Vasudevan V on "Marketing facilities for Farmer Producer Companies"

Mr. Vasudevan V says they are member of a Consortium Producer Company in Tamilnadu. They make arrangements both domestic and foreign markets for value added agricultural products. They are also member in various All India Forums such as Association of FPOs, APE-DA. Their leaders of Consortium company are having well connected with CII, FICCI etc.

Priyanshu Jain on "Setting up and marketing hydroponic crops"

Mr. Priyanshu Jain is the Founder of Agri Joy LLP in Agra, Uttar Pradesh. His interests are Hydroponics and Sustainable Agriculture. To know more view <https://bit.ly/3gthMdQ>

Mr. Nishanth M on "Irrigation automation by Mobitech Wireless Solution"

Mr. Nishanth M is an Agronomist at Mobitech Wireless Solution Private Limited in Erode, Coimbatore. To know more view <https://bit.ly/3yaV9Si>

Dr. Pankaj Sharma on "Sesame production in India and factors effecting its production; diseases"

Dr. Pankaj Sharma is a Plant Pathologist at Punjab Agricultural University in Ludhiana, Punjab. He says sunflower production in India is going down very sharply and among the major factors, diseases are playing important role. To know more view <https://bit.ly/3hgZ9Zi>

Mr. Ramakoti K.Venkataramana on "How a small farmer earns higher income by taking up bamboo cultivation"

Mr. Ramakoti K.Venkataramana from Ongole, Prakasam Dist in AndhraPradesh is a retired Scientist from CSIR-Indian Institute of Chemical Technology, Dept.of Science and Technology, Hyderabad, Telagana.

Mr. Kulkarni HB on "Repealing the new Farm Laws - Repercussions faced by FPOs and FPCs"

Mr. Kulkarni HB is the President of Federation for Re-farming Societies in Bengaluru, Karnataka. To know more view <https://bit.ly/3ByAKrA>

Ms. Teena Elizabeth Alex on "Longan - exotic fruit cultivation, economics and post harvest management"

Ms. Teena Elizabeth Alex is a Microbiologist at Home Grown Biotech in Kottayam, Kerala. She says longan fruit has gained popularity now a days as an exotic fruit, and is priced on world markets with strong demand for its desirable flavor and semi-translucent to white aril. The fruit production has increased over recent decades because of great improvements in agronomic practices and other aspects.

Dr. Digvijay Singh Rathore on "Commercial cultivation of aloe vera and basil as an intercrop"

Dr. Digvijay Singh Rathore is a Project Advisor at Amritanjali Ayurved (Op) Pvt. Ltd. in Udaipur, Rajasthan. To know more view <https://bit.ly/3800WRK>

Dr. Sushant Shekhar on "Exotic varieties in mushroom - Economics & marketing"

Dr. Sushant Shekhar is the Founder & Director of Jayaa Agro Foods in Deoghar, Jharkhand. His interests are mushroom cultivation , manufacturing and value addition. To know more view <https://bit.ly/39wZtiQ>

Dr. Sheshagiri Gubbi on "Sustainable way for doubling the farmers returns"

Dr. Sheshagiri Gubbi is the Co-founder of Sirisamashti Krushi Pvt Ltd., Koppal, Karnataka. To know more view <https://bit.ly/3zNd69v>

Mr. E. Ashok Reddy on "Banana tissue culture "

Mr. E. Ashok Reddy is the Technical Incharge at Vigneshwara Biotech in MS Nagar, Bengaluru. His interest is on micropropagation of banana. During this meeting, Mr. E. Ashok Reddy will discuss about tissue culture, banana tissue culture, micropropagation, media preparation and hardening.

Dr. Shivalingam Elayabalan on "Importance of indoor air purifier plants"

Dr. Sivalingam Elayabalan is the Technical Director / Agriculture Scientist at Sankar Bio-Tech in Hosur, Tamilnadu. His interests are in Agricultural Biotechnology (Plant cell, Tissue culture and Molecular Plant Virology); AI technology for banana pest and disease detection; Mass production of bioinoculants and plant cell line development; Promotion of organic banana cultivation; Import and Export of planting materials ,fruits .

Mr. Surajit Sinha on "Climate-smart solution for mitigating crop production risk"

Mr. Surajit Sinha is the Head – Agritech at Farmsio in Chennai, Tamilnadu.

He is into

– Market linkage through digital technologies and a professional over more than 16 + years of success in achieving revenue, market expansion, profit and business growth.

– Reshaping agriculture through digitization and impact into a single platform to the millions of smallholders

– Worked on input marketplace integration, market linkage and direct advisory

To know more view <https://bit.ly/2YnOovx>

Mr. Ramana Rao on "Graviola fruit - Health benefits and marketing opportunities"

Mr. Ramana Rao KV is the CEO of Trisakthi Stevia Farms in Hyderabad, Telangana. To know more view <https://bit.ly/3cKilrc>

Mr. Anil Kumar Sawhney on "Black cardamom - a high value crop in micro climate"

Mr. Anil Kumar Sawhney is the Proprietor of Godson Organic Farm in Bareilly District, Uttar Pradesh. To know more view <https://bit.ly/3bkFi92>

Mr. Minkal Bansal on "Business plan to set-up commercial vermicompost"

Mr. Minkal Bansal is the Promoter at Suman Vermicompost at Jalesar in Uttar Pradesh. To know more view <https://bit.ly/3DhbVjI>

Dr. Vidur Sahgal on "One Village - One Farm & From Farm to Fork"

Dr. Vidur Sahgal is the Proprietor of Original Mechanization & Data Integrated Consultancy (OMDIC) , New Delhi. To know more view <https://bit.ly/3ndAauz>

Mr. Mandar Vasudeo Athalekar on "Digitization of agri-food supply chains"

Mr. Mandar Vasudeo Athalekar is the Growth Leader – Technology, Stellar Value Chain Solutions in South Mumbai, Maharashtra. To know more view <https://bit.ly/3ptQxCM>

Dr. Anurag Saxena on "Cultivation and post harvest processing of apricot"

Dr. Anurag Saxena is the Principal Scientist & In charge at ICAR-National Dairy Research Institute in Karnal, Haryana. To know more view <https://bit.ly/3cZQI2N>

Mr. Yogesh G on "How to earn good income in rural areas by becoming an Entrepreneur"

Mr. Yogesh G is Manager at Sanjivani Agro Machinery in Nagpur, Maharashtra. To know more view <https://bit.ly/3FRyItg>

Mr. Ramana Rao KV on "My experience in promoting stevia cultivation in India"

Mr. Ramana Rao KV is the CEO of Trisakthi Stevia Farms in Hyderabad, Telangana. To know more view <https://bit.ly/3cKilrc>

Dr. C. Vaithilingam on "Role played by bio-solubilizers in reducing chemical fertilizers usage"

Dr. C. Vaithilingam is the Managing Director of Romvijay Biotech in Pondicherry. To know more view <https://bit.ly/3nBw5QS>

Dr. P. Naveen Kumar on "Commercial cultivation of bulbous flower crops – tuberose and gladiolus"

Dr. P. Naveen Kumar is a Principal Scientist at ICAR – Directorate of Floricultural Research, in Pune, Maharashtra. To know more view <https://bit.ly/3HEGAKZ> Dr. P. Naveen Kumar says Tuberose and gladiolus are bulbous flower crops which have good potential for commercial production in India. Tuberose is grown for loose and cut flowers and also for extraction of essential oils whereas gladiolus is grown

Mr. S. Vijay Kumar on "Micro irrigation - why it is absolutely necessary"

Mr. S. Vijay Kumar is an AGM – Technical Services at Premier Irrigation Adritec Pvt. Ltd., in Bengaluru, Karnataka. To know more view <https://bit.ly/3nyicD3>

Dr. A. Ramalingam on "Opportunities in seed production"

Dr. A. Ramalingam is a Principal S.Thangapazham Agricultural College in Vasudevanallur, Tenkasi District, Tamilnadu. To know <https://bit.ly/3CtxInJ>

Mr. Gorityala Vidyasagar on "Impact of climate change in Agriculture"

Mr. Gorityala Vidyasagar is the Assistant Director of Agriculture at Department of Agriculture, Govt. of Telangana, Hyderabad , Telangana. To know more view <https://bit.ly/3yt9Cba>

Dr. R. Venkattakumar on "Innovative marketing of fruits and vegetables during COVID 19 lockdown period"

Dr. R. Venkattakumar says during the lock down period phase 1 of COVID 19 pandemic, there was a difficulty in marketing of fruits and vegetables by the farmers due to lack of transport facilities and mobility restrictions. However, there were some initiatives by the development departments, KVKs, FPOs and private organizations to help the farmers to sell their produces. Such initiatives were documented for recommendation towards replication and drawing out some pointers as conclusions.

Mr. Abhishek Dasani on "Automation in farming – How these systems can help farmers in saving costs and producing better yields"

Mr. Abhishek Dasani a Partner of Revot Automation in Faridabad, Haryana. During this meeting, Mr. Abhishek Dasani will discuss on how IoT technologies can help farmers save on labour costs and effectively manage indoor environment conditions to improve on yields and do better produce management. Development of cost effective automation solutions that can today allow farmers to record and manage various input parameters (temperature, moisture , pH easily right from their phones.

Dr. BSR Reddy on "Jackfruit production and value addition"

Dr. BSR Reddy is a Senior Lead Scientist at ITC LIMITED in Rajahmundry, Andhra Pradesh. To know more view <https://bit.ly/3krVI9Z>

Mr. Sai Krishna on "Speed breeding, a promising approach to crop breeding"

Mr. Sai Krishna is Jr. Breeder at Mangal Murthi Seeds at East Godavari District in Andhra Pradesh. Mustard oil is intensely concentrated with anti-nutritional components like erucic acid and glucosinolates that makes the oil inedible for human consumption. Breeding is done to reduce the contents of these fatty acids ..

Dr. PK Shrivastava on "Dairy scenario in the world with current Indian status"

Dr. PK Shrivastava is a Dairy Business Consultant at M/s. Dairy Consultancy India in Bengaluru, Karnataka. To know more view <https://bit.ly/2Sj19bn>

Online meetings are available only for Premium Members