

Crop Care

CCFI

Inspiring Agriculture for the Future

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Small Farms
The millions that made India an agricultural powerhouse

“Need to increase the collective power of our small farms. Make them national pride,”
- Prime Minister Shri. Narendra Modi
15th Aug 2021

The Tribune
VOICE OF THE PEOPLE
March 19, 2017

Punjab no 'cancer belt', it's a myth: Tata experts

Experts from Tata Memorial Hospital (TMH), the country's top cancer treatment facility, have debunked as a "myth" the tag of "cancer belt of India" being attached with Punjab, especially the Malwa region. The number of cancer cases reported in Punjab, TMH Dr Anil D'Cruz said, is far less than s

Dr Rajendra Pachauri

Sunita Narain's Lies Exposed

Cancer Train

She mentioned that because of indiscriminate use of pesticides, Punjab has a very high cancer rate. She is spreading propaganda that everyday a cancer patient goes from Bhatinda to Bikaner to the Cancer hospital. In RTI Act, when we asked Acharya Tulsi Regional Cancer Hospital, Bikaner, confirmed in year 2024 out of 100 cancer patients in the said hospital, 98 patients are from the other parts and only 2 patients were from Punjab. There are one or two Cancer patients going from Bhatinda to Bikaner by train.

Hindustan Times

Dilip Khedkar Arrested for disproportionate assets

BBC

Greenpeace ordered to pay more than \$660m for defaming oil firm in protests

20 March 2025
Madina Yousif
BBC News

Share Save

The New York Times

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NEW YORK, FRIDAY, SEPTEMBER 7, 2012

The Organic Fable
By ROGER COHEN

LONDON — At some point — perhaps it was around a La Patisserie session offering “organic baked” bread served with organic beans, organic oils and organic spreads — as well as naturally organic beer — I found I just could not stomach the “O” word or what it represented.

Now let me say three nice things about the organic phenomenon. The first is that it reflects a growing awareness about diet that has spurred quality, small-scale local farming that had been at risk of disappearance.

The second is that even if it’s not better for you, organic farming is probably better for the environment because less soil, trees and fauna are contaminated by chemicals. Although of course, without fertilizers, you need a much larger amount of produce to feed the same number of people.

Business Standard
WEEKEND

Organic report card
Not more nutrition, not less emissions

After a meta-analysis of 237 studies (short-listed from 5,900 on the basis of solid design) representing four decades of research, Stanford University scientists have concluded that conventional food is on average no less nutritious than organic food. Aamir Khan should read this. Summarising a much-watched episode of his

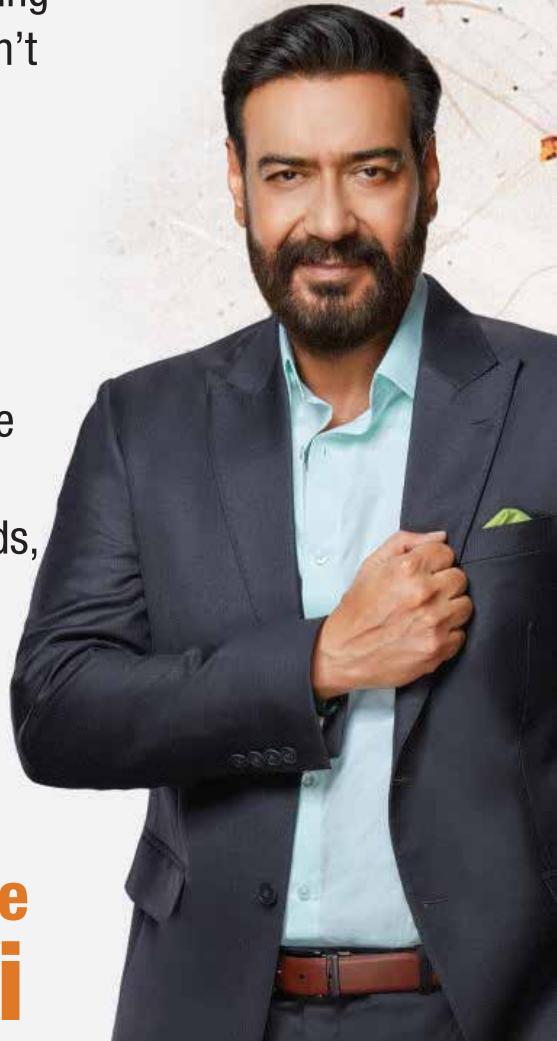


ARE YOU BRAVE ENOUGH TO SHARE THE RESPONSIBILITY?



Responsibility means nurturing better yield while retaining soil nutrition. Responsibility means caring for the planet by bringing in eco-safe solutions. It doesn't end with producing the right products, but starts with providing the right solution.

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हर कदम, हम कदम

FROM THE DESK OF THE CHAIRMAN



Deepak Shah

India has made significant strides in agricultural productivity and food security, but challenges like climate change and resource constraints persist. The expanded partnership with the Gates Foundation aims to leverage technology and innovation to sustain growth and build resilience.

The Bill & Melinda Gates Foundation and the Indian government are deepening their collaboration across key sectors, including agriculture, rural development, food security, artificial intelligence, and technology exchange.

and technology exchange, Minister for Agriculture and Farmers' Welfare, Shivraj Singh Chouhan announced after meeting Bill Gates in New Delhi on March 17, 2025.

The partnership builds on the Foundation's existing work in India, which includes initiatives in digital agriculture, biotechnology, and climate-resilient farming. "Today, many important issues were discussed with Bill Gates and his team," Chouhan said, noting that the Gates Foundation shares global best practices in agriculture and rural development while working to uplift communities. He emphasized the potential to deepen collaboration, particularly in AI-driven agriculture, agri-fintech, and climate-smart technologies.

India's agricultural sector has maintained an average annual growth rate of over 4% in the past decade. Despite having less than 4% of the world's agricultural land and freshwater resources, the country provides food security for 18% of the global population and 15% of its livestock. It is the largest producer of millets, spices, milk, and pulses and the second-largest producer of rice, wheat, and fruits and vegetables. India is also promoting climate-resilient and sustainable farming, with a growing focus on natural and organic agriculture. The government allocates 10-11% of its annual budget to agriculture and related sectors. A key part of India's agri-tech transformation is the development of digital public infrastructure, including the AgriStack initiative, which aims to drive data-driven decision-making and financial inclusion for farmers.

According to Hon'ble Prime Minister Shri Narendra Modi Ji, the foreign funded environment activists are receiving crores of rupees to harm Indian agriculture. Ms. Sunita Narain of the Centre for Science and Environment (CSE) had received Rs. 700 crores during 2006-2017, reveals a well-documented record.

चेयरमैन की कलम से



दीपक शाह

भारत ने कृषि उत्पादन क्षमता और खाद्य सुरक्षा में उल्लेखनीय प्रगति की है, लेकिन जलवायु परिवर्तन और संसाधनों की कमी जैसी चुनौतियाँ अब भी बनी हुई हैं। गेट्स फाउंडेशन के साथ विस्तारित साझेदारी का लक्ष्य विकास को स्थायी रखने और लौचिकता बनाने के लिए टेक्नोलॉजी और इनोवेशन (नवोन्मेष) का लाभ उठाना है।

कृषि और किसान कल्याण मंत्री शिवराज सिंह चौहान ने १७ मार्च, २०२५ को नई दिल्ली में बिल गेट्स से मुलाकात के बाद घोषणा की कि बिल एंड मेलिंडा गेट्स फाउंडेशन और भारत

सरकार कृषि, ग्रामीण विकास, खाद्य सुरक्षा, आर्टिफिशियल इंटेलिजेंस और प्रौद्योगिकी के आदान-प्रदान सहित प्रमुख क्षेत्रों में अपना सहयोग बढ़ा रहे हैं।

यह साझेदारी भारत में फाउंडेशन द्वारा किए गए मौजूदा काम पर आधारित है, जिसमें डिजिटल कृषि, जैव प्रौद्योगिकी और जलवायु-लौचिकतापूर्ण खेती में पहल शामिल हैं। चौहान ने कहा, “आज बिल गेट्स और उनकी टीम के साथ कई महत्वपूर्ण मुद्दों पर चर्चा हुई”, यह भी देखा गया है कि गेट्स फाउंडेशन समाज के उत्थान के लिए काम करते हुए कृषि और ग्रामीण विकास में वैश्विक श्रेष्ठ पद्धतियों को साझा करता है। उन्होंने विशेष रूप से एआई-संचालित कृषि, एप्री-फिनटेक और क्लाइमेट-स्मार्ट टेक्नोलॉजियों में सहयोग को गहरा करने की संभावनाओं पर जोर दिया।

भारत के कृषि क्षेत्र ने पिछले दशक में ४% से अधिक की औसत वार्षिक वृद्धि दर बनाए रखी है। दुनिया की ४% से भी कम कृषि भूमि और मीठे पानी के संसाधनों के बावजूद, देश वैश्विक आबादी के १८% और अपने पशुधन के १५% के लिए खाद्य सुरक्षा प्रदान करता है। यह बाजरा, मसाले, दूध और दालों का सबसे बड़ा उत्पादक है और चावल, गेहूं और फल और सब्जियों का दूसरा सबसे बड़ा उत्पादक है। भारत जलवायु के प्रति सहनशील और टिकाऊ कृषि को भी बढ़ावा दे रहा है, जिसमें प्राकृतिक और जैविक कृषि पर अधिक ध्यान दिया जा रहा है। सरकार अपने वार्षिक बजट का १०-११% कृषि और संबंधित क्षेत्रों को आवंटित करती है। भारत के एप्री-टेक परिवर्तन का एक प्रमुख हिस्सा डिजिटल पब्लिक इंफ्रास्ट्रक्चर का विकास है, जिसमें एप्रीस्टैक पहल शामिल है, जिसका उद्देश्य डेटा-आधारित निर्णय लेना और किसानों के लिए वित्तीय समावेशन को बढ़ावा देना है।

माननीय प्रधानमंत्री श्री नरेंद्र मोदी जी के अनुसार, विदेशी वित्त पोषित पर्यावरण कार्यकर्ताओं को भारतीय कृषि को नुकसान पहुंचाने के लिए करोड़ों रुपये मिल रहे हैं। सेंटर फॉर साइंस एंड एनवायरोनमेंट (सीएसई) की सुश्री सुनीता नारायण को २००६-२०१७ के दौरान रु.७०० करोड़ प्राप्त हुए हैं, यह एक अच्छी तरह से डॉक्यूमेंटेड रेकॉर्ड से पता चलता है।



FROM THE DESK OF THE CHAIRMAN EMERITUS

Those in the know say that according to the official records, several Indians have been acquiring fake PhD degrees by getting money from abroad. This misdeed has been on the rise in recent times. Coupled with this misdemeanour is the fact that a handful of countries from the European Union (EU) are doling out hush money to several Indian NGOs to spread canards and rumours about Indian Agriculture and the Indian agrochemical industry.

Rajju Shroff

One glaring example is that Ms. Sunita Narain, Director General of Centre for Science and

Environment got Rs. 700 crores in the garb of donation to use her Down To Earth magazine to malign Indian Agriculture and the Indian agrochemical industry. She published cooked up stories in her magazine that every day one train full of cancer patients from Bhatinda in Punjab travelled to Bikaner in Rajasthan for treatment. According to official data on cancer, Punjab has got 97.5 incidences of cancer per 1 lakh people. So, the figures quoted by Sunita Narain don't corroborate with the data (even 1 or 2 cancer patients going to Bikaner from Bhatinda by train are utterly bunkum).

Next, there is a pack of lies circulated by environmental lobbyists about breast milk containing pesticides. It is wholly untrue that all the toxic chemicals lactating mothers ingest accumulate in their fat, or in breast milk. Except in rare cases, breastfeeding is the healthiest option for the baby (and the mother, because breastfeeding reduces the risk of breast cancer later in life). Hence, the so-called environmental evangelists should stay away from scaremongering and junk science to defend their whimsical decisions.

That Indian farmers use excessive pesticides is a myth. The reality is that India ranks 2nd in the world in agricultural production after China, but it ranks 12th in pesticide use. Most other countries including the US and those in the EU such as France, Spain, Italy and Germany use more pesticides than India on per unit area and per unit of output basis (Source: FAOSTAT).

Academic and scientific misconduct is a threat to intellectual integrity that hinders the progress of further research. Such incidences not only question the credibility of the community but also poses to be a great threat to scientific integrity, which must be stopped at any cost.



Rajju Shroff



रज्जू श्रॉफ

चेयरमैन एमेरिटस की कलम से

जानकारों का कहना है कि आधिकारिक रेकॉर्ड के अनुसार, कई भारतीय विदेश से पैसे लेकर फर्जी पीएचडी डिग्री हासिल कर रहे हैं। यह गलत काम हाल के दिनों में बढ़ रहा है। इस गलत कार्य के साथ यह भी सच है कि यूरोपियन यूनियन (ईयू) के कुछ देश भारतीय कृषि और भारतीय एग्रोकेमिकल इंडस्ट्री के बारे में झूठी खबरें और अफवाहें फैलाने के लिए कई भारतीय एनजीओ को छिपे तौर से पैसे दे रहे हैं।

एक बड़ा उदाहरण यह है कि सेंटर फॉर साइंस एंड एनवायरोनमेंट की डायरेक्टर जनरल सुनिता नारायण को भारतीय कृषि और

भारतीय एग्रोकेमिकल इंडस्ट्री को बदनाम करने के लिए अपनी डाउन टू अर्थ मैगज़ीन का इस्तेमाल करने के लिए अनुदान के नाम पर रु.700 करोड़ मिले हैं। उन्होंने अपनी पत्रिका में मनगढ़त कहानियाँ प्रकाशित की हैं कि पंजाब के भटिंडा से हर दिन केंसर के मरीज़ों से भरी एक ट्रेन इलाज के लिए राजस्थान के बीकानेर जाती है। केंसर पर आधिकारिक डेटा के अनुसार, पंजाब में प्रति १ लाख लोगों पर केंसर के १७.५ मामले हैं। इसलिए, सुनिता नारायण द्वारा बताए गए आंकड़े डेटा से मेल नहीं खाते (भटिंडा से बीकानेर ट्रेन से १ या २ केंसर मरीज़ों का जाना भी पूरी तरह से बकवास है)।

इसके अलावा, पर्यावरणवादी लॉबिस्टों द्वारा स्तन के दूध में कीटनाशक होने के बारे में झूठ का पुलिंदा लोगों के सामने परोसा गया है। यह पूरी तरह से झूठ है कि स्तनपान कराने वाली माताएं जो सभी जहरीले रसायन खाती हैं, वे उनके फैट में या स्तन के दूध में जमा हो जाते हैं। दुर्लभ मामलों को छोड़कर, स्तनपान बच्चे के लिए सबसे सेहतमंद विकल्प है (और माँ के लिए भी यह सेहतमंद है, क्योंकि स्तनपान जीवन में आगे चलकर स्तन केंसर के जोखिम को कम करता है)। इसलिए, तथाकथित पर्यावरण के प्रचारकों को अपने मनमाने फैसलों का बचाव करने के लिए डर फैलाने और बकवास विज्ञान से दूर रहना चाहिए।

यह एक भ्रामक बात है कि भारतीय किसान बहुत ज्यादा कीटनाशकों का इस्तेमाल करते हैं। सच्चाई यह है कि भारत कृषि उत्पादन में चीन के बाद दुनिया में दूसरे स्थान पर है, लेकिन कीटनाशकों के इस्तेमाल में यह १२वें स्थान पर है। अमेरिका और ईयू के देशों जैसे फ्रांस, स्पेन, इटली और जर्मनी सहित ज्यादातर दूसरे देश प्रति यूनिट क्षेत्रफल और प्रति यूनिट उपज के आधार पर भारत से ज्यादा कीटनाशक का इस्तेमाल करते हैं (स्रोत: एफएओएसटीएटी)।

शैक्षणिक और वैज्ञानिक कदाचार बौद्धिक सत्यनिष्ठा के लिए एक खतरा है जो आगे के शोध की प्रगति में बाधा डालता है। ऐसी घटनाएं न केवल समुदाय की विश्वसनीयता पर सवाल उठाती हैं बल्कि वैज्ञानिक प्रामाणिकता के लिए भी एक बड़ा खतरा पैदा करती हैं, जिसे किसी भी कीमत पर रोका जाना चाहिए।


रज्जू श्रॉफ

EDITOR'S NOTE



Just by paying a few thousand rupees, Sameer (name changed to protect his identity), a young man living in the by lanes of Gurgaon, which is part of the National Capital Region (NCR), can get almost any research paper published in a Scopus-indexed journal. He and umpteen others like him are eager beavers in the Indian academia trapped in the vicious cycle of publishing fake Research papers to flaunt their deceitful CVs masquerading as PhD scholars in the Indian academia, which has scant resources to nab them in the act. A burgeoning scam has recently come to light in India where deceptive entities sell fake honorary doctorate degrees to unscrupulous individuals in exchange for moolah. These entities, disguised as prestigious institutions, exploit the aspirations of rogues seeking to camouflage their academic credentials with fraudulent degrees. Investigations have unearthed that several such entities, including the **Legendary Peace Awards Council, Well Educational and Peace Council** and the **American Merit Council**, among others have been promoting their so-called honorary doctorate programmes on social media platforms such as Instagram, Facebook and X (formerly known as Twitter). These entities claim that the honorary degrees are officially sanctioned by the Government of India and the University Grants Commission (UGC), when in fact, they are entirely illegitimate. They are known to offer honorary doctorate degrees for a fee ranging from the range of Rs. 15,000 to Rs. 45,000, to be precise.

Fraud represents a grave danger in any society. The falsification of master's and PhD degrees is particularly destructive, as at this level, academics are supposed to represent the elite institutions and are entrusted with leading society toward development, progress and growth in all walks of life. We are confronted with a crime that destroys the present and the future, undermining all meanings of competence, diligence, merit and fair competition. The perpetrators of both the crimes, the ones selling the fake honorary doctorate degrees and the buyers of the same degrees, are both partners in crime and should be made to pay for their shady deeds by spending 8 to 10 years behind bars, besides paying a penalty of Rs. 1 lakh.

Amitabha Laskar
Managing Editor

संपादक के विचार



कुछ हजार रुपये देकर, समीर (पहचान छिपाने के लिए नाम बदला गया), जो राष्ट्रीय राजधानी क्षेत्र (एनसीआर) के गुरुग्राम की गलियों में रहने वाला एक युवा है, किसी भी रिसर्च पेपर को स्कोपस-इंडेक्स्ड जर्नल में प्रकाशित करवा सकता है। वह और उसके जैसे अनगिनत अन्य लोग भारतीय शिक्षा जगत में ऐसे हैं जो नकली रिसर्च पेपर प्रकाशित करके अपने धोखाधड़ी भरे सीवी दिखाने के दुष्क्र में फंसे हुए हैं, जो भारतीय शिक्षा जगत में पीएचडी स्कॉलर होने का दिखावा करते हैं, जिसके पास उन्हें रंगे हाथों पकड़ने के लिए बहुत कम संसाधन हैं। भारत में हाल ही में एक बढ़ता हुआ घोटाला सामने आया है जहाँ धोखेबाज संस्थाएँ बेर्इमान लोगों को पैसे के बदले नकली मानद डॉक्टरेट डिग्रियाँ बेचती हैं। ये संस्थाएँ, प्रतिष्ठित संस्थानों के रूप में भेस बदलकर, उन धोखेबाजों की आकांक्षाओं का फायदा उठाती हैं जो अपनी शैक्षणिक योग्यताओं को फर्जी डिग्रियों से छिपाना चाहते हैं। जांच में पता चला है कि लेजेंडरी पीस अवाइर्स काउंसिल, वेल एजुकेशनल एंड पीस काउंसिल और अमेरिकन मेरिट काउंसिल सहित कई ऐसी संस्थाएँ इंस्टाग्राम, फेसबुक और एक्स (जिसे पहले ट्रिटर के नाम से जाना जाता था) जैसे सोशल मीडिया प्लेटफॉर्म पर अपने तथाकथित मानद डॉक्टरेट कार्यक्रमों को बढ़ावा दे रही हैं। ये संस्थाएँ दावा करती हैं कि मानद डिग्रियाँ भारत सरकार और विश्वविद्यालय अनुदान आयोग (यूजीसी) द्वारा आधिकारिक तौर पर स्वीकृत हैं, जबकि वास्तव में, वे पूरी तरह से अवैध हैं। सटीक रूप से कहें तो वे मानद डॉक्टरेट डिग्री रु. १५,००० से रु. ४५,००० तक की फीस पर देती हैं।

धोखाधड़ी किसी भी समाज के लिए एक गंभीर खतरा है। मास्टर्स और पीएचडी की डिग्रियों का फर्जीवाड़ा विशेष रूप से विनाशकारी है, क्योंकि इस स्तर पर, शिक्षाविदों से प्रतिष्ठित संस्थानों का प्रतिनिधित्व करने और जीवन के सभी क्षेत्रों में समाज को विकास, प्रगति और उन्नति की ओर ले जाने की उम्मीद की जाती है। हम एक ऐसे अपराध का सामना कर रहे हैं जो वर्तमान और भविष्य दोनों को नष्ट कर देता है, जो योग्यता, लगन, बुद्धिमत्ता और निष्पक्ष प्रतिस्पर्धा के सभी मायनों को कमजोर करता है। दोनों अपराधों के दोषी, नकली मानद डॉक्टरेट डिग्री बेचने वाले और उन डिग्रियों को खरीदने वाले, दोनों अपराध में भागीदार हैं और उन्हें अपने गलत कामों के लिए ८ से १० साल जेल में बिताने के अलावा रु. १ लाख का जुर्माना भी देना चाहिए।

अमिताभ लस्कर
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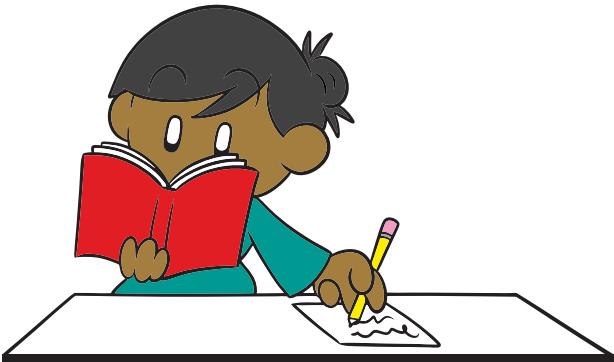


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Content Highlights





Readers Write

We love hearing from you because you constantly motivate us to excel.

Here are a few of your letters and e-mails:

Dear Sir/Madam,

India's agricultural success is often overshadowed by a wave of misinformation surrounding the use of pesticides. From exaggerated claims about residues in food to unfounded links with cancer and suicides, these myths continue to shape public perception and policy decisions, frequently without scientific basis. As India strives toward self-reliance in food production and exports, it becomes crucial to separate fact from fiction and present data-backed realities. The article, titled, ***Demystifying Myths about Pesticides in India*** by Deepak Shah aims to debunk the most persistent myths about pesticide use in India and highlight the country's responsible and efficient practices in crop protection.

Nazneen A. Shaikh
Hyderabad, Telangana

Dear Sir,

As the author of the article, titled, ***Changing India's Agrochemical Landscape: Innovation and R&D are the two driving forces***, Rajju Shroff explained the topic succinctly and clearly.

He summarises several critical points by pointing out that Innovation and Research and Development (R&D) are fundamentally transforming India's agrochemical landscape by driving a strategic shift from generic products to the development of novel, sustainable, and technology-driven solutions and this evolution is positioning India as a global innovation hub and a key exporter in the agrochemical sector.

Mangesh S. Ranadive
Mumbai

Sir,

The article, titled, ***Stringent norms for max pesticide residue limit in food items in India: FSSAI*** by Archana Nair in the last issue of Crop Care is an eye opener. The Government of India adopted stringent norms for maximum pesticide residues limit in food items. The clarification comes amid a ban imposed by the Hong Kong food regulator on certain spice mix of two leading Indian brands MDH and Everest on alleged presence of pesticide Ethylene Oxide in their samples. The Indian Government on May 5, 2025, asserted that India has one of the most stringent norms for pesticides residues in food items and rejected reports suggesting that food regulator FSSAI allows high level of residues in spices and herbs.

Asha G. Hazarika
Guwahati, Assam

Dear Editor,

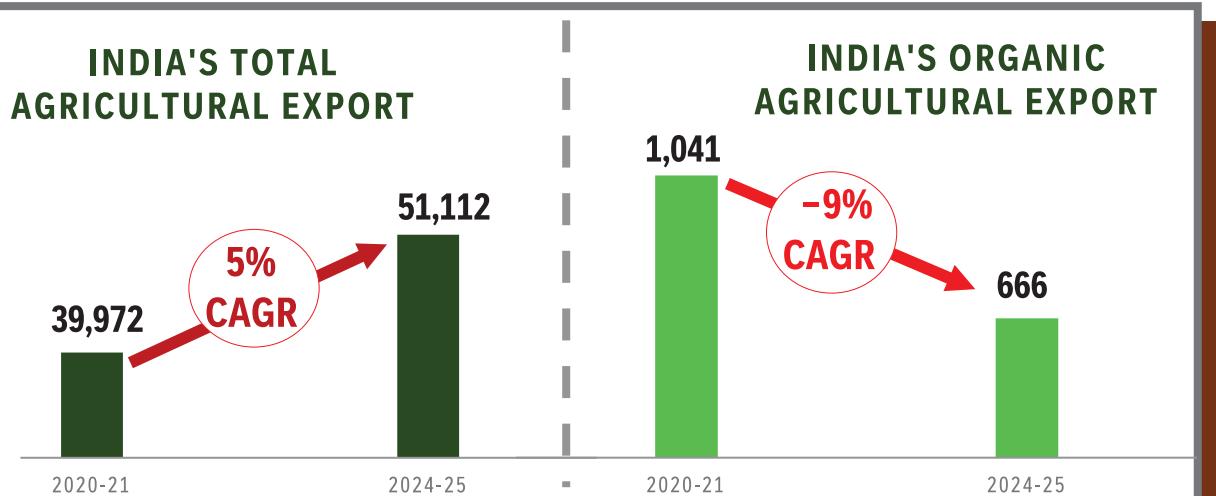
In the article, titled, *Organic Food: Fact, or just a fad?*, the author Amitabha Laskar probes deep to arrive at a decisive conclusion. The term organic refers to elements in the production process of the food. To be classed as organic, there must be no use of chemical fertilizers, pesticides, or fungicides when growing crops, and livestock must be free range and not treated with any growth hormones. It also rules out any use of genetic modification of products. Whilst these measures may seem to be unequivocally good for health and the environment, the truth is much more complicated.

Cynthia F. Fernandes

Panaji, Goa

What is ailing our organic export?

Interesting Information



Source: APEDA and Ministry of Commerce (Accessed on 6th August 2025)

Unit: \$ mn

- While India's agricultural export is growing at a healthy CAGR of 5%, India's organic products export show a negative CAGR of -9% in the last 5 years.
- Available information shows fraudulent claims about organic products are rampant leading to rejections and reputational damage.

The accreditation of the Sikkim State Organic Certification Agency (SSOCA) was suspended following a major scandal in 2024. Remember, Sikkim is considered to be **100%** organic state.

In organic certification, making a false claim with an intent to deceive /defraud should attract criminal proceedings – not just civil penalties.

Our National Programme for Organic Production (NPOP) introduced 25 years ago lacks teeth to criminally punish the fraudsters.

In 2019, three individuals were imprisoned in the USA for fraudulently marketing non-organic crops as certified organic.

Is there any authority in India vested with powers to take criminal action against false claims about organic products?
NO
This must be addressed.

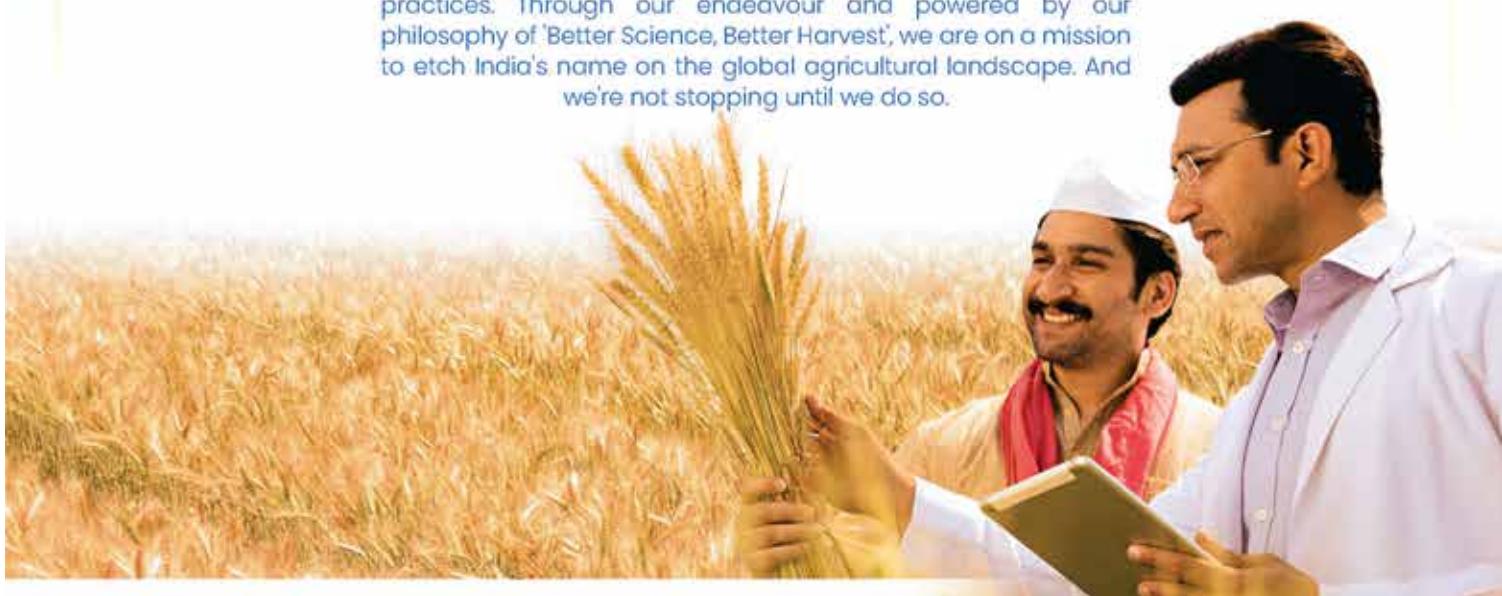


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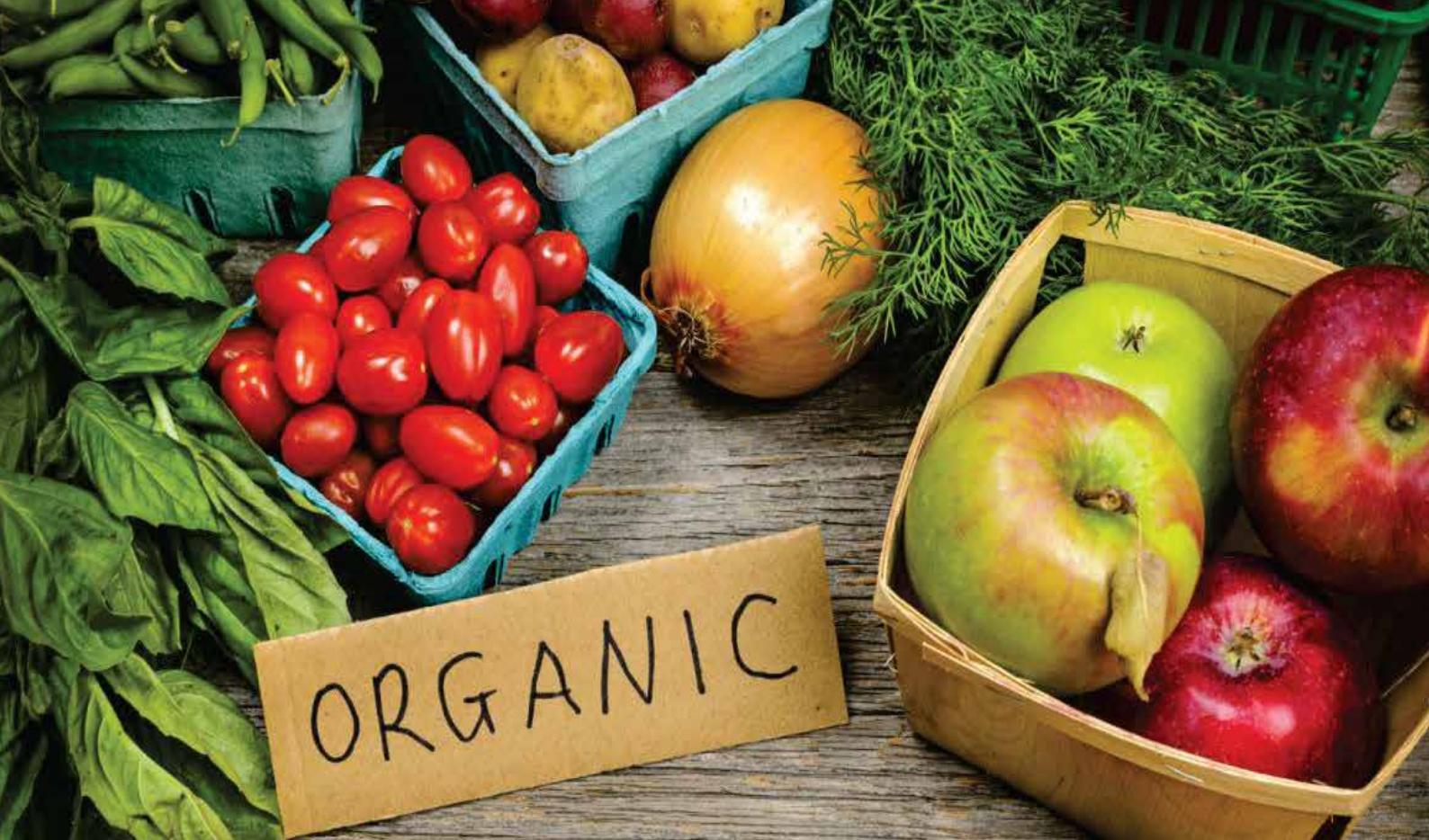


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Stop buying organic food, if you really want to save our Earth...

- Rajju Shroff

Chairman Emeritus, CCFI



Contrary to the widespread propaganda unleashed by a handful of organic food fanatics across the globe, organic farming is certainly not the best way to farm from an environmental point of view. Organic farming could be harmful for Planet Earth as compared to conventional farming methods, because of the greater land use required and the methods involved therein.

The food sold at our nearest supermarket is changing and how. Organic fruits and vegetables are flying off the shelves faster than ever before as buying them makes us feel that we're doing our wee bit for environmental conservation. But the truth is just the opposite, if you're open to logic. There are no health benefits from eating organic food. And, it is likely worse for the environment as well. An organic label throws our skepticism and common sense out of the window. Consumers in one study were given two sets of absolutely identical food items, with one set marked "organic" and the one was unmarked. They declared that the food labelled as "organic" was lower in calories and more nutritious, and were willing to pay 16 to 23% more. It's called the "health halo" effect.

In 2012, the Stanford University's Center for Health Policy conducted the largest comparison of four decades worth of research comparing organic and conventional food. Their expectation to find evidence that organic foods were nutritionally superior to conventional foods went for a toss. Want to know the

conclusion of the report? It reads: **Despite the widespread perception that organically produced foods are more nutritious than conventional alternatives, we did not find robust evidence to support this perception.**

Organic farming: Enemy of the People and the Environment

According to research reports, farming is still the second biggest source of greenhouse gas emissions (behind heating and electricity), with organic farming doing more environmental damage than conventional farming – not only do they produce more emissions, but because of the lower yield of crops, organic farms require more land. In the tropical regions, this means cutting down more rainforests, affecting not only greenhouse gas emissions but wildlife, too!

The price of organic vegetables compared to that of non-organic vegetables is more than 200% in India.

Norman Borlaug was an American agronomist who led initiatives worldwide that contributed to the extensive increases in wheat production termed as the Green Revolution in India during the late 1960s. His famous words, **"There are 6.6 billion people on the planet today. With organic farming we could only feed 4 billion of them. Which 2 billion would volunteer to die?"**

Research findings also indicate that buying from local organic farmers doesn't guarantee a reduced carbon footprint than food flown from thousands of miles, as it all depends on the production process.

The smart answer, according to the New Scientist magazine, could actually lie in GM (Genetically Modified) crops, which may be reducing green gas emissions even though they weren't originally meant to do so. Now, trials are planned for GM crops that can boost photosynthesis and boost yields by 15 to 20%. A bitter truth for the organic food aficionados to swallow, undoubtedly.



In 2011, an E. coli O104:H4 outbreak in Europe that was eventually attributed to the consumption of fenugreek sprouts grown at an organic farm in Germany was massive in terms of its devastation. Primary cases were associated with sprout consumption; secondary transmission was also documented. The E. coli outbreak resulted in 4321 cases, an unknown number of hospitalizations, at least 908 instances of hemolytic uremic syndrome, and at least 50 deaths. Cases were reported throughout the European Union and the United States. Five of the six cases residing in the United States had travelled to Germany during May 2011; the sixth case had contact with one of the other cases. The fenugreek sprout seeds had been imported into the European Union from Egypt.

The E. coli O104:H4 was particularly harmful as it was highly resistant to antibiotics and lacked a gene which had been the key in causing kidney damage. It had the ability to gather on the surface of the intestinal wall in a dense pattern, possibly enhancing the bacteria's ability to pump Shiga toxin into the body.

The E. coli which are responsible for the numerous reports of contaminated foods and beverages are those that produce Shiga toxin, so called because the toxin is virtually identical to that produced by *Shigella dysenteria* type 1. The best-known and also most notorious E. coli bacteria that produce Shiga toxin is E. coli O157:H7. Shiga toxin-producing E. coli (STEC) cause approximately 100,000 illnesses, 3,000 hospitalizations, and 90 deaths annually in the United States. Most reported STEC infections in the United States are caused by E. coli O157:H7, with an estimated 73,000 cases occurring each year. A study published in 2005 estimated the annual cost of E. coli O157:H7 illnesses to be \$405 million (in 2003 dollars), which included \$370 million for premature deaths, \$30 million for medical care, and \$5 million for lost productivity.



In 2012, more than 200 studies conducted at the Stanford University found very little evidence that organic food is actually more nutritional either, a terrible blow for anyone who has forced himself to go dieting on avocados and juice in a quirky and thoroughly depressing effort to shed a few kilos.

Idle fancy, not an ideal solution

According to research conducted by the New Scientific magazine, the report points to a key drawback of organic agriculture, which is typically less efficient and productive than conventional growing methods. That's a problem for the die-hard fans of organic farming because the world has a limited supply of arable land, a billion or so undernourished people, a growing population, an expanding middle class and therefore a humongous demand for affordable and nourishing food.

If, in fact, organic methods are less productive, scaling up the production of organic food at will require more land, contribute to deforestation and cost more than growing our food using conventional methods. This clearly suggests that organic farming methods are suitable only for the rich nations and can never feed the hungry world in a sustainable way. More a fad, than a workable idea.

सारांश

यदि आप सच में हमारी धरती को बचाना चाहते हैं तो जैविक आहार खरीदना बंद करें.

दुनिया भर में मुद्री भर ऑर्गेनिक खाने के शौकीनों द्वारा फैलाए गए व्यापक प्रचार के उलट, जैविक खेती निश्चित रूप से पर्यावरण की दृष्टि से खेती का सबसे अच्छा तरीका नहीं है। जैविक खेती मिट्टी के स्वास्थ्य और जैव विविधता के लिए बेहतर हो सकती है, लेकिन इससे अक्सर फसल की पैदावार कम होती है, जिससे उतनी ही मात्रा में खाद्यान्न पैदा करने के लिए ज्यादा जमीन की ज़रूरत होती है। जमीन के इस बढ़े हुए उपयोग से खासकर कुछ उष्णकटिबंधीय क्षेत्रों में, ज्यादा जंगल कटाई हो सकती है, और पारंपरिक खेती की तुलना में ग्रीनहाउस गैसों का उत्सर्जन भी बढ़ सकता है।





Truth about GM CROPS



S. Ganesan

Editorial Advisor, CCFI

What are Genetically modified (GM) crops?

1

GM crops are plants whose genetic material has been modified using genetic engineering technique.

2

This process involves inserting specific DNA sequence (genes) into plants genome. The gene could be from another plant, animal or micro-organism.

3

Well known GM crops globally include Bt. cotton, GM corn, Soyabean, Canola etc.

4

The “Bt.” in GM cotton stands for the bacterium “Bacillus thuringiensis” (Bt.). The toxin produced by “Bt.” renders the cotton plant resistant to select bollworms.

5

Bt. cotton is the only GM crop allowed for cultivation in India.

What are the claimed benefits GM crops?

- Increased resistance to insect pests.
- Herbicide tolerance.
- Drought resistance.
- The claim of “yield increase” is notably absent. It is illegal to make any such label claim for GM crops. Remember, GM technology is not, by itself, a yield enhancing technology.
- Yield is an outcome influenced by numerous factors, including genetics, environment, and management practices. GM technology is one tool among many that can be used to influence these factors. That's all to it.



Does GM technology increase the inherent yield potential of the seeds?

- GM crops do not enhance the inherent yield potential of the seeds/plants.
- GM crops can only indirectly contribute to better yields by reducing crop losses due to pests, diseases or weeds - similar to application of pesticides and weedicides.
- It is the traditional breeding including hybrid technology that increases the inherent yield potential of crops due to “heterosis” (hybrid vigour).
- Traditional breeding techniques continue to be a major growth driver of crop yields and agricultural production.
- The claim that GM technology consistently increases the crop yield is not supported by evidence.

Bt. cotton yields in India.

Year	India's Cotton Yield (Kgs/Ha)
2014-15	513
2015-16	459
2016-17	542
2017-18	500
2018-19	449
2019-20	460
2020-21	451
2021-22	428
2022-23	443

- The yield of Bt cotton in India peaked in 2016-17 and shows a steady decline since then. The present average yield of Bt. cotton in India is **15%** less than what it was a decade ago.



Source:
Cotton Corporation of India
(Accessed on 23rd July 2025)





- In 2010-11, India ranked **25th** globally in cotton yield. Now the rank has slipped to **36th** which is far below than countries such as Benin, Bangladesh, Cameroon, Ethiopia, Iran, Pakistan, Sudan, etc.
- India has **about 40%** of cotton global acreage but only **about 20%** of the global production.
- Introduction of Bt. cotton has not helped India achieving “fibre security” for our textile mills. India's import dependency has increased in recent years
- Atmanirbhar Bharat in cotton is elusive, although India has the largest area under cotton, globally (**11 mn hectares**).

Are there examples of non-GM crop varieties outperforming GM ones? Yes

a) Yield of Bt. Brinjal in Bangladesh vs Brinjal in India (non-Bt.)

Country	Five-year average yield (2019-2023)
Bangladesh	11 tonnes/ha
India	18 tonnes/ha

Source:
FAOSTAT (Accessed on 23rd July 2025)



- India's non-Bt. brinjal yield is **64%** higher than Bt. brinjal yield in Bangladesh.

b) Yield of Bt. Rapeseed in Canada and USA vs Rapeseed in EU (non-Bt.)

Country	Five-year average yield (2019-2023)
Canada	2.1 tonnes/ha
USA	1.9 tonnes/ha
EU	3.1 tonnes/ha

Source:
FAOSTAT (Accessed on 23rd July 2025)



- EU's non-Bt. Rapeseed yields is over **50%-60%** higher than Bt. Rapeseed yields in Canada and the USA.



Has introduction of GM technology reduced pesticide use globally? No

- Widespread adoption of GM crops, particularly cotton, soybeans, corn, and canola, began in 1996.
- The size of global agrochemicals market was estimated to be **\$35 billion** in 2000. By 2024, it expanded exponentially to **\$75 billion**. (Source: S & P Global report)
- The increase is over **100%** led by volume growth.
- Contrary to the popular perception, the consumption of weedicides, insecticides and fungicides significantly increased after the introduction of GM crops.
- It's important to know that the major GM seed companies are also the major producers of pesticides. Both businesses complement each other.

Pesticide use (tonnes) in major GM crops growing countries

Year	Argentina	Australia	Brazil	USA
2005	138,669	34,310	233,367	409,730
2010	235,739	42,169	360,735	374,818
2015	203,807	50,922	497,626	423,475
2020	241,520	120,949	685,746	439,593
2023	262,507	182,264	800,652	429,501
Growth	89%	431%	243%	5%

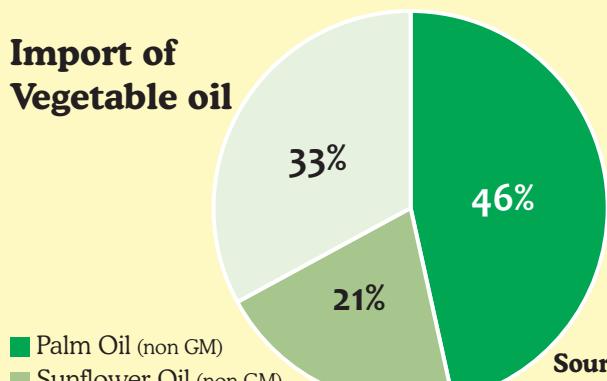
Source:
FAOSTAT
(Accessed on
23rd July 2025)



- Land in the US farms has decreased by about **74.7 million acres** between 2000 and 2023. In spite of this reduction, the pesticides consumption in the US shot up.

Does India require GM for oilseeds to reduce import dependence?

- India is a net importer of vegetable oils. India's edible oil import basket shows that the share of GM crops (Soybeans) forms a minor share as shown below;

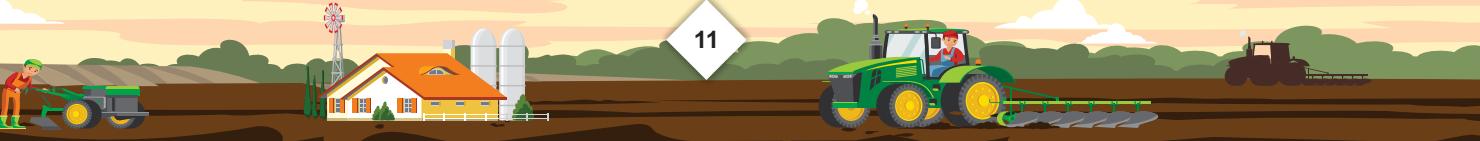


Source:
The Solvent Extractors' Association of India
(Accessed on 23rd July 2025)

• Palm oil and Sunflower oil (non-GM) occupy about **70%** of India's vegetable oil import.

• This means only **30%** comes from GM source.

• India has begun the cultivation of oil palm in a big way. This should reduce the import.



India's production of oil seed in the last 10 years has grown more than 70%.

Year	Oilseed production (million tonnes)
2015-16	25
2016-17	31
2017-18	31
2018-19	32
2019-20	33
2020-21	36
2021-22	38
2022-23	41
2023-24	40
2024-25	43
Growth Rate	72%

Source:

Ministry of Agriculture & Family Welfare
(Accessed on 23rd July 2025)



During this period, the production of Bt cotton declined by **11%** from **332 lakh bales** to **294 lakh bales**.

Going by the experience of Bt. cotton in India, it is naïve to believe that introduction of GM soyabean, would by default, increase the domestic production.

Final words

Failure of Bt. cotton in India is as glaring as the full moon.

Ignoring this, lobbyists are busy pedalling GM technology for other crops in India like maize, soybean, mustard, etc. This will only increase foreign monopoly.

Remember, GM technology is not, by itself, a yield enhancing technology.

The purpose of this advocacy paper is to deliver a strong caution on the strength of solid facts. GM technology is not a panacea.



Trust of million Farmers



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Did you know that the organic foods you consume are more harmful than the non-organic ones in India?

- Rajju Shroff

Chairman Emeritus, CCFI



The fierce fanaticism displayed by the green lobbyists about the superiority of organic crops over conventionally grown ones during the past few decades has created more controversies than solutions. Besides, the constant propaganda about all organic crops being grown without using chemical pesticides is a big hogwash by a rabid band of eco-terrorists until an initiative by the Crop Care Federation of India (CCFI) proved that they were resorting to blatant lies.

Unless you're a qualified nutritionist, it is impossible trying to decode the cleverly concocted terms which food marketers use to label organic foods. While you may think that the term "100% Organic" label speaks volumes about how healthy they are, well my suggestion to you is, think before you buy...

The term: 100% Organic; where do we find this label?

On the packs of fruits, vegetables, poultry items, meats, eggs, yoghurt, food grains, and tea available at the supermarkets and certain pockets of vegetable and fruit markets and at select outlets.

What does "Organic Food" mean?

Organic food is a category of food, which, in its natural form, is grown without chemical fertilizers and pesticides and sold to the consumer without adding any chemical preservatives.

But mind you, they could come infested with insects and bacteria.

Unfortunately, a large section of the gullible consumers have been brainwashed by the die-hard advocates of the organic food that organically grown foods are safer and more nutritious; however, there are no corroborative data to demonstrate the clear superiority of organic over non-organic foods.

False propaganda about poisoned fruits and vegetables can really sway consumers into thinking that what they are buying and what they need to buy are two completely different things. Consumers should not get influenced by the hype. Although organic foods have created a mad rush by a few unscrupulous businessmen, much of it is overrated, so much so that even the word 'organic' has become a much maligned one. **To address this challenge, we need independent and impartial regulatory bodies to oversee the functions of keeping a strict vigil over "organic food" being sold in India.**



Organic Foods: Think before you buy

The media report in 2012 of the Stanford University study proving that organic food has no substantial benefit over conventionally grown food is a glaring example of how to give a befitting answer to the rumour mongers with vested interests in the guise of green activists.

The study or rather, the media report on it has created quite a bit of buzz. On the one hand, I face people upset with what they've heard and clearly hope that there's something wrong with the study. On the other hand, I am greeted by strangers at conferences and seminars pumping my hands and saying, "I told you so". So what's the truth? Is there something wrong with the study? Or is all that extra money people have been paying for organic produce, meat and dairy just a big unnecessary waste of their hard earned money?

The problem isn't with the Stanford University study. The problem is with the bottom line, which says: Save your money. **There's no difference between organic and non-organic food. The UK government is mulling over the withdrawal of subsidies for organic farming.**

Now, let me give you documentary evidence that Organic Foods are not all that safe as they have been made out to be.

According to the German Health Authorities, bean sprouts from an organic farm in Germany had killed 31 people and infected a thousand more, sometime from May to June in 2011, caused by an E. coli outbreak.

According to Dr. Reinhard Burger, President of the Robert Koch Institute, Berlin in Germany, the organic farm came under suspicion in the investigation as it did not use chemical fertilizers which made the crops more susceptible to contamination caused by the bacteria originating from the pig manure.

Whereas in the US, Dr. David Acheson of the Center of Food Safety and Applied Nutrition from the Department of Food and Drug Administration said that the FDA had clear evidence that bagged organic spinach was to be blamed for the outbreak of E. coli in California in September 2006, due to which several people fell ill and a large number of old people died.

This *E. coli* outbreak prompted several grocers across the US to pull off organic spinach from their shelves and later the authorities even confirmed that the deadly *E. coli* bacteria may have come from the cattle manure used as a fertilizer in the organic farm. Altogether 26 states were affected, with at least 200 cases of the disease being reported as of December 23, 2006. A number of deaths were confirmed to be from the outbreak source with an elderly woman in Wisconsin, a two-year old in Idaho, and an elderly woman in Nebraska. A fourth death of an elderly woman in Maryland is still under investigation to determine if it is linked to this outbreak. An organic produce company from California was identified as the source of this organic spinach and the cases of the strain of *E. coli* were linked to the organic spinach grown in this company.

So, I would love to hear what the fanatics of organic food have to say about this catastrophe. I dare them to bring to my notice a single death caused by consuming food grown conventionally. They know where to find me...



CCFI exposes the biggest lie about organic foods in India...

Despite paying as much as double the price, many health-conscious consumers who think they've paid for organic food have really been conned. **Information sourced by the Crop Care Federation of India (CCFI) under the Right to Information (RTI) Act proves that farms claiming to be organic regularly do use chemical pesticides to protect their crops, yet they market and sell their produce under the "100% Organic" label.**

The clinching evidence of this fraudulent practice saw the light of day after information from the Indian Agricultural Research Institute (IARI), New Delhi, revealed its findings on pesticide residues in organic vegetables. According to Dr. K. K. Sharma of the IARI laboratory, in the analysis, **33% of organic products sold in Delhi over the last two years contained pesticides. The organic vegetable samples were collected from one popular officially certified organic retail store in Delhi between January 2012 and October 2014.**

The lab analysis has only confirmed our age-old belief that **organic farms do use chemical pesticides to control pests and disease and yet pass on their products as organic in order to fleece the unsuspecting consumers.** In fact, the common vegetables which tested positive for pesticides included brinjal, okra, tomato, capsicum, chillies, cabbage, cauliflower, coriander and green peas and many of them were found to contain residue from multiple pesticides. Although the **Maximum Residue Limit (MRL)** is irrelevant to organic vegetables, it was genuinely shocking that the IARI's study showed that many **organic vegetables carried pesticide residues far above the MRL set for vegetables.** But, when the same IARI analyzed **92, 000 samples of conventional food from all over India** they found that the **pesticides residues in them were only in 1.5%, whereas pesticide residues appeared in 3% (Germany) and in 4% (the US).**

According to the study of Crop Care Federation of India it was found that most of the organic farmers claimed that they do not use chemical fertilizers and pesticides but use manure as fertilizers and cow urine as insecticides. But it was found that before harvest, to get rid of insects, they used stronger



chemical insecticide to kill the live insects as compared to the conventional farmers who control insects more scientifically. Which is why, organic food contained more pesticides residues.



I believe that my dear friend Aamir Khan who shares a love-hate relationship with the pesticide industry by pronouncing it guilty of serving poison on peoples' plates along with causing many of the ills associated to Indian agriculture while he brazenly eulogized the organic farming lobbyists comprising a handful of organic farmers, a controversial medical doctor, a data-manipulating chemist who is a proven plagiarist, a conniving environmental activist and an organic food promoter named, Smt. Vandana Shiva, on *Satyamev Jayate*, a Sunday morning primetime TV show to glorify

his image as a matinee idol turned social crusader against scores of nagging problems plaguing our society also must be hiding for cover after reading the screaming headlines in the mainline dailies which announced the dubious role of organic farming in defrauding the Indian masses. There's one particular environmental activist named Sunita Narayan heading the Centre for Science and Environment (CSE) who takes an active interest in publishing defamatory articles against the pesticide industry in Down to Earth, her magazine, which are filled with fabricated reports and utter falsehood.

After doing a background check on Sunita Narain, we found out that according to an Intelligence Bureau Report which has been made public, The Centre for Science and Environment (CSE), headed by her, had received over Rs 67.7 crore in foreign funds over the past few years, which is mainly used to malign the Indian pesticide industry and support the foreign donors.

Little wonder that she is the flag-bearer in the agitation against chemical pesticides and non-organic farming. Amen!

सारांश

क्या आप जानते हैं कि भारत में आप जो जैविक आहार खाते हैं, वह गैर जैविक आहार से ज्यादा हानिकारक है?

हर बार जब आप मंडी में मिलने वाले रु. ६० के देसी सेब की तुलना में बिंग बास्केट में अपनी कार्ट में एक सेब डालते हैं, तो आपके सामने एक पुराना सवाल आता है: जैविक या पारंपरिक? बढ़ती कीमतों और हर जगह पोषण के दावों के साथ, सवाल हमेशा बना रहता है: क्या जैविक ज्यादा सेहतमंद विकल्प है, या सिर्फ एक मार्केटिंग का हथकंडा है? भारत जैसे देश में, जहाँ अन्न सिर्फ पोषण नहीं बल्कि संस्कृति, परंपरा और बजट से भी जुड़ा है, यह सवाल और भी ज्यादा प्रासंगिक हो जाता है: क्या जैविक सच में आपकी सेहत के लिए बेहतर है, या हम सिर्फ चालाकी भरी मार्केटिंग और फैंसी पैकेजिंग के लिए ज्यादा पैसे दे रहे हैं?

एफएसएआई की हाल ही की एक सर्वेलांस रिपोर्ट में पाया गया है कि भारत में पारंपरिक उपज के एक चिंताजनक प्रतिशत में कीटनाशक अवशेष तय सीमा से ज्यादा हैं, खासकर पालक, धनिया और मेथी जैसी पत्तेदार सब्जियों में, जिन्हें हम कच्चा या हल्का पकाकर खाते हैं।

सभी जैविक फसलों को बिना केमिकल कीटनाशकों के उगाए जाने का लगातार प्रचार एक कटूरपंथी ब्रांड के इको-टेररिस्ट्स का सरासर झूठ है, जिसका पर्दाफाश क्रॉप केयर फेडरेशन ऑफ इंडिया (सीसीएफआई) ने किया है।



Reduction in GST of 18% on agrochemicals would benefit only MNCs & Trading Importers



Crop Care Federation of India (CCFI), which is the apex body consisting of the manufacturers and exporters of pesticides from India firmly believes that the present GST of 18% on pesticides is logically justified. If any reduction is implemented, then the Indian manufacturers will suffer as all the raw materials, containers, plant and machinery, PPE kits and major investments attract a steep GST of 18%, to be precise.

- **Harish Mehta**
Senior Advisor, CCFI

The result will be a major loss of revenue to the Government, besides being detrimental to local indigenous manufacturers.

Crop Care Federation of India (CCFI), which is the apex body consisting of the manufacturers and exporters of pesticides from India firmly believes that the present GST of 18% on pesticides is logically justified. If any reduction is implemented, then the Indian manufacturers will suffer humongous losses as all the raw materials, containers, plant and machinery, PPE kits and major investments attract a steep GST of 18%, to be precise.



AGROCHEMICALS

The organization argues that maintaining the current GST slab is essential to protect domestic manufacturers, ensure a level playing field, and avoid significant revenue losses for the government. The GST slab revision would be detrimental to Indian manufacturers who have the capability and capacity to manufacture quality pesticides locally, rather than depend on imports.

Reduction in GST is advantageous to Importers

Reducing the GST rate on imported pesticides to any lower slab would give the importers a distinct advantage, creating an uneven level playing field and undermining the government's 'Make in India' initiative.

The present GST structure generates revenue as under:

Tax Slab	GST Revenue
5%	7
12%	6
18%	73
28%	14

Source: GST average collection slab wise in India as per Shri Pankaj Chaudhary, Hon'ble Minister of State for Finance

As is evident, the major revenue contribution comes from the slab of 18%, whereas the other slabs are significantly lower in generating revenue.

This rate covers more than 70% of the revenue, which is subject to GST. Similarly, about 90% of the final products and services like security, safety, laboratory consumables, advertisement, PPE Safety Kits and publicity and promotional material are all sold by the industry across the value chain and are at this rate of 18% with the aim to provide proper utilization.

If the final product is taxed at a lower rate, then it would result in the accumulation of GST credit and the blockage of funds. While there is a refund mechanism, but it is quite cumbersome and time consuming. It would be difficult to get a refund easily and without additional effort, especially, by medium and smaller units. This will increase the cost of business.

Distortion due to Inverted Duty Structure

The aim is uniform balancing and seamless flow of credit and its utilization. It also avoids distortion due to “inverted duty structure” and problems related to adjustment of credit balance. It has been observed in the past that any relief in taxation once given remains unchanged, resulting in a continuous loss of revenue linked with growth in the industry. With surge in agrochemical imports touching Rs. 13,998 crores during the year 2023-24, the importers would have a distinct advantage against indigenous manufacturers. This needs to be curbed primarily by upward revision of custom duty for which we have already made our proposal to nodal ministries, including the Ministry of Agriculture & Finance.

Comparable GST on Agri-inputs

For your ready reference, the GST structure for other major agricultural inputs, are as under:

1. Bulk fertilizers & water-soluble fertilizers @ 5%
2. Tractors and farm equipment/machinery @18%
3. Micronutrients @ 18%
4. Seeds: Nil

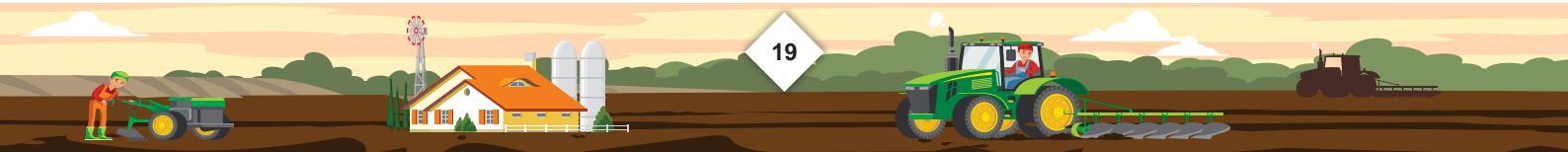
On fertilizers and on farm implements, the government gives subsidy to farmers and therefore there is no point in charging higher GST of 18% and then giving subsidy. This is the reason GST is kept lower in these cases, whereas this is not the case for pesticides, which have no element of subsidy.



Major Financial Loss to the Exchequer

Any reduction would result in loss of revenue to the Government estimated annually at Rs. 6400 crores on domestic sales and would cross Rs. 8,000 crores additionally, if import value is also considered. This would vary annually depending on the turnover of the indigenous agrochemical industry.

CCFI is of the view that the revenue generated can be utilized to better the agriculture infrastructure, warehousing, supporting R&D facility, etc., where Indian corporates have set up accredited laboratories for product innovation and cost reduction. All these steps would facilitate increasing the farmer's income with better realization of their produce, which would be in sync with the government policy of doubling the farmers' income.



Goods Sold inclusive of GST in Rural Areas

Even if the GST rates are reduced, the benefit is hardly passed on to the customers, as we have seen in majority of the products. All the retail products are MRP based and inclusive of GST. Therefore, it would only increase the profits for intermediaries, importers and middlemen.

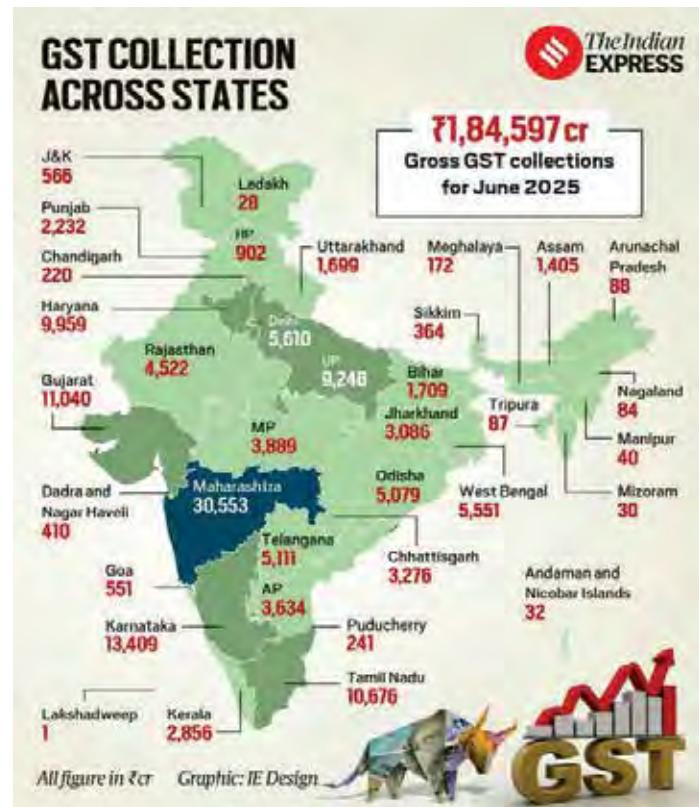
For the farmer who is the ultimate consumer, there would be no price differential. The usage of pesticide is dependent upon the recommendation by government/agricultural universities on different crop segments and not based on the pricing. Just assuming it being cheaper, one cannot use higher pesticides dosages than permitted. Therefore, it will not have a significant impact.

Moreover, also per hectare cost of pesticides is minimal, less than 1%, as an Agri-input in cultivation. The cost of pesticides is negligible as compared to Tractors & Farm equipment and Bulk Fertilizers.

It would be interesting to know the major states contributing to gross GST collections during June 2025 which had a record collection at ₹1,84,597 crores.

The states which lead in the agricultural and industrial sectors also continue to dominate the field of revenue generation.

In the absence of any duty differential in Technical (Raw material for formulation) and formulation imports (readymade finished product) imports, where Custom Duty presently on both at 10%, the MNC would prefer continued imports of formulated products by adjusting the GST benefits in the prices. The concept of anti-profiteering won't be applicable to imports. This would also be against the very purpose of increasing our Self-reliance/ Atmanirbhar Bharat in this Champion sector.



In that case, importers may not be interested in transferring the technology to country for manufacturing Technical/ intermediates. Indian farmers may be forced to bear the burden of higher cost of manufacturing in the west by way of imports unless indigenous corporates are encouraged for India to become a Manufacturing hub.

CCFI working towards rationalizing usage

Today the government is cautioning to rationalize the usage of (pesticides and fertilizers). Higher than required consumption may increase government scrutiny and have an adverse impact on the environment and ecology. The usage of pesticides should increase by covering more areas under cultivation as per recommended norms and creating awareness about their benefits. Merely reducing the GST rates is not the solution.

We strongly recommend that there should not be any change in GST rates for presently applicable at 18% for manufactured in India and should not be confused with importing lobby's game plan to make huge profits and to scuttle local manufacturing.





Ministry of Finance agrees to the CCFI proposal of retaining 18% GST on agrochemicals

The Indian Government has agreed to a major Goods and Services Tax (GST) reform in September 2025, moving to a simplified two-slab structure (5% and 18%) following the GST Council's decision, and not a specific proposal from the Crop Care Federation of India (CCFI) on general GST reform. CCFI did make a proposal to retain the 18% GST on agrochemicals, which the Indian Government has seemingly considered as the rate was kept unchanged for pesticides to avoid an inverted duty structure.

The miracle of modern agriculture

According to International Labour Organization (ILO),



in 1991 agriculture accounted for 43% of the total employment globally. This has dropped to 26% by 2023.



During this period, however, the global agricultural output increased from \$1.09 trillion to \$4.39 trillion.

Source : World Bank

In other words, even as the number of people engaged in agriculture globally declined by 40%, the agricultural output increased by 300%.



INDIA



the number of people engaged in agriculture decreased by 30% while the agricultural output increased by 700%.

Source : World Bank

Well, that's the miracle of modern agriculture.

Modern agriculture uses scientific knowledge (hybrid seeds, fertilizers and pesticides), advanced machines, digital management tools etc., to deliver continuous optimization of the output.

Modern agriculture has helped India to become the second largest in agricultural output in the world.

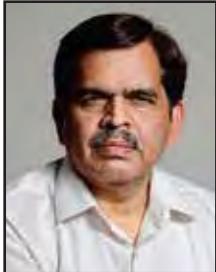
Modern agriculture feeds all including the naysayers!







Data Exclusivity: Anti Poor, Anti-Farmer, Anti-Self Reliance and Anti-Industry



Ashwani Mahajan

Data exclusivity refers to the period during which a manufacturer cannot rely on existing data to support the approval of a generic or similar product, writes the author **Ashwani Mahajan**.

Since the time of GATT (General Agreement on Trade and Tariff) negotiations, the issue of data exclusivity has been a bone of contention. There had been a consistent effort and lobbying by multinational corporations (MNCs) to include data exclusivity in the rule book, in one way or the other. But the nation had been able to thwart their efforts in this regard. When in the first instance, a bill was proposed to amend the Indian Patent Act, 1970, after the TRIPS agreement in the World Trade Organization (WTO), the clause of data exclusivity was opposed by the people at large, and parliamentarians and experts in particular, who were aware of its implications; and that clause was done away with, and various other provisions were included in the Indian Patent Act, 1970 (Amendment), to safeguard the interest of the people in view of the public health, protection of farmers and the industry by allowing compulsory licensing among others.

Data exclusivity is not a new term, but it has been gaining currency recently. We understand that patent (a form of Intellectual Property Right) grants exclusive rights to the patent holder for marketing and enjoying monopoly and royalty, if the rights are transferred to other parties. Though, data exclusivity and patents are two different concepts, if we go into the details, data exclusivity in effect extends the monopoly rights of the patent holders, beyond the period of patent protection.

What is Data exclusivity?

“Period of time during which an applicant cannot rely on the data in support of another marketing authorization for the purposes of submitting an application, obtaining marketing authorization or placing the product on the market, i.e., generics, hybrids, biosimilars cannot be validated by the Agency.”

We see, if provision of data exclusivity is introduced, then those manufacturers, awaiting to start production of items, after the expiry of patents, will not be able to do so, till the period of data protection or data exclusivity is not over. It has been seen that India, and its industry has been greatly benefitted by producing generic products, reducing the prices of pharmaceuticals significantly, sometimes, even to the extent of 90 to 95%. Data exclusivity is directly linked with blocking and delaying, the efforts of the Indian industry willing and waiting to manufacture generic products to make it available at affordable prices to the users, consumers, farmers and the industry.

Renewed Attempts to bring Data Exclusivity

Though the official stated that the stand of the government has been clear beyond doubt, that it has no intention to allow data exclusivity, in any form, the efforts by MNCs and foreign governments have been continuing consistently all these years. Though, for more than two decades, these efforts failed to garner much headway, recently there have been some renewed efforts to include data exclusivity by way of Free Trade Agreements (FTAs). This issue of allowing Data Exclusivity, though, is on the table for negotiations, is being opposed by the Indian Government. Unfortunately, some unsolicited attempts are also being witnessed in some quarters of the government, which is a cause of greater worries. One such effort is by way of an order, dated November 4, 2024, by the Department of Agriculture and Farmers' Welfare, Plant Protection Division. As per this order, a committee has been constituted to explore and examine the provisions related to data protection for agrochemicals. This order has been issued on the pretext, 'to study the requirements of regulatory data protection and global best practices on data protection with an intent to introduce new molecules and pesticides that have no alternatives aimed at protecting major crops from these losses due to new invasive pests and diseases'.

In 2019, India walked out of a mega FTA, called RCEP, where proposed provisions sought to extend pharmaceutical corporations' patent terms beyond the usual 20 years and would require data exclusivity that limits competition. Data exclusivity and extending patent beyond 20 years and other provisions were a cause for great concern with respect to public health, because of their potential adverse impact on access to affordable medicines.

In many of the FTAs on table, including the UK, the USA and the EU, this issue of data exclusivity is definitely, a cause of major concern for the Indian industry, especially, pharmaceutical and chemicals.

Official Position so far

On the issue of data exclusivity, the Official Position is reflected by various office memorandums including the one issued on September 1, 2015, about the proposed Pesticide Management Bill. The office memorandum states that the provision of data exclusivity for five years as proposed in the Pesticide Management Bill is TRIPS plus, and in case this provision is extended to agrochemicals, there will be pressure from the MNCs to extend the same to pharmaceutical products also. The order further states that data exclusivity in pharmaceuticals will not only delay the entry of generics by creating additional period of legal monopoly but will also make medicines unaffordable to patients.

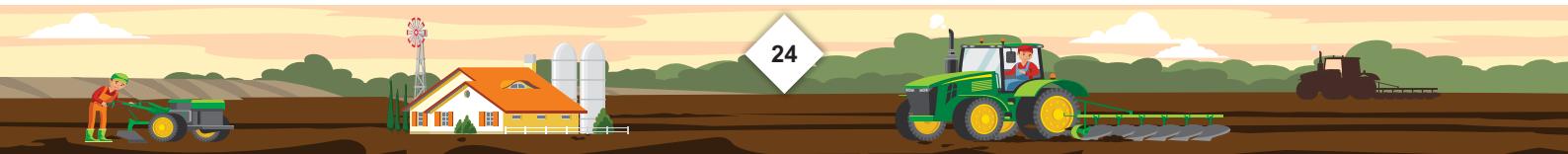
Parliamentary Committee Report December 2021 on PMB 2020

The Parliamentary Committee after taking due consideration of all the earlier committee reports and facts on Data protection / exclusivity and all the stakeholders' views into consideration, conclusively recommended that no data protection be given beyond the patent period, as the patent period of 20 years is sufficient for inventors to gain benefits. 'No Provision' of Data Protection for the introduction of New Molecules/ Products, will protect the domestic industry and the Indian farmers will be benefitted by the availability of cheaper pesticides.

If data protection/exclusivity allowed

The provision for data protection is fraught with major negative consequences, which our nation cannot afford. Let's see how the absence of data protection has benefitted people and domestic manufacturers, and the economy at large, and if we heed to the lobbying of MNCs and foreign governments, the negative consequences, we may face:

1. We know that the moment a patent expires, domestic pharmaceutical manufacturers can start manufacturing the product. We see that the price of the product comes down by up to 90 %, making it much more affordable for the consumers. We know that generic drugs are available at nearly 90% discount through the PM Jan Oushadhi Kendras, being run under the government scheme; and this has been made possible since data protection is not allowed to the patent holders, beyond the period of patent. If we allow data protection, then this benefit will vanish and consumers will be forced to pay much higher prices for medicines and other health products, and most of the people will be deprived of the medicines. A country with the prevalence of low incomes, can ill afford this kind of situation.
2. It's not just the prices of pharmaceuticals and other medical products, the prices of agrochemicals will also reduce significantly, with domestic production after the expiry of patents. For instance, the price of Acetamiprid 20%SP plummeted from Rs. 6380/Kg to nearly Rs. 800 per Kg (87% decline!). Similarly, we see that all erstwhile patented molecules, which are now being produced in India are priced lower between 60% and 90%.
3. If we allow data protection beyond the patent period, there is also the danger that the product may vanish from the market, or the same is not introduced, if the same was not produced till date. An order by the Ministry of Agriculture and Farmers' Welfare (MOAFW) also says that there are many molecules, patents of which have expired, and are not being produced. Now these molecules can easily be introduced, if the data protection is absent.
4. Recently, there has been yet another attempt by the patent holders of biological medicines to block the generic versions (biosimilars), by extending their patents internationally. However, in India, Article 3(d) doesn't allow evergreening of patents. But if provision of data protection is made, it can delay availability of biosimilars, which are generic versions of biologicals. A delay or the non-availability of biosimilars can deprive people suffering from incurable diseases with affordable treatment.





Parijat Industries (India) Limited continues to strengthen its product portfolio with a robust herbicide range, crafted to deliver effective weed control and aim to support farmers in achieving healthier, high-yielding crops.

LUKARIO



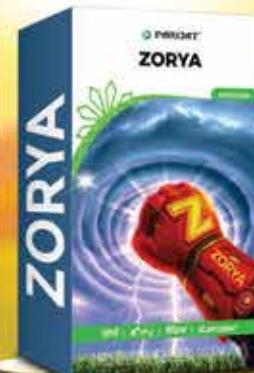
- Superior Resistance Management
- Precise Control
- Excellent Tank Mixability



ZORYA



- Control On Stubborn Weed
- Flexibility To Use
- Yield And Quality



VOSTRIX



- EPT Technology
- Safe For Crop
- Effective Control Of Resistant Weeds



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Frauds in Indian scientific research



It's quite ironical that along with economic strength, space technology and software expertise, India is also a leading nation in fraudulent scientific research. The problem is worsened by vested interests working in concert for their own benefit. These self-promoting cartels, together with defective evaluation methods and weak penal systems, combine to perpetuate scientific misconduct.

- Amitabha Laskar
Managing Editor, Crop Care

In theory, it is accepted that a purely-number driven university ranking exercise is self-defeating. In practice, though, university officials insist on research and publication numbers and are often indifferent to their manipulation. Students bear the brunt of such research.



An artist's impression of Scientific Frauds in Indian Academia

Scientific Misconduct: The Great Temptation

Over the last two decades, articles on the endemic problem of research misconduct in even notable Indian universities have frequently appeared in prestigious journals. However, the problem seems unresolved due to the structure of the modern Indian university with its fixation on research models, rather than, say, factors such as social mobility as well as student life and exposure mitigating social disharmony, which were part of the original mandate of the idea of the university. Even insofar as critical research goes, for example, in the health sciences, one repeatedly finds an extraordinary abuse of public trust.

Instead, the everyday life of the university today seems built around the annual cycle of rankings, and the rise of primarily bureaucratic leadership fixated on numbers alone, seems to almost necessitate the entrenchment of overwhelmingly one-sided research angles. Thus, one hears regular stories of purchased

co-authorship, or often invitation to lend one's name for a nominal fee, or even for free as there is much pressure to publish, and shared authorship from a different country greatly increases a paper's value.

The pressure to publish in indexed journals, particularly those listed in Scopus and the Web of Science (WoS), has fostered a culture of productivity reckoned in numerical terms that is indifferent to critical inquiry, theoretical originality, and ethical standards.

Probing the Systemic Rot in Scientific Research

One singular caveat of research misconduct is that it has tended to focus on unethical behaviours that have a solely self-serving advantage for the individual. However, a wide range of anecdotal evidence and recent reports suggest that individuals pursue unethical behaviour with an ardour that goes beyond mere self-serving behaviour. For example, in academia, it is perhaps not uncommon for dissertation advisors to gush about their students on the job market in recommendation letters, although their students may not merit such praise and approval.



Lab Research being conducted for a Scientific Experiment

Penalizing the Rogues of Scientific Misconduct

Scientific misconduct, encompassing acts like fabrication, falsification, and plagiarism, are addressed through a range of penalties. From institutional actions like retraction of publications and termination of employment to legal repercussions and public shaming... The severity of the penalty often depends on the nature and extent of the misconduct, and the specific context of the research.

The perpetrator of both the crimes, the one selling the fake honorary doctorate degrees and the buyer of the same degrees, are both partners in crime and should be made to pay for their shady deeds by spending 8 to 10 years behind bars besides paying a penalty of Rs. 5 lakhs.

सारांश

भारतीय वैज्ञानिक अनुसंधान में धोखाधड़ी



भारत में अकादमिक चोरी बढ़ती जा रही है. प्रकाशन का बढ़ता दबाव, नैतिकतापूर्ण वैज्ञानिक लेखन में अपर्याप्त प्रशिक्षण, अज्ञानता, लापरवाही और अकादमिक क्षेत्र में वैज्ञानिक दुर्व्यवहार से निपटने के लिए वैधानिक नियंत्रण और स्पष्ट नीतियों की कमी के कारण अनुसंधान से जुड़े दुर्व्यवहारों में वृद्धि हुई है, जो भारत की उच्च शिक्षा प्रणाली के विकास पर गंभीर प्रभाव डाल सकता है. प्रकाशनों को किसी व्यक्ति के पेशेवर विकास, अकादमिक पदोन्नति और वेतन से जोड़ने के परिणामस्वरूप अनैतिकतापूर्ण प्रकाशन और साहित्यिक चोरी की जा रही है. पिछले कुछ वर्षों में न केवल कम प्रोफाइल पत्रिकाओं में बल्कि कुछ उच्च-प्रोफाइल पत्रिकाओं में भी कई लेखकों वाले पेपरों में नाटकीय रूप से हुई वृद्धि से यह बात साबित होती है.





Pesticide residues in Indian food: The mother of lies and false propaganda

- Archana Nair
Executive Editor



It's high time that the pack of vicious lies and false propaganda against pesticide residues in Indian food by a section of fear-mongering and irresponsible Indian environmental activists be exposed to the readers who can easily differentiate between truth and falsehood when scientific data come in handy.

The biggest dilemma plaguing the Indian agrochemical industry is the seemingly relentless attacks unleashed by India's conniving NGOs comprising self-proclaimed environmental experts who seldom shy away from resorting to falsification of facts including fabrication of scientific data to press the panic button by acting in a completely unethical manner to influence the gullible public at large and browbeat the government into having their way, seek hefty donations from donors abroad with vested interests and want to implement their myopic strategy of changing India's cultivation method from "conventional farming" to "organic farming", which will be nothing less than a Himalayan blunder.

Several Indian environmental elitists would want us to believe that doing away with pesticides in farming is the remedy for producing safer food. If they only cared to step out of their comfort zones of plush air-conditioned offices, they would also be a privy to the fact that almost over 30% of the world's potential crop production is lost annually because of the effects of weeds, pests and diseases (according to the Food and Agriculture Organization of the United Nations, or the FAO). The very same FAO admitted that the crop losses would double if the existing pesticide uses were discontinued, significantly sending food prices soaring through the roof. The primary goal of the pesticide industry is to enable farmers to grow an abundant supply of food in a safe manner and prevent their prices from skyrocketing. As the food production processes benefit from continual advancements in agricultural technologies and practices, in fact, a population now nearly twice as large has more food available per capita than 40 years ago as agrochemicals such as herbicides, insecticides and fungicides reduce crop losses both before and after the harvest, and increase crop yields.

What these environmental evangelists cleverly suppress is that without the use of pesticides, overall food production would decline and many of the fruits and vegetables we buy from the market would



be in short supply. As pesticides can help grow healthy and plentiful crops, they help keep our food at a stable price in the kirana (grocery) store. Pesticides not only safeguard food crops; the production of certain fibres and oils would also be affected, as crops like cotton are highly susceptible to pests and disease.

The Art of Media Manipulation exposed

Most people who are reading this might have a hard time fathoming how an entire nation could be so well deceived, but it's really nothing short of a cakewalk when a matinee idol cashes in on the subtle art of his histrionic skills while he has the members of the mass media eating out of his hands.

Remember Aamir Khan's show on the idiot box, titled, "Poison on Your Plate" featured in *Satyamev Jayate* or "Truth Alone Prevails" — a mix of activist-style talk show and investigative journalism, where he showcased a panel of judges who were stage-managed and resembled puppets on a string, clearly in the hands of Mr. Khan.

Those who watched the show impartially will vouch that actor Aamir Khan's foray into social activism through television may have earned him several brownie points, but he appeared shaky as the host on the debate over the use of pesticides, raising questions about where he crossed the line between impartial reporting and advocacy, or even whether he knew about the existence of the line.

The truth is not as you know it. Our faith in the media myth has been our Achilles heel, or the most vulnerable point.

Many have realized long ago that our politicians will lie to us at the drop of a hat, but most have no clue that our mass media lie and deceive us just as much, if not more so.

We have been deceived by our media to such an extent, mostly because people are too trusting of our news system. They very naively believe that broadcasters and journalists would never lie to us. This trust has worked against us with devastating consequences which are unknown to most.

It was crystal-clear watching the episode that Mr. Khan is dead against pesticides in the same way he's against the other social ills like sexual abuse of children or domestic violence.

The problem with Mr. Khan was that the premise that Mr. Khan started with and drove home with zero scientific data or proof: Pesticides were equated to poison that's fatal for human beings.

As the host, Mr. Khan did invite Rajju Shroff, the Chairman of UPL Ltd., one of India's largest pesticide manufacturers, onto the show in an attempt to strike a balance between the sworn anti-pesticide crusaders and pro-pesticide group. But Mr. Shroff's contention that pesticides are not harmful to humans and are needed to kill pests and ensure adequate food output almost caused Mr. Khan to fall out of his chair in disbelief.



Yet Mr. Khan had left no stone unturned to tell all those people watching the *Satyamev Jayate* show by prodding a self-proclaimed agricultural expert who claimed that farmers can produce enough food for India's 1.2 billion mouths by discarding the use of chemical fertilizers and pesticides and by embracing organic farming.

A few decades ago when Dr. Norman Borlaug was asked about the claim that organic farming is better for the environment and human health and well-being and could feed the world. He answered, **"That's ridiculous. This shouldn't even be a debate. Even if you could use all the organic material that you have--the animal manures, the human waste, the plant residues--and get them back on the soil, you couldn't feed more than 4 billion people. In addition, if all agriculture were organic, you would have to increase cropland area dramatically, spreading out into marginal areas and cutting down millions of acres of forests... If people want to believe that the organic food has better nutritive value, it's up to them to make that foolish decision. But there's absolutely no research that shows that organic foods provide better nutrition."**

As far as plants are concerned, they can't tell whether that nitrate ion comes from artificial chemicals or from decomposed organic matter. If some consumers believe that it's better from the point of view of their health to have organic food, God bless them. Let them buy it. Let them pay a bit more. It's a free society. But don't tell the world that we can feed the present population without chemical fertilizer. That's when this mis-information becomes destructive..."

Incidentally Dr. Norman Borlaug, acknowledged as the father of the Indian Green Revolution received the Nobel Peace Prize in 1970 for a lifetime of work to feed a hungry world.

Fundamental flaws about pesticide residues nailed

An expert panel of lawyers and scientists shared details of how 'The Right to Information Act (RTI)' helped expose and confirm several fundamental flaws in a scientific study on pesticide residue analysis by the National Institute of Occupational Health (NIOH), Ahmedabad. The NIOH study, titled, "Final Report of the Investigation of unusual illnesses allegedly produced by exposure at the Padre Village of Kasargod district (North Kerala)" and its related reports have been cited at the Stockholm Convention while proposing the listing of Endosulfan as a Persistent Organic Pollutant (POP).

The Ministry of Agriculture, Government of India had appointed a Committee, which concluded that there is no link established in the use of Endosulfan in the Kasargod part of Kerala. The Endosulfan case had come up for hearing in the Supreme Court. But blatant lies about the use of pesticides to protect crops from the attack of insects and pests is still going on by a coterie of environmental activists, who get huge sums of money in the guise of donations from abroad.



Sometime ago, Greenpeace, alleged in an article that a plant of UPL Ltd., at Vapi, posed serious health hazards to the town of Vapi. UPL filed a case against Greenpeace in the Chicago Court in the US. Greenpeace lost the case, offered an apology and had to pay Rs. 1 crore as defamation fees to UPL. A handful of irresponsible journalists and also some pseudo scientists wrote horrible articles about the effect of pesticides and chemicals on expectant mothers and children. Mr. Paul John of The Times of India (TOI) wrote about children born with deformed genitals, choked anus and other gruesome physiological deformities. UPL had filed a case against The Times of India (TOI); the TOI admitted its mistake and apologized publicly. But surprisingly, Dr. S.G. Kabra again narrated a similar story in the *Satyamev Jayate* show on TV blaming teratogenic pesticides. It is well-known that there are no teratogenic pesticides available in India, so it is clear that Dr. Kabra was simply lying.

As a leader in the Indian agrochemical industry, UPL decided that unless legal actions are taken against these anti-farmer and anti-progress lobbies they will continue to harm our country.

Greenpeace collects money from gullible citizens by spreading scary stories in the mass media. It published a study that farmers' children were mentally affected because of pesticides used in the farm. Another study was published at the same time that a factory in Vapi produced PCB (Poly Chlorinated Biphenyl), which is banned; a case was filed by UPL at the Valsad Court and Greenpeace had to pay a fine of Rs.48 lakh.

When Mr. Aamir Khan had hosted a TV show '*Satyamev Jayate*', he invited a large number of NGOs and presented various cases of harmful effects of pesticides. In one case, Dr. Rashmi Sanghi of IIT Kanpur accused that she had tested mothers' milk from Bhopal and found that they contained Endosulfan and Chloropyriphos. The shocking matter according to her was that Endosulfan's Maximum Residue Limits (MRLs) in the mothers' milk were 800% higher than the ADI (Actual Daily Intake). Any scientific person with a basic knowledge can make out that Dr. Rashmi Sanghi does not know what MRL is or what ADI of pesticides is. On further investigation, it was found that IIT Kanpur had disowned her and her study report. It was later found that the same scientists of IIT Kanpur were regularly publishing cooked up reports of pesticide residues. Dr. Padma Vankar published a report of pesticide residues in fruits and vegetables from the Delhi market. Dr. Rashmi Sanghi said that the same report was published by her earlier, but in Dr. Vankar's report, exactly the same pesticide residues were found from the Kanpur vegetable market. Isn't that ironical?

Ms. Kavitha Kuruganti had claimed in *Satyamev Jayate* that 67 pesticides which had been banned worldwide were still being used in India. Any farmer tilling his land can tell that she is an outright liar. She tried to get cheap publicity through the *Satyamev Jayate* programme by falsifying truths. As UPL cares for Indian farmers and Indian agriculture, it strongly believes that if we want to remove hunger and poverty from rural India, the same can only be done by helping and educating farmers to increase their produce by better crop protection policies with pesticides. There are foreign countries with vested interests in the

world, which want to keep India backward and they are busy financing these pseudo scientists, who publish lies –left, right and centre about pesticide residues in food in India.

There have been false stories and rumours linking pesticides to cancer. A few scientists, who want cheap publicity spread doctored study reports. Once in the past, Dr. Padmaja, Director of the National Institute of Nutrition (NIN) made a statement to the Andhra Jyoti newspaper that she tested the blood samples of 426 cancer patients and found that all of them had pesticide residues. It was later found that there was no such test conducted at the NIN, Hyderabad.

Even Dr. Rao, a scientist from the ICAR gave a statement to the Hindustan Times saying that all the fish in the lakes around Patna in Bihar contained Cadmium. When a legal notice was sent to him, he flatly denied having made such a statement. The pesticide industry in India has decided that it will not keep silent but expose all the frauds committed by these environmental extremists.

False allegations against pesticide use by farmers should be made punishable: CCFI

Any baseless allegations against the use of pesticides should be made a punishable offence, said CCFI (Crop Care Federation of India), the agrochemical industry body of India, besides demanding the setting up of inspection centres to check pesticide residues on imported agricultural commodities.

Citing an IB (Intelligence Bureau) report, Raju Shroff, Chairman Emeritus, CCFI, said that NGOs were working against the developmental interests of India.

The recent IB report has vindicated that NGOs are motivated by vested interests and are working to ensure that the agricultural sector remains primitive so that India becomes dependent on imports to sustain the growing needs of people.

Mr. Shroff also demanded that the Government of India should not make baseless allegations against the agrochemical industry which should be treated as a punishable offence.

“There is an urgent need that unfounded false and malicious allegations against the use of pesticides should be made a punishable offence under the Insecticides Act,” he added.

सारांश

भारतीय खाद्यान्न में कीटनाशक के अवशेष: झूठ और असत्य प्रचार की जननी

भारत में, २०२२-२५ में ८६,००० से ज्यादा खाद्य पदार्थों में कीटनाशक के अवशेषों का विश्लेषण किया गया; जिसमें मुश्किल से २.८% में ही उनकी सीमा से ज्यादा अवशेष पाए गए. एफएसएआई विभिन्न खाद्यान्नों पर लागू एफएसएस नियमों के प्रावधानों के अनुपालन का आकलन करने के लिए देशव्यापी मासिक निगरानी अभियान चला रहा है.

एफएसएआई (भारतीय खाद्य सुरक्षा और मानक प्राधिकरण) एक सरकारी निकाय है जो खाद्यान्न के लिए विज्ञान-आधारित मानक तय करता है और मानव के उपभोग के लिए सुरक्षित और पौष्टिक भोजन की उपलब्धता सुनिश्चित करने के लिए इसके निर्माण, भंडारण, वितरण, बिक्री और आयात को विनियमित करता है. एफएसएआई जोखिम मूल्यांकन करने के बाद फूड सेफटी एंड स्टैंडर्ड्स (कंटैमिनेंट्स, टॉक्सिसन्स एंड रेसिड्यूज) रेगुलेशन २०११ के तहत खाद्य पदार्थों पर कीटनाशकों के एमआरएल को अधिसूचित करता है.





GHARDA CHEMICALS LTD.

Power of
Global Presence



PRODUCT RANGE

Insecticides

Product Name	Purity
Alpha Cypermethrin Technical	97% +
Cypermethrin Technical	93% +
Deltamethrin Technical	98% +
Permethrin Technical	92%, 94% and 95% +
Chlorpyriphos Technical	98% +
Indoxacarb Technical	67% + and 95% +
Fipronil Technical	97% +
Diflubenzuron Technical	95% +
Quinalphos Technical	70% +
Profenophos Technical	94% +
Temephos Technical	92.5% +

Herbicides

Product Name	Purity
Anilofos Technical	93% +
Isoproturon Technical	97% + and 98% +
Dicamba Technical	97% +
Triclopyr Butoxy Ethyl Ester	97% +
Bispyribac Sodium Technical	98% +
Mesotrione Technical	98% +
Diuron Technical	98% +



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Vet Products

Product Name
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Deltamethrin Technical
Cypermethrin Technical
Permethrin Technical
Fipronil Technical

Public Health Products (WHO approved)

Product Name
Alpha Cyper Technical
Deltamethrin Technical 98.5%
Temephos Technical
Chlorpyriphos Technical

Intermediates

Product Name	Purity
Cypermethric Acid (98:2)	99% +
Cypermethric Acid Chloride (40:60)	99% +
High Trans CMA (2:98)	99% +
High Trans CMAC (2:98)	99% +
Meta Phenoxy Benzaldehyde	99% +
Meta Phenoxy Benzyl Alcohol	98% +
Bromo Benzene	99% +



Small Farms

The millions that made India an agricultural powerhouse

“Need to increase the collective power of our small farms. Make them national pride,”

- Prime Minister Shri. Narendra Modi
15th Aug 2021

Small steps that have left a big impact on Indian agriculture.

Dr. K.C. Ravi, Chairman Crop Life India and Chief Sustainability Officer, Syngenta India Pv.t Ltd., is spreading blatant lies against Indian farmers accusing that Indian farmers make indiscriminate use of pesticides leading to the destruction of thousands of crores of rupees of crops due to the improper use of pesticides on crops.

There is a two-pronged approach to weed out unscrupulousness (read corruption) from India. As Shri Narendra Modi ji, the Indian Prime Minister wants to eradicate corruption, and the agrochemical industry will provide complete support to make India Bhrashtachar-Mukt Bharat.

The development of technologically advanced pesticides, which significantly boost crop yield while minimizing environmental impact, is considered a tour de force in the field of agrochemical production in India as Indian engineers and scientists are at par with the best in the world.

A few bare facts about the Indian agrochemical industry which will exemplify India's competence in the world market. Just check out the facts and figures:

Out of the global agrochemical market of \$ 79 billion, nearly 93% of the pesticides are off-patent generic pesticides. The multinational companies (MNCs) find it difficult to compete against India and even after 20 years of patent protection, they want more Data Protection in India so that they can retain the monopoly and rob the Indian farmers. There are examples where MNCs talk about Data Protection. There are more examples of MNCs indulging in corrupt practices.

M/s BASF, one of the largest chemical companies of the world imported unregistered substandard Acephate in the USA and they declared that it was manufactured by UPL, which have after generating full data, got the registration of Acephate in the USA. We are enclosing the copy of where EPA USA has mentioned the possible damage claim of \$ 58 million by UPL against BASF.

The New York Times

SEPT. 21, 2001

U.S. Says Memphis Company Falsely Labeled Its Pesticides

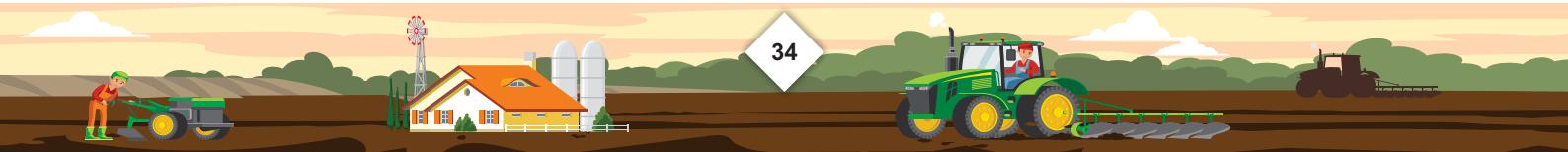
By ANDREW C. REVKIN

In what it is calling its biggest enforcement action ever in a pesticide case, the Environmental Protection Agency has accused a company BASF based in Memphis of illegally marketing millions of pounds of insecticides containing falsely labeled imported ingredients.

In their complaint, agency officials described how

thousands of drums of ingredients had been imported with labels saying they were from United Phosphorus, an approved pesticide manufacturer in Bombay, when the materials actually came from many factories elsewhere.

United Phosphorus has sued Micro Flo and BASF, seeking \$57 million in damages.



There are more examples of MNCs indulging in corrupt practices in India.

- M/s Dow (DiNOCIL) admitted in the Indian Parliament that they bribed Rs. 1 crore to the then PPA Dr. R. L. Rajjak who bore the reputation of being a corrupt officer.
- One more serious case of corruption occurred when M/s Syngenta, which had the monopoly to sell Clodinafop Propagyl in India. After in-house research, UPL applied for registration to make it in India. But a false complaint was made by Syngenta and the UPL factory was raided. Later it was found that everything was in order. After a few months when UPL got the registration to manufacture Clodinafop Propagyl, another false complaint was planted most probably by M/s Syngenta that UPL is smuggling finished goods and declaring it as raw material, 5-Chloro-2,3-difluoropyridine. An urgent letter was written from the Ministry to the Collector of Customs Mumbai that UPL had smuggled finished goods and declared it as raw material. Copy enclosed. All the imported raw material was stuck at the docks even though UPL got the plant ready to start production immediately.



राष्ट्र सरकार
कृषि भवनालय
(कृषि एवं सहकारिता विभाग)
कृषि भवन, नई दिल्ली-११०००१
GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
(DEPARTMENT OF AGRICULTURE & COOPERATION)
KRISHI BHAWAN, NEW DELHI-110001

AMAND SHAH
DIRECTOR
Email- amand@krishi.nic.in
TELEFAX: 2339 9441/ 23384468
D.O.No DIR/PP/ MISC-1/2006

18th August 2006

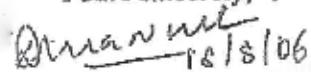
Dear Sir,

Please refer to our telephonic discussions regarding misdeclaration in the Bill of Entry and other documents pertaining to the import of a consignment of pesticide at Nhava Sheva. In this context, I, would like to reiterate that the actual pesticide being imported is Clodinafop Propargyl while it has been misdeclared as 5-Chloro-2, 3-difluoro pyridine 95% by the importer, i.e. M/S United Phosphorous.....

In so far as this would be a case of import in violation of the Insecticides Act, 1968, the party would be liable to prosecution and penal action under the provisions of Insecticides Act, 1968, it would be imperative that

With regards

Yours sincerely,


(Amand Shah).

Siraj Najib Shah,
Commissioner of Customs, Imports
JNPT, Uran, Raigad
Maharashtra
Fax- 022-241828

27242402

More shocking news arrived when the confidential letter written from the Ministry to the Mumbai Customs alleging that UPL was smuggling finished goods circulated in the Punjab market purported by the Syngenta agents. On 18th August 2008, in the Bombay docks, from 10 p.m. till 4 a.m. they kept on drawing samples to find out if UPL was smuggling finished goods. The fact was that any qualified chemist can test the samples within one day and decide that it is a basic raw material and not smuggled finished goods. There was an allegation that Dr. Ms. Potdar was bribed to delay the test result, but it took nearly one month to get the result. UPL had to complain to the then Hon'ble Minister, Mr. Pawar, and then only it was declared that samples were in order. But in the meantime, UPL had already lost one whole season. Despite repeated requests, the corrupt officers are protecting Syngenta who had made this false complaint.

In Punjab, in 2009, during a public meeting, The Hon'ble Minister for Agriculture while honouring Mr. Rajju Shroff, Chairman of UPL and said that "Punjab farmers have saved Rs. 50 crores because of UPL." Copy of Tribune enclosed.

The Tribune

FRIDAY, OCTOBER 3, 2008

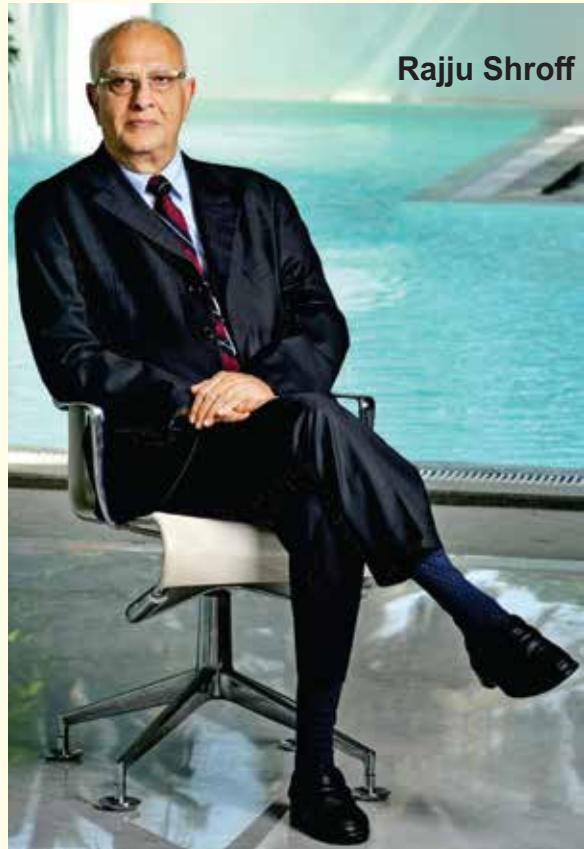
Association to honour industrialist

Rajju Shroff awarded for his contribution to the farming community

Tribune News Service

Chandigarh, October 2

An industrialist who lowered the prices of weedicides to benefit Punjab farmers to the tune of Rs 50 crore, is set to get the annual 'Dr Amrik Singh Cheema award' for his contribution to the farming community of Punjab as well as the national agro-chemical industry.



- Another matter of very high corruption was when it was decided that the Indian industry, which wants to register pesticide in India, doesn't require finger-print matching. Three corrupt officers, namely Dr. Khurana, Mr. Bhatnagar and Dr. Subhash Chand changed the minutes illegally. They made Not required 'NR' to Required 'R'. The then Minister for Agriculture, Shri Tomar Ji ordered action against these corrupt officers, copy enclosed. Despite a lot of complaints and follow-ups, no action was taken against these corrupt officers.



- They talk about Indian companies stealing the Trademarks of American companies. M/s Midland Fumigant of USA imported sub-standard material and couldn't sell. This happened for the first time when an American company copied the trademark of an Indian company. They put label of UPL India on the packing illegally. A case was filed in Kansas City Court and M/s Midland Fumigant was fined \$ 5 million.
- UPL fought against the German company M/S Degesch GmbH claiming false patents and they had to pay a penalty to UPL for a false claim.

26

Annexure R-2

F.No. 44014/17/2014-PP Estt (FTS: 6175)
मारत सरकार
कृषि एवं किसान कल्याण मंत्रालय
कृषि, सहकारिता एवं किसान कल्याण विभाग
Krishi Bhawan, New Delhi-110001
Dated the 2nd May, 2020
June

To:
The Plant Protection Adviser
Directorate of Plant Protection Quarantine & Storage
NH- IV, Faridabad, Haryana -121001.

Subject: Complaint by Ms. Nirmala Patharawal, Head, Crop Care Federation of India (CCFI), New Delhi on R/NR Issue against the Officers of CIBRC, Faridabad - reg.

Sir,

I am directed to refer to the above mentioned subject and to state that the matter was put up for the consideration of Hon'ble AM. Hon'ble AM has approved the understated actions:-

1. Responsibility should be fixed and the members of the internal committee i.e. Dr. S K Khurana; Mr. Vipin Bhatnagar, Ex-APPA and Dr. Subhash Kumar, DD(WS) should be asked to explain as to why changes in the guideline was made without the approval of the Registration Committee.
2. Therefore, you are hereby requested to expeditiously take action as approved above and action taken in this regard may be communicated to this Department within 15 days.

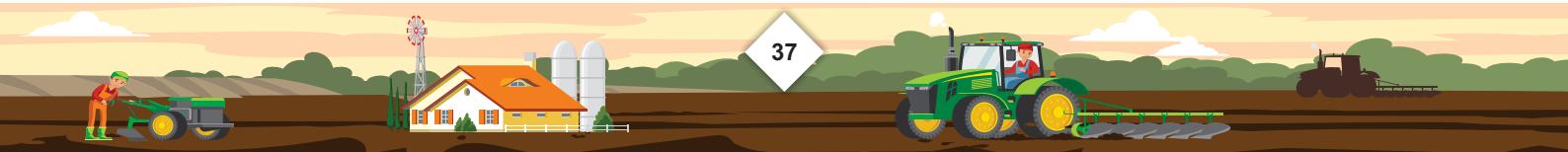
Yours faithfully,
R.R.
(R Rajeev)
Under Secretary to the Govt. of India

- UPL got export only registration for Bentazon as the order was received from the customer. After the registration certificate was issued for export, within one month the registration was cancelled perhaps because of the monopoly of BASF in India. It took two and a half years to get the registration for export only. But the reputation of UPL as a reliable supplier was affected. Even there are serious complaints against the import of formulation to keep the monopoly without registering of technical.
- There is a serious case of PI Industry manufactured Pyroxasulfone of 95% and exported to Japan Kumiai Industry @ Rs. 5000/kg and imported the same product of 85% @ Rs. 11000/kg. This is a clear case of money laundering and illegally trying to keep monopoly and rob Indian farmers. Action should be taken against PI Industry.

We strongly believe that the future of the agrochemical industry is very bright. Our Prime Minister wants to eradicate corruption from India. He says "Mujhe Aapka Saath Chahiye." The Indian industry is ready to extend its full co-operation to expose corruption. If the industry and the government work together, we can make Bhrashtachar-Mukt Bharat.



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2024 Global Top 20 Crop Protection Companies

In 2024, the global crop protection industry was expected to experience complex and volatile development trends.

According to **GLOBAL FARM POLICY GROUP**, the report published in the **August edition of AgNews & data by Agro-pages** reflects the ranking of the Top 20 Global Crop Protection Companies. While the industry, as a whole is facing adjustment pressures, the Chinese Agro companies are showing a robust growth.

In 2024, the top 20 global crop protection companies were expected to generate approximately **US \$75 billion sales, which came down from US \$79 billion in 2023**. This shifts highlights profound changes in reshaping the agricultural market, including climate change, geopolitical pressures, supply chain realignments, and the push towards sustainability.

1. Syngenta's sales in 2024 was US \$13.26 billion but the turnover went down by minus 14.06%.
2. Bayer earlier had a Sales of US \$11.09 billion, but in 2024 the growth rate, has gone down to minus 6.39%.
3. BASF had a Sales of US \$8.29 billion but the growth rate in 2024 was minus 5.54%.
4. Corteva had a Sales of US \$7.36 billion and the growth rate in 2024 was minus 5.04%.
5. UPL registered Sales worth US \$4.33 billion in 2024 and had a persistent growth rate of 0.2%.
6. In FMC the total sales in 2024 was, US \$4.01 whereas, the growth rate went down by minus 5.29%.
7. ADAMA had total Sales of US \$3.72 billion in 2024, but the growth rate went down, drastically by minus 10.78%.
8. Sumitomo registered Sales of US \$3.02 billion in 2024, and the growth rate had gone down by minus 3.95%.
9. Nufarm's Sales in 2024 was US \$1.94 billion, but the growth rate had gone down by minus 4.83%.
10. Only the growth of Rainbow has gone up by 15.77% in 2024 against the Sales figure of US \$1.85 billion in 2023.

From 11th to rank 20th only one Indian company PI Industries, which ranked 19th, has made its place with a reasonable growth, whereas most of the companies are Chinese and have shown a very good growth.





The 2024 rankings show that, traditional crop protection giants still dominate the top spots, but their growth trajectories are diverging. **Syngenta remains the global leader with US\$13.263 billion in sales, yet it experienced a sharp 14.06% decline compared to the year 2023.** This drop reflects global agricultural price volatility, changing demand in key markets, and strategic adjustments in product portfolios.

Bayer, ranked second, posted sales of US\$11.086 billion, down by 6.39% year-on-year. BASF came third with US \$8.293 billion, falling by 5.54%, while Corteva ranked fourth with US \$7.363 billion, down by 5.04%. The results highlight that, even the top European and American crop protection firms were under significant pressure, signalling a period of adjustment and transformation across the global industry.

A standout trend in 2024, reflects the strong performance of Chinese Crop protection companies. Out of the top 20, eleven companies are Chinese, with most, reporting a positive growth.

Beyond Chinese firms, other crop protection companies in the Asia-Pacific region also showed varying degrees of growth potential.

India's UPL ranked fifth globally with US\$4.326 billion in sales in 2024. Although its growth was modest at 0.2% compared to 2023, the company maintained a solid position in the global market.



While the global crop protection market, faces adjustment pressures in 2024, a recovery is anticipated in 2025, as the agricultural commodity prices stabilize, investment in agriculture rebounds, and new technologies are adopted. Emerging markets, in particular, are expected to see a continued and strong demand for crop protection products as agricultural modernization advances.



Small Farms
The millions that made
India an agricultural powerhouse

- Shri. Narendra Modi, Prime Minister



Coming back to India, there are large number of technically advanced, crop protection companies. The Indian companies are able to manufacture, quality pesticides at competitive prices. In the year 2022-23, India was the second largest exporter of pesticides that is US \$5.4 billion. By proper usage of crop protection chemicals, India's agriculture production was worth US \$574 billion, which was the second highest in the world.

More and more Indian companies are now concentrating on research and innovation, and they are growing fast.

To give a few examples:

1. UPL is the leader in research and innovation and it has more than 3000 patents across the world.
2. M/s Gharda Chemicals is very advanced in newer and superior technology. Even the German company followed the process of Gharda Chemicals in manufacturing of the herbicides, Isoproturon, Dicamba, etc.
3. Sulphur Mills Limited (SML) because of their inhouse research, they have more than 600 patents all over the world.
4. M/s Insecticide India Ltd has got a very good research centre in cooperation with a Japanese company. It has a state-of-the-art R&D centre with Japanese collaboration.
5. M/s Heranba Ltd. is also a leading manufacturer and exporter of pesticides.
6. Excel Industries were the first to make a number of technical pesticides for the first time in India.
7. Indofil Industries Ltd. brought a new chemical compound for the first time in India.
8. Rallis India also had a very big R&D centre.
9. Atul Ltd. is a leader in some of the herbicides in the world.
- 10 Coromandel Ltd. is also a leader in south India in the manufacture of crop protection chemicals. Even the large number of medium and small-scale industries in India are conducting research and applying innovation.

If the policy of "Ease of doing Business" is implemented and hurdles are removed, the Indian Agrochemical companies will have a bright future.



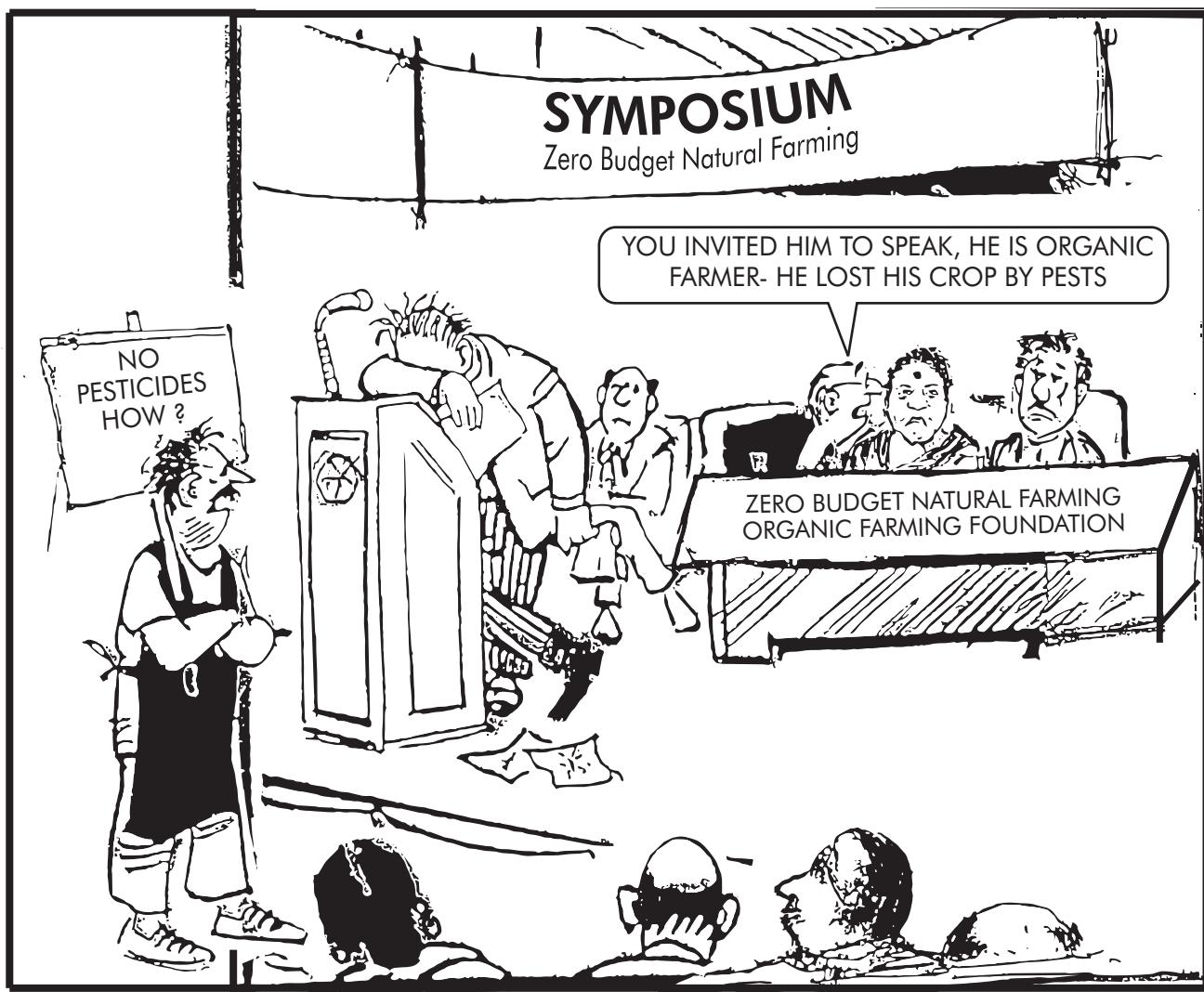
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The Economist

Perhaps the most eminent critic of ``**organic farming**'' is Norman Borlaug, the father of the Indian ``Green Revolution'', winner of the Nobel peace prize and an outspoken advocate of the use of synthetic fertilizers and pesticides to increase crop yields. **He claims the idea that organic farming is better for the environment is ``ridiculous''** because organic farming produces lower yields and therefore requires more land under cultivation to produce the same amount of food. Thanks to synthetic chemicals, Borlaug points out, global cereal production tripled between 1950 and 2000, but the amount of land used increased by only 10%.



Norman Borlaug

Using traditional techniques such as crop rotation, compost and manure to supply the soil with nitrogen and other minerals would have required a tripling of the area under cultivation. **The more intensively you farm, Borlaug contends, the more room you have left for rainforest.**



With financial incentives, agriculture could be the “new Tesla” of the climate transition, says UPL's Global CEO.

In an interview with AgFeed during COP 30, Jai Shroff, Global CEO, UPL Ltd., advocates for regenerative and sustainable agriculture and compares the transition in the field to the electrification of cars.

Points to Ponder:

- UPL's Global CEO, Jai Shroff, argues for the need for financial incentives to adopt regenerative practices.
- Mr. Shroff said that farmers can reduce their emissions by 10% with technology and incentives and compared the introduction of regenerative agriculture to the beginning of car electrification.
- Even with high interest rates, restricted credit and lower commodity prices, Mr. Shroff believes that UPL projects a more positive 2025 for both its global and Brazilian operations.



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Initiatives

Training Programme on the right and safe use of agrochemicals, College of Agriculture Kolhapur

In keeping with its commitment for disseminating training to farmers on the right and the safe use of agrochemicals, Crop Care Federation of India (CCFI) conducted a Farmers' Training Programme at the College of Agriculture in Kolhapur.

A Training Programme was jointly conducted by the Agriculture Technology Management Agency (ATMA) and the Rajarshee Chhatrapati Shahu Maharaj, College of Agriculture, Kolhapur for two days. CCFI along with UPL Ltd. sponsored the event from 23rd to 24th December 2024 at the College of Agriculture, Kolhapur.





Explaining the importance of packaging leaflets

The Training Programme coincided with National Farmers Day, i.e., 23rd December 2024, on which selected farmers were called on two consecutive days to be trained on the safe and judicious use of agrochemicals. The programme was interactive with farmers sharing their experiences of crops like sugarcane, paddy (rice), and oilseeds like ground nuts and soyabbeans.

Ms. Nirmala Pathrawal Executive Director, CCFI conducted the Training Programme highlighting the importance of pesticides for reducing crop losses and interim increasing productivity. The importance of the label on the container and the guidelines in the leaflet were explained to the farmers, so that they could verify their doubts at the point of purchase from the dealers and 100 safety kits were distributed.

As a promotional effort, the CCFI video films in local language were screened, which created a lot of enthusiasm among the audience. The programme concluded with a vegetarian lunch for the participants.



Farmers with safety kits after the training

Farmer Training Workshop at Badnapur Jalna, Maharashtra

The Farmers' Training Workshop highlights the dynamics between cash cropping and food crop production at the district level. With a focus on the potential pathways by which cash crop production may affect food crop productivity and then empirically measuring these effects using the case of Badnapur Jalna.



Dignitaries with Ms. Nirmala Pathrawal for the Inaugural Session

The Farmers Training workshop at the Agriculture Research Station Badnapur, Jalna, Maharashtra. A one-day training programme was conducted by CCFI on 9th January 2025.

Maharashtra is an important state in terms of verity of cash and commercial crops namely jowar (sorghum), bajra (pearl millet), wheat, pulses (like moong, tur, urad), cotton, sugarcane, and ground nuts. Scientists from the Agriculture Research Station were felicitated in conducting the technical session.

Hon'ble Vice-Chancellor, Prof. (Dr.) Indra Mani of Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani (Maharashtra) was the Chief Guest at the Workshop. The In-charge of Agriculture Research Station, Badnapur, Dr. D. K. Patil was among one of the dignitaries.

The mandate of the Agriculture Research Station Badnapur is to generate the production technology for boosting the production of different pulse crops along with genotypic



Farmers displaying their Safety Kits



Demonstration on the use of PPE Kits before farmers

specification. To undertake research on location-specific problems in the state. To test and transfer the improved technology from research farm to farmers' field. To develop the pest-tolerance and disease-resistant varieties.

Ms. Nirmala Pathrawal, Executive Director, CCFI, spoke on the importance of agrochemicals in one of the major states like Maharashtra where all types of crops are grown with higher productivity. The importance and use of safety kits cleared a lot of doubts in the safe application of pesticides. A live demonstration was conducted for the benefit of the participants which included female farmers also.

Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani (Maharashtra) provides education in agriculture, allied sciences and humanities. It also provides research base to improve the productivity of important agricultural activities, such as horticulture, livestock, fisheries and Agri-allied activities of the Marathwada region. It also develops appropriate plans for conservation of natural resources and sustainable use.

To undertake and guide extension education programmes, first line transfer of technology, extend services of training, conducting demonstrations and developing appropriate communication network are very critical.

To standardize technologies for crop production, protection, harvesting, marketing, post-harvest utilization as also for livestock, fisheries and allied agro-communities for improving the living status of farmers, farm workers and the women of Marathwada are also part of the agenda. It is also important to provide the necessary production support of nucleus, breeders and foundation seeds of important crops of the region and also generate revenue through large farms for sustainable growth of the University.



View of the farmers at the event

Bharat Agri-Tech Krishi Mela Indore, Madhya Pradesh

Bharat Agri-Tech Krishi Mela- 2025, was organized on 18th to 20th January 2025 at the College of Agriculture Ground, Lalaram Nagar, Indore, Madhya Pradesh.

Bharat Agri-Tech held a leading Exhibition on the Advanced Agri Machinery, Dairy, Horticulture and Organic Products. Bharat Agri-Tech stressed on Agri Innovation and Training, accompanied by international conferences.

Crop Care Federation of India (CCFI) was provided with a front stall so that farmers could queue up for the registration and distribution of safety kits. The response was overwhelming as 600 safety kits were distributed during the event.

Ms. Nirmala Pathrawal, Executive Director, CCFI and Mr. Harish Mehta, Senior Advisor, CCFI, participated in the programme. The farmers were briefed about the proper usage of agrochemicals, particularly the use of face masks and gumboots for safety in slush and against snakes.

CCFI took this opportunity to distribute its new year calendar 2025 which has visual safety norms on each page. Several members like SAFEX Chemicals India Ltd., Best AgroLife Ltd., Parijat Industries (I) Pvt. Ltd., Insecticides (India) Ltd., SML Ltd., UPL Ltd. and Heranba Industries Ltd. contributed to providing promotional support by sponsoring safety kits.

The backdrop of the CCFI Stall had a list of its members with their logos. CCFI also highlighted the map of India with the event and location of the training programme conducted so far. Another



Token of appreciation presented by organizers



interesting feature was our display of “Myths vs Reality” on the pesticides in use in India.

The programme was inaugurated with the replica of Ramlalla at the entrance of the Krishi Mela. The CCFI delegates were awarded/ presented with a trophy by the organizer in appreciation of its effort to promote the safe and the judicious use of pesticides for the farming community.

Agriculture Research Station provides education in agriculture, allied sciences and humanities. It also provides research base to improve the productivity of important agricultural activities, such as horticulture, livestock, fisheries and agri-allied activities of the Marathwada region. It also develops appropriate plans for the conservation of natural resources and sustainable use.



To undertake and guide the extension education programmes, first line transfer of technology, extend services of training, conduct demonstrations and development of appropriate communication network are the critical factors of Agriculture Research.



To standardize technologies for crop production, protection, harvesting, marketing, post-harvest utilization as also for livestock, fisheries and allied agro-communities for improving the living status of farmers, farm workers and the women of Marathwada.

Providing the necessary production support of nucleus, breeders and foundation seeds of important crops of the region and generating revenue through large farms for sustainable growth of the University are of vital importance.





Indus Food, Agri-Tech, Dwarka, New Delhi

“Indus Food, Agri-Tech”, an exhibition organized by the Trade Promotion Council of India (TPCI) was organized between 9th to 11th January 2025. The venue of the event was at Yashbhoomi (IICC), Dwarka, New Delhi. The programme was supported by the Ministry of Commerce and Industry, Ministry of Agriculture & Farmers' Welfare, Ministry of Fisheries, Animal Husbandry and Dairy.

About 200 farmers visited the CCFI Stall; They were given safety kits after the verification of their Aadhar cards.

CCFI had put up the stall which displayed our activities and used the opportunity to brief the visiting farmers on the judicious use of crop care chemicals. While distributing PPE kits the inherent advantage and safety factors were well explained to avoid accidental cases totally during field operations.





approving crop specific recommendation, the pest complex on major crops in India and the focus on Research & Development for developing new and improved agrochemical products, enhancing existing formulations, and promoting sustainable agricultural practices for indigenous manufacturers.

Dr J C Majumdar, Chief Scientific Advisor CCFI covered the Technical aspect, whereas Harish Mehta spoke on the growing agrochemical market, domestic consumption and the potential of exports. He also clarified that sharing misinformation on spurious pesticides should be stopped totally to maintain the positive image of the agrochemical fraternity.

Ms. Nirmala Pathrawal, Executive Director, CCFI, explained the basics of the Training Programme being conducted and the impact on farmers wherever such programmes are conducted in her vote of thanks.



Ms. Nirmala Pathrawal, Executive Director, CCFI and Mr. Harish Mehta attended the deliberations which also included a lecture sessions in which both Government and industry participated. Among the panelist were Dr. Vishal Choudhary, Scientist 'F', Office of The Principal Scientific Adviser to The Government of India, Dr. Brijesh Tripathi, Deputy Director (Chemistry), Dr. T. Sonai Rajan Assistant Director (Entomology) who spoke about the role of regulatory department for



Hemani Industries Ltd

Growth driven enterprise through innovative agrochemicals

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Hemani Industries Ltd. has emerged as one of India's leading names in the agrochemical sector, delivering quality, innovation, and reliability to farmers and businesses worldwide.

Hemani Industries: A brief synopsis

Established in the early 1980s, the Company has steadily expanded from being a domestic manufacturer of pesticide intermediates to a global player with a strong footprint in technical, formulations, and active ingredients. With its headquarters in Mumbai and state-of-the-art production facilities in Gujarat, Hemani is known for its ability to combine research-driven solutions with large-scale manufacturing excellence.



A Strong Legacy with Global Reach

Over the last four decades, Hemani Industries has grown from modest beginnings into a diversified enterprise exporting to more than 75 countries across Asia, Europe, Africa, Latin America, and the CIS region. The Company's strategy has consistently balanced its domestic presence with aggressive international expansion, enabling it to hedge against regional uncertainties while contributing to global food security.

Diverse Product Portfolio

One of Hemani's biggest strengths lies in its broad and balanced portfolio of agrochemicals. The company manufactures a wide range of insecticides, herbicides, fungicides, and intermediates, supplying both domestic and international markets.

- **Insecticides:** Cypermethrin, Alphacypermethrin, Permethrin, Deltamethrin, Lambda Cyhalothrin, Zeta-Cypermethrin, Transfluthrin, Bifenthrin, Fenpropathrin, Acetamiprid, Beta-Cyfluthrin, Profenofos, Ehtiprole, and Thiamethoxam.
- **Herbicides:** Sulfentrazone, Prosulfocarb, Metamitron, Metribuzin, Dicamba, Mesotrione, and Clomazone.
- **Fungicides:** Propiconazole, Tebuconazole, and Dithianon.
- **Intermediates:** MPBD, MPBAL, CMAC, 1R-CMA, Bromobenzene, and 3-CPC.



Smooth functioning production plant

This comprehensive product basket allows Hemani to serve multiple segments of crop protection, ranging from broad-acre crops like wheat, corn, and soybeans to specialty crops such as fruits and vegetables.

State-of-the-Art Manufacturing Facilities

Hemani Industries operates world-class manufacturing plants at Dahej, Ankleshwar, and Saykha in Gujarat, India's chemical hub. These facilities are equipped with advanced process automation, stringent safety measures, and environmentally sustainable technologies. The company has invested heavily in backward integration, producing key Intermediates and Technical Formulations in-house. This not only ensures cost-efficiency but also provides better quality control and supply chain resilience. Sustainability is an important pillar in Hemani's manufacturing philosophy. The Company's plants adhere to global environmental standards, with a focus on waste reduction, effluent treatment, and energy efficiency. By embedding responsible practices into production, Hemani continues to align itself with the growing demand for environmentally conscious agriculture.



R&D is the key at our Laboratory

R&D and Innovation

Innovation has been the cornerstone of Hemani's journey. The company's R&D centres are staffed with experienced chemists and researchers who focus on developing new molecules, improving formulations, and creating cost-effective synthetic pathways. By continually refining processes, Hemani can increase yields, reduce impurities, and introduce novel formulations that meet stringent international standards.



Regulatory Strength

One of Hemani's biggest competitive advantages is its ability to navigate complex regulatory frameworks across multiple regions. The company holds registrations in key markets such as the European Union, Latin America, Africa, and Asia, which requires a high level of technical documentation, toxicology data, and compliance with global safety norms. Its growing portfolio of EU technical equivalences and country-specific registrations is a testament to Hemani's scientific rigour and reliability. This regulatory strength gives international customers confidence in Hemani's products and makes the company a preferred partner for distributors and formulators worldwide.

Customer-Centric Approach

Hemani Industries has built lasting relationships by focusing on customer needs, whether it is timely deliveries, flexible packaging, or tailored formulations. The company's supply chain and logistics network ensure that clients receive consistent service, even in volatile global markets. Its business development teams are active in emerging as well as established markets, enabling Hemani to identify opportunities quickly and respond with agility.

Looking Ahead

As the global population continues to rise and arable land faces pressure, the demand for efficient and sustainable agrochemicals is only expected to grow. Hemani Industries is positioning itself to meet this challenge through capacity expansions, new product launches, and a sharper focus on sustainable agriculture. With its combination of technical expertise, manufacturing scale, regulatory credibility, and customer-centric approach, the company is well-placed to continue its upward trajectory.

From its roots in India to its presence on the global stage, Hemani Industries Ltd. represents the best of innovation-driven, responsible agribusiness. Its mission remains clear: to empower farmers, support food security, and create value through quality agrochemical solutions that benefit communities worldwide.



Farmer-centric products
are the key for us



Our Stall at an Exhibition





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- Beta Cyfluthrin
- Bifenthrin
- Deltamethrin
- Ethion
- Cypermethrin
- Flubendiamide
- Fenpropathrin
- Lambda Cyhalothrin
- Permethrin
- Profenophos
- Temephos
- Tefluthrin
- Tolfenpyrad
- Zeta Cyper

FUNGICIDES

- Cyproconazole
- Hexaconazole
- Picoxystrobin
- Sulphur
- Tebuconazole
- Thiophanate Methyl
- Tricyclazole
- Thifluzamide

HERBICIDES

- Bispyribac
- Metribuzin
- Pendimethalin
- Propaquizafop
- Quizalofop
- Tembotrione
- Topramezone

PUBLIC HEALTH

- Beta Cyfluthrin
- Cyfluthrin
- Diflubenzuron
- Temephos
- Transfluthrin

INTERMEDIATES

- Bromobenzene
- Cypermethric Acid Chloride (CMAC)
- Meta Phenoxy Benzyldehyde (MPBD)
- Meta Phenoxy Benzyle Alcohol (MPBAL)



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NABARD promotes 6,215 farmer producer organizations, says FM Sitharaman



Nirmala Sitharaman
Finance Minister (FM)

The National Bank for Agriculture and Rural Development (NABARD) has promoted the formation of 6,215 FPOs till date under various schemes, the Indian Parliament was informed on August 4, 2025.

The National Bank for Agriculture and Rural Development (NABARD) has promoted the formation of 6,215 FPOs till date under various schemes, Parliament was informed on August 4, 2025. The major support provided to Farmer Producer Organizations (FPOs) includes formation of FPOs, capacity building, credit facilitation and market linkage support, financial literacy, etc., Finance Minister Nirmala Sitharaman said in Lok Sabha.

In addition, she said, NABARD, in partnership with Small Farmers' Agri-Business Consortium (SFAC) and Open Network for Digital Commerce (ONDC), has conducted FPO Melas (TARANG-celebrating Collectivization) at 50 locations across 24 states/UTs to demonstrate the products of FPOs/OFPOs to enable the marketing & branding of FPO products.

नाबार्ड ने ६,२१५ किसान उत्पादक संगठनों को बढ़ावा दिया है, वित्त मंत्री सीतारमण ने कहा

नेशनल बैंक फॉर एग्रीकल्चर एंड रुरल डेवलपमेंट (नाबार्ड) ने विभिन्न योजनाओं के अंतर्गत अब तक ६,२१५ एफपीओ के गठन को बढ़ावा दिया है, भारतीय संसद को ४ अगस्त, २०२५ को यह जानकारी दी गई।

नेशनल बैंक फॉर एग्रीकल्चर एंड रुरल डेवलपमेंट (नाबार्ड) ने विभिन्न योजनाओं के तहत अब तक ६,२१५ एफपीओ के गठन को बढ़ावा दिया है, ४ अगस्त, २०२५ को संसद को यह जानकारी दी गई। वित्त मंत्री निर्मला सीतारमण ने लोकसभा में कहा कि किसान उत्पादक संगठनों (एफपीओ) को दिए जाने वाले प्रमुख समर्थन में एफपीओ का गठन, क्षमता निर्माण करना, क्रेडिट सुविधा और बाजार से जुड़ने के लिए सहयोग, वित्तीय साक्षरता आदि शामिल हैं।

इसके अलावा, उन्होंने कहा, नाबार्ड ने 'स्मॉल फार्मर्स' एग्री-बिजनेस कंसोर्टियम (एसएफएसी) और ओपन नेटवर्क फॉर डिजिटल कॉमर्स (ओएनडीसी) के साथ साझेदारी में, एफपीओ उत्पादों की मार्केटिंग और ब्रांडिंग को सक्षम बनाने के लिए एफपीओ/ओएफपीओ के उत्पादों को प्रदर्शित करने के लिए २४ राज्यों/केंद्र शासित प्रदेशों में ५० स्थानों पर एफपीओ मेले (तरंग- सामूहिकता का जश्न) आयोजित किए हैं।



Researchers at IIT-Madras develop agricultural waste-based packaging material

They have established NatureWrks Technologies, a start-up incubated by the institute, to develop and commercialize the product.



The biodegradable packaging material that has been developed at IIT-M

Researchers at the Indian Institute of Technology-Madras (IIT-M) have developed an agriculture waste-based packaging material, which they say can be a sustainable alternative to plastic foams that are used currently.

The researchers cultivated fungi, such as *Ganoderma lucidum*, a type of mushroom known for its medicinal properties, and *Pleurotus ostreatus*, an edible mushroom,

on agriculture and paper waste to derive the material. They explored various optimal combinations of fungal strains and substrates to produce a composite material, which turned out to be sturdy, a press release stated.

आईआईटी-मद्रास के शोधकर्ताओं ने कृषि अपशिष्ट-आधारित पैकेजिंग सामग्री विकसित की

उन्होंने उत्पाद को विकसित करने और उसका व्यवसायीकरण करने के लिए संस्थान द्वारा इनक्यूबेट किए गए एक स्टार्ट-अप, नेचरवर्क्स टेक्नोलॉजीज की स्थापना की है।

इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी-मद्रास (आईआईटी-एम) के शोधकर्ताओं ने एक कृषि अपशिष्ट-आधारित पैकेजिंग सामग्री विकसित की है, जिसके बारे में उनका कहना है कि यह वर्तमान में इस्तेमाल होने वाले प्लास्टिक फोम का एक स्थायी विकल्प हो सकता है।

शोधकर्ताओं ने सामग्री प्राप्त करने के लिए कृषि और कागज के कचरे पर गैनोडर्मा ल्यूसिडम, जो अपने औषधीय गुणों के लिए जाने जाने वाली एक प्रकार की मशरूम है, और प्लुरोट्स ऑस्ट्रेट्स, एक खाने योग्य मशरूम, जैसे फंगस उगाए। उन्होंने एक कंपोजिट सामग्री बनाने के लिए फंगल स्ट्रेन और सब्सट्रेट के विभिन्न सर्वोत्तम संयोजनों का पता लगाया, जो सशक्त साबित हुई, ऐसा एक प्रेस विज़सि में कहा गया है।

PM Modi releases ₹20,500 crores for 97 million farmers under the PM-KISAN scheme

Nearly 1 lakh farmers from Arunachal Pradesh are among the beneficiaries of the instalment of the PM-KISAN scheme, which was disbursed by Prime Minister Narendra Modi on August 2, 2025.



The PM-KISAN is a flagship welfare scheme launched by the Centre in 2019 to provide financial support to farmers across the country

PM Modi released about ₹20,500 crore to around 97 million eligible farmers across the country from an event in Varanasi in Uttar Pradesh.

Terming the PM-KISAN scheme a “silent revolution”, state Agriculture Minister Gabriel Denang Wangsu hailed the direct support being extended to cultivators under the programme. He said that nearly Rs 20 crore was transferred directly into the bank accounts of 99,797 farmers in the state as part of the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) instalment.

With this, the total amount given to farmers in the state under the scheme has now exceeded Rs 331 crore, he said.

Wangsu said farmers, who were once reliant on moneylenders, are now empowered through technology-driven financial assistance.

This instalment of PM-KISAN has reached over 9.7 crore farmers across India, further reinforcing the Centre's commitment to strengthening the agricultural community through direct benefit transfers, he said.

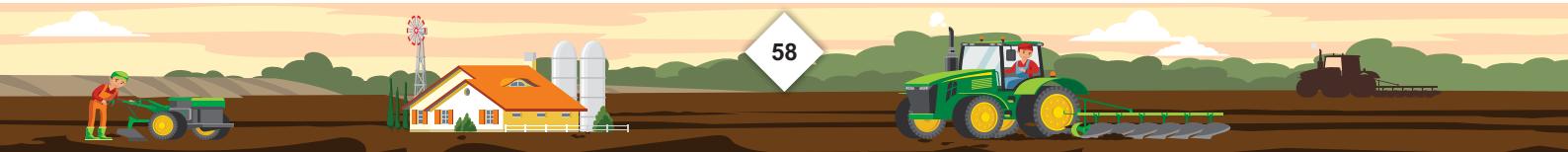
In the Lower Subansiri district, live streaming of the programme was organized at Abotani Hall in Hapoli, where 450 local beneficiaries gathered, a statement said.

Deputy Commissioner Oli Perme, Zilla Parishad Chairperson Pura Dollo, District Agriculture Officer Tasso Butung, and other officials were present at the programme.

The PM-KISAN is a flagship welfare scheme launched by the Centre in 2019 to provide financial support to farmers across the country.

Under the scheme, eligible landholding farmer families receive Rs. 6,000 annually in three equal instalments of Rs. 2,000 each, directly in their bank accounts.

The initiative aims to ensure a steady income for farmers to help them meet their agricultural and household needs.



पीएम मोदी ने पीएम-किसान योजना के तहत ९७ मिलियन किसानों के लिए रु.२०,५०० करोड़ जारी किए



पीएम-किसान केंद्र सरकार द्वारा २०१९ में देश भर के किसानों को वित्तीय सहायता प्रदान करने के लिए शुरू की गई एक प्रमुख कल्याणकारी योजना है।

एक बयान में कहा गया है कि लोअर सुबनसिरी ज़िले में, हापोली के अबोटानी हॉल में कार्यक्रम की लाइव स्ट्रीमिंग का आयोजन किया गया, जहाँ ४५० स्थानीय लाभार्थी जुटे थे।

कार्यक्रम में डिप्टी कमिश्नर ओली पर्में, ज़िला परिषद अध्यक्ष पुरा डोलो, ज़िला कृषि अधिकारी टैसो बुटुंग और अन्य अधिकारी मौजूद थे।

पीएम-किसान केंद्र सरकार द्वारा २०१९ में देश भर के किसानों को वित्तीय सहायता प्रदान करने के लिए शुरू की गई एक प्रमुख कल्याणकारी योजना है।

इस योजना के अंतर्गत, योग्य ज़मीन वाले किसान परिवारों को सालाना रु.२००० की बराबर तीन किस्तों में कुल रु.६,००० सीधे उनके बैंक खातों में मिलते हैं।

इस पहल का लक्ष्य किसानों के लिए एक स्थिर आय सुनिश्चित करना है ताकि वे अपनी कृषि और घरेलू ज़रूरतों को पूरा कर सकें।

अरुणाचल प्रदेश के लगभग १ लाख किसान पीएम-किसान योजना की किस्त के लाभार्थियों में शामिल हैं, जिसे प्रधानमंत्री नरेंद्र मोदी ने २ अगस्त, २०२५ को वितरित किया था।

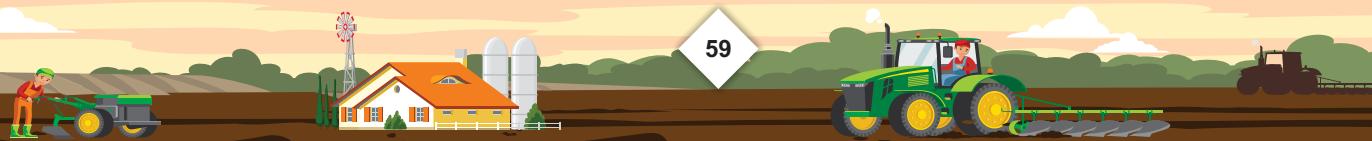
पीएम मोदी ने उत्तर प्रदेश के वाराणसी में एक कार्यक्रम के माध्यम से देश भर के लगभग ९७ मिलियन पात्र किसानों को लगभग रु.२०,५०० करोड़ जारी किए हैं।

पीएम-किसान योजना को “मौन क्रांति” बताते हुए, राज्य के कृषि मंत्री गेब्रियल डेनांग वांग्सू ने इस कार्यक्रम के तहत किसानों को दी जा रही सीधी मदद की सराहना की। उन्होंने कहा कि प्रधानमंत्री किसान सम्मान निधि (पीएम-किसान) की किस्त के तहत राज्य के ९९,७९७ किसानों के बैंक खातों में लगभग रु.२० करोड़ सीधे ट्रांसफर किए गए।

उन्होंने कहा कि इसके साथ, इस योजना के तहत राज्य में किसानों को दी गई कुल राशि अब रु.३३१ करोड़ से ज्यादा हो गई है।

वांग्सू ने कहा कि जो किसान कभी साहूकारों पर निर्भर थे, वे अब टेक्नोलॉजी-आधारित वित्तीय सहायता से सक्षम हो गए हैं।

उन्होंने कहा कि पीएम-किसान की यह किस्त पूरे भारत में ९.७ करोड़ से ज्यादा किसानों तक पहुंची है, जो डायरेक्ट बेनिफिट ट्रांसफर के जरिए कृषि समुदाय को मजबूत करने की केंद्र सरकार की प्रतिबद्धता को और मजबूत करता है।



Confined field trials on GM maize to begin soon at Punjab Agricultural University

Anti-genetic modification activists have voiced their concerns; the university's Vice Chancellor says the trials are 'for research purposes only'.



An Indian farmer spreading maize kernels for drying

The field trials of two kinds of genetically modified (GM) maize are expected to begin in the ongoing kharif (summer) season at the Punjab Agricultural University, days after the Genetic Engineering Appraisal Committee, the country's top regulator for the sector, gave the nod for the trials, after receiving consent from the Punjab government.

In its meeting in June, the committee recommended a proposal by Bayer Crop Science Limited for the conduct of confined field trials on herbicide-tolerant transgenic maize, and insect-resistant transgenic maize at Ludhiana-based university for the kharif season of 2025.

PAU will conduct confined field-trials of two varieties of transgenic Maize in collaboration with Bayer Crop Science Limited (formerly Monsanto).

GM Maize has been genetically engineered with both herbicide-tolerant (HT) and insect-resistant *Bacillus thuringiensis* (BT) traits.

Herbicide-tolerant (HT) Maize: To study weed-control efficacy in herbicide-tolerant maize hybrids with the application of Glyphosate-K salt.

Insect-resistant (IR) Maize: To study the efficacy of insect-protected maize hybrids against targeted lepidopteran pests (stem borer; fall armyworm).

Confined field trials are small-scale field experiments to address the biosafety requirements and evaluate the performance of specific traits in genetically engineered plants.



ਪੰਜਾਬ ਕ੃਷ਿ ਵਿਖੇ ਵਿਦਿਆਲਿਆਲ ਮੈਂ ਜਲਦੀ ਹੀ ਜੀਏਮ ਮਕਾ ਪਰ ਸੀਮਿਤ ਫੀਲਡ ਟ੍ਰਾਯਲ ਸ਼ੁਰੂ ਹੋਂਗੇ



मक्का के दाने सुखाने के लिए फैला रहा एक भारतीय किसान

जेनेटिक मॉडिफिकेशन विरोधी कार्यकर्ताओं ने अपनी चिंताएं जताई हैं; विश्वविद्यालय के कुलपति का कहना है कि ट्रायल 'केवल अनुसंधान उद्देश्यों के लिए' हैं.

जेनेटिक इंजीनियरिंग अप्रेज़ल कमिटी, जो इस क्षेत्र के लिए देश की शीर्ष नियामक संस्था है, द्वारा पंजाब सरकार से सहमति मिलने के बाद, दो प्रकार के जेनेटिकली मॉडिफाइड (जीएम) मक्का के फील्ड ट्रायल मौजूदा खरीफ (गर्मी) के मौसम में पंजाब कृषि विश्वविद्यालय में शुरू होने की अपेक्षा है।

जून में अपनी बैठक में, समिति ने बायर क्रॉप साइंस लिमिटेड के एक प्रस्ताव की सिफारिश की, जिसमें २०२५ के खरीफ मौसम के लिए लुधियाना स्थित विश्वविद्यालय में हर्बिसाइड-टॉलरेंट ट्रांसजेनिक मक्का और कीट-प्रतिरोधी ट्रांसजेनिक मक्का पर सीमित फील्ड टायल आयोजित करने का प्रस्ताव था।

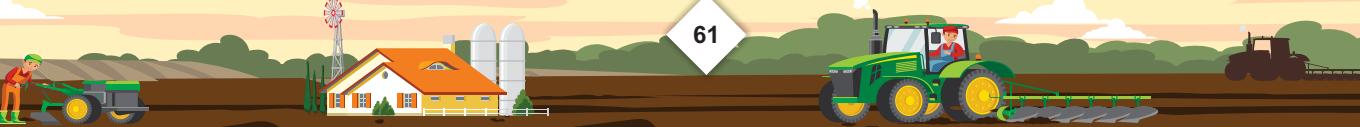
पीएयू बायर क्रॉप साइंस लिमिटेड (पहले मोनसेंटो) के सहयोग से ट्रांसजेनिक मक्का की दो किस्मों के सीमित फील्ड-ट्रायल आयोजित करेगा।

जीएम मक्का को हर्बिसाइड-टॉलरेंट (एचटी) और कीट-प्रतिरोधी बैसिलस थुरिंगिएन्सिस (बीटी) दोनों किस्मों के साथ जेनेटिकली इंजीनियर किया गया है।

हर्बिसाइड-टॉलरेंट (एचटी) मक्का: ग्लाइफोसेट-के नमक के प्रयोग से हर्बिसाइड-टॉलरेंट मक्का हाइब्रिड में खरपतवार नियंत्रण प्रभावकारिता का अध्ययन करने के लिए।

कीट-प्रतिरोधी (आईआर) मक्का: लक्षित लेपिडोप्टेरान कीटों (तना छेदक; फॉल आर्मीवर्म) के खिलाफ कीट-संरक्षित मक्का हाइब्रिड की प्रभावकारिता का अध्ययन करने के लिए।

सीमित फ़िल्ड ट्रायल छोटे पैमाने पर किए जानेवाले फ़िल्ड प्रयोग होते हैं जो जैव सुरक्षा आवश्यकताओं को पूरा करने और जेनेटिकली इंजीनियर किए गए पौधों में विशिष्ट गणों के प्रदर्शन का मल्यांकन करने के लिए किए जाते हैं।



A beetle-fungi combo threatens plantations in rubber capital Kerala



Rubber plantations in Kerala have been under threat since a beetle-fungus alliance has been attacking trees, causing severe leaf fall and rapid drying

The destructive power of the beetle-fungi association and the risk of other pathogenic fungi teaming up with the beetles together portend alarm. According to experts, the possibility calls for an action plan to mitigate and prevent further attacks

Researchers at the Kerala Forest Research Institute in Thrissur recently identified the parasite as the ambrosia beetle (*Euplatypus parallelus*).

A beetle-fungi combination is causing significant damage to rubber plantations in Kerala, India, which is known as the “rubber capital” of the country. The ambrosia beetle (*Euplatypus parallelus*) and two fungal species, *Fusarium ambrosia* and *Fusarium solani*, are working together to attack the trees. This alliance is causing severe leaf fall, trunk drying, and a decline in latex production, leading to economic losses for rubber farmers.

एक बीटल-फंगस के कॉम्बिनेशन ने रबर की राजधानी के लिए खतरा पैदा किया

बीटल-फंगस के मेल की विनाशकारी शक्ति और दूसरे रोगजनक फंगस के बीटल्स के साथ मिलकर हमला करने का खतरा चिंताजनक है। विशेषज्ञों के अनुसार, इस संभावना को देखते हुए आगे के हमलों को कम करने और रोकने के लिए एक कार्य योजना की ज़रूरत है।

त्रिशूर में केरल वन अनुसंधान संस्थान के शोधकर्ताओं ने हाल ही में इस परजीवी की पहचान एम्ब्रोसिया बीटल (यूप्लैटीपस पैरेललस) के रूप में की है।

बीटल-फंगस का यह मेल भारत के रबर की राजधानी के रूप में विख्यात केरल में रबर के बागानों को काफी नुकसान पहुंचा रहा है। एम्ब्रोसिया बीटल (यूप्लैटीपस पैरेललस) और दो फंगल प्रजातियां, फ्यूजेरियम एम्ब्रोसिया और फ्यूजेरियम सोलानी, पेड़ों पर हमला करने के लिए मिलकर काम कर रही हैं। यह गठबंधन पत्तियों के गंभीर रूप से गिरने, तने के सूखने और लेटेक्स उत्पादन में गिरावट का कारण बन रहा है, जिससे रबर किसानों को आर्थिक नुकसान हो रहा है।



IFFCO-MC, A Joint Venture between the Indian Farmers Fertilizer Cooperative Limited (IFFCO), India, and Mitsubishi Corporation (MC), Japan, was incorporated on **28th August 2015**.

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Centre making efforts to ensure adequate availability of fertilizers: Agriculture Minister

Union minister Shivraj Singh Chouhan recently said that the central government is making efforts to ensure timely and adequate availability of fertilizers and increase per-hectare agricultural productivity.



Shivraj Singh Chouhan briefing the journalists on the availability of fertilizers

Union minister Shivraj Singh Chouhan on August 2, 2025, said the central government is making efforts to ensure timely and adequate availability of fertilizers, and increase per-hectare agricultural productivity.

Mr. Chouhan was speaking at an event in Patna on the release of the 20th installment of the PM KISAN Samman Nidhi.

The interest of the country's farmers is of paramount for us. Serving farmers as the agriculture minister is like worshiping God for me. Agriculture is the backbone of India's economy and farmers are its soul, he said.

He emphasized efforts to increase per-hectare agricultural productivity, especially in low-yield regions, through initiatives like the Pradhan Mantri Dhan-Dhaanya Yojana.

Mr. Chouhan also assured farmers of timely and adequate availability of fertilizers and pesticides, and underscored various schemes aimed at compensating crop losses.

"The direction of research in the agriculture sector will now be determined not from Delhi, but from villages and farmers' fields. Our Prime Minister's commitment is to make farming more profitable", he said.



केंद्र उर्वरकों की पर्याप्त उपलब्धता सुनिश्चित करने के प्रयास कर रहा है: कृषि मंत्री



केंद्रीय मंत्री शिवराज सिंह चौहान ने हाल ही में कहा कि केंद्र सरकार उर्वरकों की समय पर और पर्याप्त उपलब्धता सुनिश्चित करने और प्रति हेक्टेयर कृषि उत्पादकता बढ़ाने के प्रयास कर रही है।

केंद्रीय मंत्री शिवराज सिंह चौहान ने 2 अगस्त, 2024 को कहा कि केंद्र सरकार यह सुनिश्चित करने की कोशिश कर रही है कि खाद समय पर और पर्याप्त मात्रा में उपलब्ध हो, और प्रति हेक्टेयर कृषि उत्पादकता बढ़े।

श्री चौहान पटना में पीएम किसान सम्मान निधि की 20वीं किस्त जारी होने के मौके पर एक कार्यक्रम में बोल रहे थे।

देश के किसानों का हित हमारे लिए सबसे ज्यादा ज़रूरी है। कृषि मंत्री के तौर पर किसानों की सेवा करना मेरे लिए भगवान की पूजा करने जैसा है। उन्होंने कहा कि कृषि भारत की अर्थव्यवस्था की रीढ़ है और किसान इसकी आत्मा हैं।

उन्होंने प्रधानमंत्री धन-धान्य योजना जैसी पहलों के ज़रिए खासकर कम उपज वाले क्षेत्रों में प्रति हेक्टेयर कृषि उत्पादकता बढ़ाने के प्रयासों पर ज़ोर दिया।

श्री चौहान ने किसानों को खाद और कीटनाशकों की समय पर और पर्याप्त उपलब्धता का भी आश्वासन दिया, और फसल के नुकसान की भरपाई के लिए विभिन्न योजनाओं पर ज़ोर दिया।

उन्होंने कहा, “कृषि क्षेत्र में रिसर्च की दिशा अब दिल्ली से नहीं, बल्कि गांवों और किसानों के खेतों से तय होगी। हमारे प्रधानमंत्री की प्रतिबद्धता खेती को और ज्यादा फायदेमंद बनाना है।”



India's sugar output seen rising 18% to 34.9 million tonnes in 2025-26: ISMA

India's sugar production is expected to rise 18% to 34.90 million tonnes in the 2025-26 season starting in October 2025, with a scope for exports of 2 million tonnes, the Indian Sugar and Bio-energy Manufacturers Association (ISMA) said on July 31, 2025.



The government has allowed exports of 1 million tonnes of sugar in the current season

Sugar production is estimated at 26.10 million tonnes in the current 2024-25 season (October-September).

"The sugar production is estimated to be higher at 34.90 million tonnes with upward bias and there is scope for export of 2 million tonnes in 2025-26 season," ISMA President Gautam Goel told reporters while releasing the first preliminary estimate.

About 5 million tonnes of sugar can be diverted next season for ethanol production compared with 3.5 million tonnes in the current season, he said. The government has allowed exports of 1 million tonnes in the current season.

Goel said the industry body will seek "timely" permission for 2 million tonnes sugar exports, higher diversion for ethanol, an increase in the minimum selling price of sugar as well as prices of ethanol made from B molasses and cane juice.

ISMA projected higher sugar output in top-producing states: Uttar Pradesh at 10.25 million tonnes, Maharashtra at 13.26 million tonnes, and Karnataka at 6.61 million tonnes for the 2025-26 season.

Sugarcane production is estimated to increase to 13.26 million tonnes as against 9.33 million tonnes on likely better yields and increased acreage due to good monsoon.



२०२५-२६ में भारत का चीनी उत्पादन १८% बढ़कर ३४.९ मिलियन टन होने का अनुमान: आईएसएमए

इंडियन शुगर एंड बायो-एनर्जी मैन्युफैक्चरर्स एसोसिएशन (आईएसएमए) ने ३१ जुलाई, २०२५ को कहा कि अक्टूबर २०२५ से शुरू होने वाले २०२५-२६ के मौसम में भारत का चीनी उत्पादन १८% बढ़कर ३४.९० मिलियन टन होने की उम्मीद है, जिसमें २ मिलियन टन चीनी के निर्यात की गुंजाइश है।



वर्तमान २०२४-२५ के मौसम (अक्टूबर-सितंबर) में चीनी उत्पादन २६.१० मिलियन टन होने का अनुमान लगाया गया है। आईएसएमए के अध्यक्ष गौतम गोयल ने पहला प्राथमिक अनुमान जारी करते हुए पत्रकारों से कहा, “चीनी उत्पादन ३४.९० मिलियन टन होने का अनुमान है और २०२५-२६ सीज़न में २ मिलियन टन निर्यात की गुंजाइश है।”

उन्होंने कहा कि अगले मौसम में इथेनॉल उत्पादन के लिए लगभग ५ मिलियन टन चीनी का इस्तेमाल किया जा सकता है, जबकि वर्तमान मौसम में यह ३.५ मिलियन टन था। सरकार ने वर्तमान मौसम में १ मिलियन टन निर्यात की अनुमति दी है।

गोयल ने कहा कि इंडस्ट्री बॉडी २ मिलियन टन चीनी निर्यात के लिए समय पर अनुमति, इथेनॉल के लिए ज़्यादा उपयोग करने, चीनी के न्यूनतम बिक्री मूल्य में बढ़ोतरी के साथ-साथ बी मोलासेस और गन्ने के रस से बने इथेनॉल की कीमतों में बढ़ोतरी की मांग करेगी।

आईएसएमए ने २०२५-२६ के मौसम के लिए सबसे ज़्यादा उत्पादन करने वाले राज्यों में चीनी उत्पादन ज़्यादा होने का अनुमान लगाया है: उत्तर प्रदेश में १०.२५ मिलियन टन, महाराष्ट्र में १३.२६ मिलियन टन और कर्नाटक में ६.६१ मिलियन टन।

अच्छे मॉनसून के कारण बेहतर पैदावार और बढ़े हुए क्षेत्र के चलते गन्ने का उत्पादन ९.३३ मिलियन टन की तुलना में बढ़कर १३.२६ मिलियन टन होने का अनुमान है।



Uttar Pradesh government to provide subsidized agricultural equipment to farmers

The Uttar Pradesh government is set to distribute subsidized agricultural equipment to farmers through an e-lottery system. Scheduled for August 7 and 8, the lottery will be overseen by District Magistrates in all 75 districts. Bookings have been made via the departmental portal under schemes like Promotion of Agricultural Mechanization and Sub-Mission on Agricultural Mechanization.



A Farmer in Uttar Pradesh working at his field

The Uttar Pradesh government will provide subsidized agricultural equipment to farmers through an e-lottery system.

The Agriculture Department will conduct the lottery under the supervision of District Magistrates across all 75 districts on August 7 and 8, according to an official statement issued here on August 6, 2025.

Bookings for agricultural equipment have already been made via the departmental portal under various schemes, including Promotion of Agricultural Mechanization for In-situ Management of Crop Residue and Sub-Mission on Agricultural Mechanization, it said.

Bookings for Mini Oil Mill Extraction Unit and Tarpaulin have been made under the National Mission on Edible (Oilseed) scheme, it added.

Insect-resistant (IR) Maize: To study the efficacy of insect-protected maize hybrids against targeted lepidopteran pests (stem borer; fall armyworm).

Confined field trials are small-scale field experiments to address the biosafety requirements and evaluate the performance of specific traits in genetically engineered plants.



उत्तर प्रदेश सरकार किसानों को सब्सिडी पर कृषि उपकरण प्रदान करेगी

उत्तर प्रदेश सरकार ई-लॉटरी सिस्टम के ज़रिए किसानों को सब्सिडी वाले कृषि उपकरण बांटने जा रही है. ७ और ८ अगस्त को होने वाली इस लॉटरी की देखरेख सभी ७५ ज़िलों में ज़िला मजिस्ट्रेट करेंगे. कृषि मशीनीकरण को बढ़ावा और कृषि मशीनीकरण पर सब-मिशन योजनाओं के तहत विभागीय पोर्टल के ज़रिए बुकिंग की गई है.



उत्तर प्रदेश में एक किसान अपने खेत में काम करते हुए

उत्तर प्रदेश सरकार ई-लॉटरी सिस्टम के ज़रिए किसानों को सब्सिडी वाले कृषि उपकरण देगी.

६ अगस्त, २०२५ को यहां जारी किए गए एक आधिकारिक बयान के अनुसार, कृषि विभाग ७ और ८ अगस्त को सभी ७५ ज़िलों में ज़िला मजिस्ट्रेट की देखरेख में लॉटरी आयोजित करेगा.

इसमें कहा गया है कि फसल अवशेषों के इन-सीटू प्रबंधन के लिए कृषि मशीनीकरण को बढ़ावा देने और कृषि मशीनीकरण पर सब-मिशन सहित विभिन्न योजनाओं के तहत विभागीय पोर्टल के ज़रिए कृषि उपकरणों के लिए बुकिंग पहले ही की जा चुकी है.

इसमें आगे कहा गया है कि नेशनल मिशन ऑन एडिबल (ऑयलसीड) योजना के तहत मिनी ऑयल मिल एक्सट्रैक्शन यूनिट और तिरपाल के लिए बुकिंग की गई है.

कीट प्रतिरोधी (आईआर) मक्का: लक्षित लेपिडोप्टेरान कीटों (तना छेदक; फॉल आर्मीवर्म) के खिलाफ कीट-सुरक्षित मक्का हाइब्रिड की प्रभावकारिता का अध्ययन करने के लिए.

सीमित फील्ड ट्रायल छोटे पैमाने के फील्ड प्रयोग हैं जो जैव सुरक्षा आवश्यकताओं को पूरा करने और आनुवंशिक रूप से संशोधित पौधों में विशिष्ट गुणों के प्रदर्शन का मूल्यांकन करने के लिए किए जाते हैं.

Kharif crops sowing this season may exceed last year's level: ICRA

India anticipates a good kharif season. Favourable monsoon conditions support increased sowing. Kharif sowing already exceeds last year's levels. Above-normal rainfall is expected in August and September. This will benefit both kharif and rabi crops. Agriculture Gross Value Added (GVA) is projected to grow. Rural wage growth is also increasing. This will likely boost rural consumption.



Millet, the Kharif crop, has had a favourable season this year

Research firm ICRA said that kharif crops sown in 2025 may exceed the level of last year by a reasonable margin.

Aided by a favourable monsoon, kharif sowing has been completed on 76% of the normal sown area and is up by a rise of 4% year-on-year as of July 2025, ICRA said in its latest report.

Sown during the rainy season months of June and July, the kharif crops are mainly moong, rice and maize.

The IMD forecast of above-normal rainfall during August and September augurs well for the continued sowing of kharif crops, and the replenishment of reservoirs will favour the sowing during the rabi season from October to March, the report said.

According to the ICRA report, India received above-normal rainfall during July 2025.

The quantum of rainfall during the entire Southwest Monsoon season in 2025 is estimated to exceed 106% of the Long Period Average (LPA), the report also said.

ICRA estimates the Gross Value Added (GVA) growth of agriculture, forestry and fishing during the first quarter of 2025-26 to be around 4.5%.

Also, growth in real rural wages increased to 4% in May 2025 from zero levels in January 2025. This will help in boosting rural consumption demand, the report said.

इस मौसम में खरीफ फसलों की बोवाई पिछले वर्ष के स्तर से ज्यादा हो सकती है: आईसीआरए

भारत में खरीफ का मौसम अच्छा होने का अनुमान है। अनुकूल मानसून की स्थिति ज्यादा बोवाई में मदद कर रही है। खरीफ की बोवाई पहले ही पिछले साल के स्तर से ज्यादा हो गई है। अगस्त और सितंबर में सामान्य से ज्यादा बारिश का अनुमान है। इससे खरीफ और रबी दोनों फसलों को फायदा होगा। एग्रीकल्चर ग्रॉस वैल्यू एडेड (जीवीए) में वृद्धि का अनुमान है। ग्रामीण मज़दूरी में भी वृद्धि हो रही है। इससे ग्रामीण खपत को बढ़ावा मिलने की संभावना है।



रिसर्च फर्म आईसीआरए ने कहा कि २०२५ में बोई गई खरीफ फसलें पिछले वर्ष के स्तर से काफी ज्यादा हो सकती हैं।

आईसीआरए ने अपनी नवीनतम रिपोर्ट में कहा कि अनुकूल मानसून की सहायता से, सामान्य बोआई क्षेत्र के ७६% हिस्से पर खरीफ की बोवाई पूरी हो गई है और जुलाई २०२५ तक यह पिछले वर्ष की तुलना में ४% ज्यादा है।

जून और जुलाई के बारिश के महीनों में बोई जाने वाली खरीफ फसलें मुख्य रूप से मूँग, चावल और मक्का हैं।

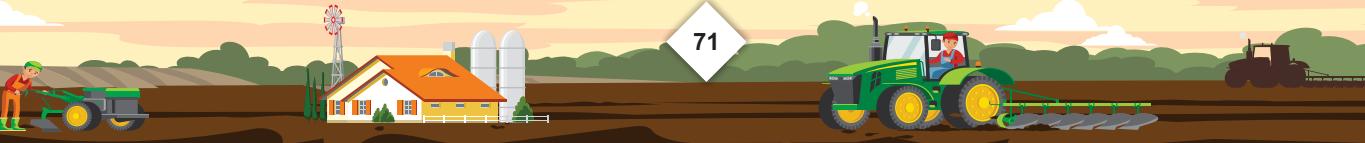
रिपोर्ट में कहा गया है कि अगस्त और सितंबर के दौरान सामान्य से ज्यादा बारिश का आईएमडी का पूर्वानुमान खरीफ फसलों की लगातार बोवाई के लिए अच्छा संकेत है, और जलाशयों के फिर से भरने से अक्टूबर से मार्च तक रबी के मौसम के दौरान बोवाई में मदद मिलेगी।

आईसीआरए की रिपोर्ट के अनुसार, जुलाई २०२५ के दौरान भारत में सामान्य से ज्यादा बारिश हुई।

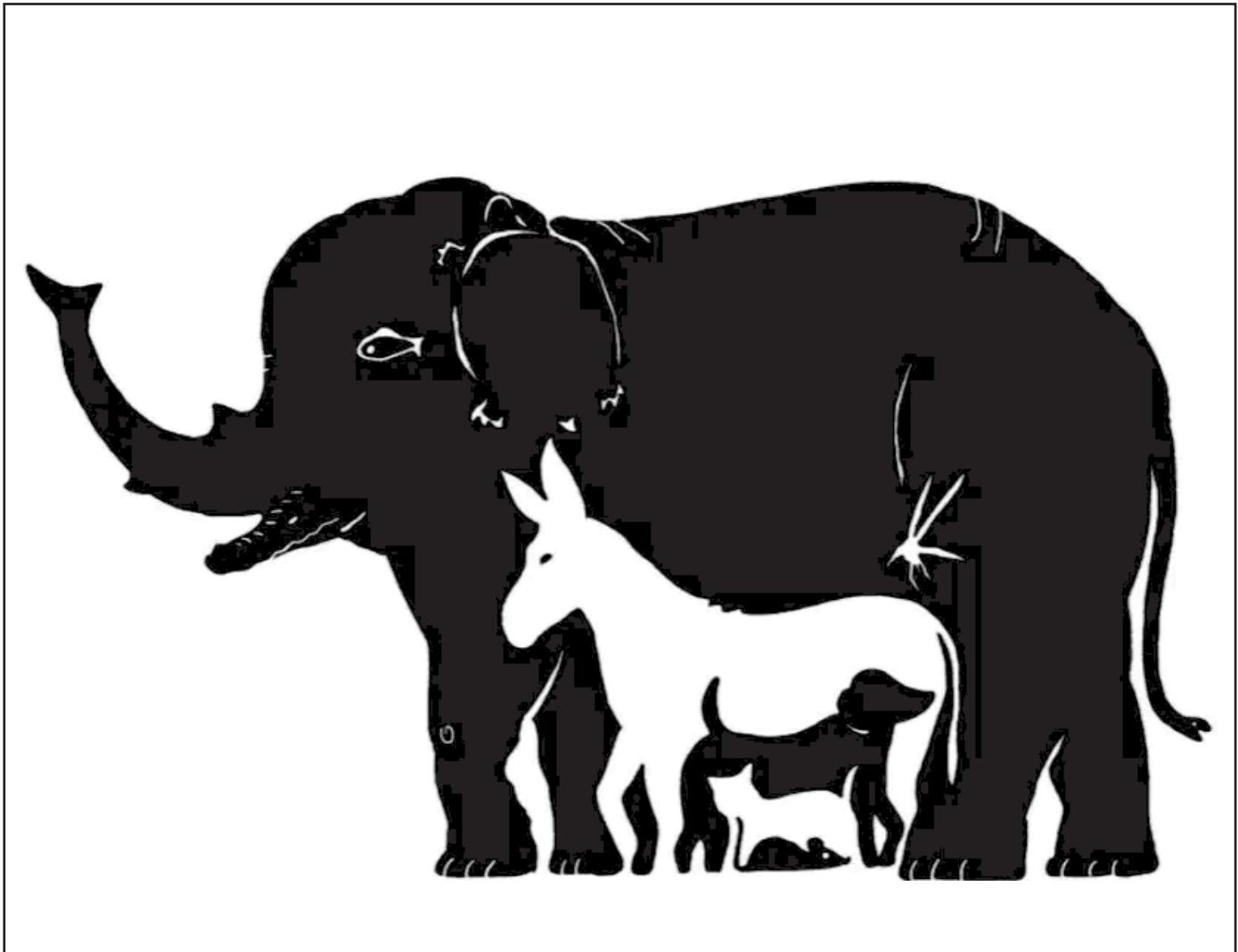
रिपोर्ट में यह भी कहा गया है कि २०२५ में पूरे दक्षिण-पश्चिम मानसून के मौसम के दौरान बारिश की मात्रा दीर्घ कालिक औसत (एलपीए) के १०६% से ज्यादा होने का अनुमान है।

आईसीआरए का अनुमान है कि २०२५-२६ की पहली तिमाही में कृषि, वानिकी (फॉरेस्ट्री) और मछली पालन का ग्रॉस वैल्यू एडेड (जीवीए) ग्रोथ लगभग ४.५% रहेगा।

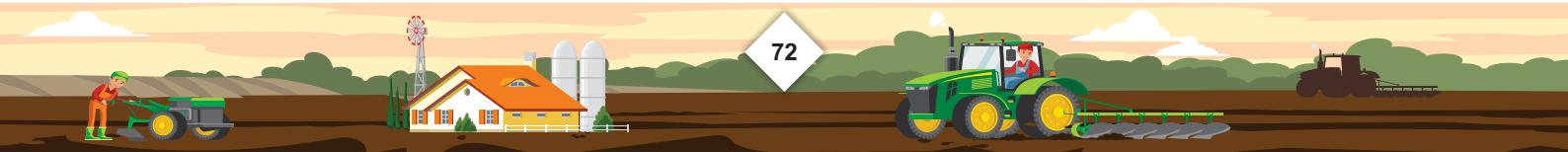
साथ ही, मई २०२५ में वास्तविक ग्रामीण मज़दूरी में वृद्धि जनवरी २०२५ के शून्य स्तर से बढ़कर ४% हो गई। रिपोर्ट में कहा गया है कि इससे ग्रामीण खपत की मांग को बढ़ावा मिलेगा।



OPTICAL ILLUSION



How many animals can you find
hidden in this picture?





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Students' Corner

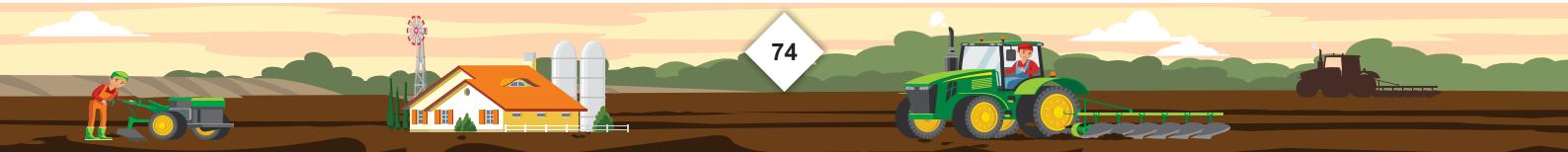


Meet the Snow Leopard



The endangered snow Leopard is a large cat of the species *Uncia Uncia*, descending from the wild cat and panther families. The endangered snow leopard is identified by its beautiful black spotted smoky-gray coat and snow-white colored belly. Said to be relatively smaller than most big cats, the endangered snow leopard weighs only about 30-55 kg. Lengthwise, the endangered snow leopard is about 80-135 cm long and at its shoulder, it stands at almost 2 meters.

The fur on its belly is about 5 inches thick. Its long tail is as long as nearly if its whole body and in exceedingly harsh frosty winds, it acts as a kind of muffler to protect the nose from the cold. The endangered snow leopard has well-adapted paws for walking on snow and even wading across when there is a very deep snow cover. In summer, the endangered snow leopard may spot on a less dense and thin layered coat of fur.





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Puzzle Corner

Suspicious Suicide

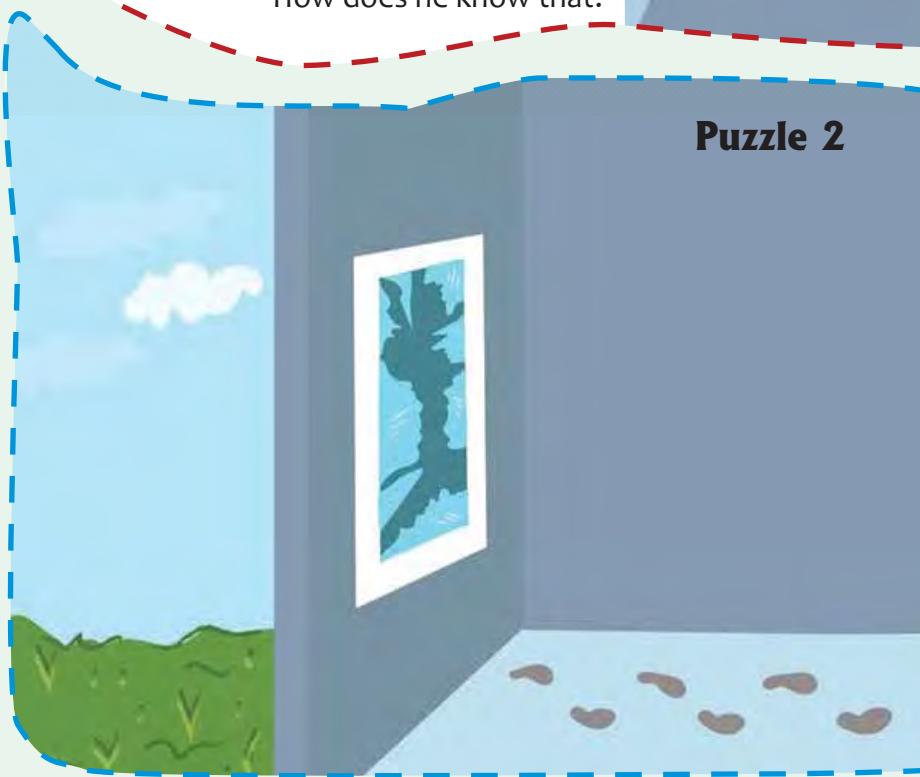
A dead female body lies at the bottom of a multistoried building. It looks as though she committed suicide by jumping from one of the floors. When the detective arrives, he goes to the first floor of the building, opens the closed window and flips a coin toward the floor. He goes to the second floor and does the same thing. He continues to do this until he gets to the top floor of the building.

When he comes back down, he states that it was a murder and not a suicide. How does he know that?

Puzzle 1



Puzzle 2



Stolen ring

Nicole went to the police to report that someone had stolen her vintage ring. When the police got to her house, they noticed glass on the grass beneath a broken window, a total mess inside and dirty footprints on the carpet. But there were no other signs of a break-in.

The next day, the police arrested Nicole for fraud. Why?



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Sardar Baljit Singh walks into a swanky bar in New York.

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The other customer on his left quips, “Jim Beam, Single.”

Promptly the Sardar says, “Baljit Singh, Married.”

Young Sardar proposes to a beautiful girl

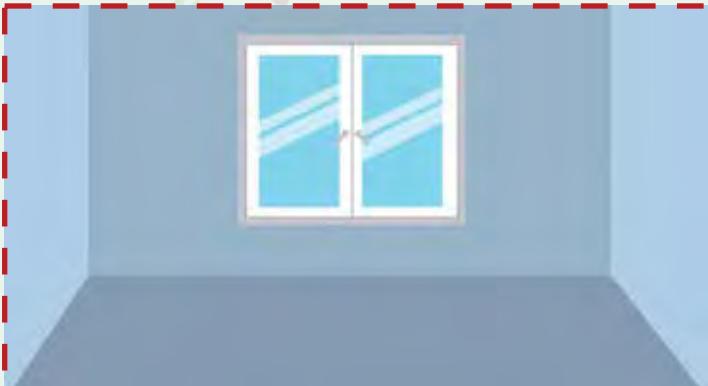
A young Sardar proposed to a girl near the mustard field.

The girl said, “I am one-year older than you.”

The Sardar promptly said, “Oye... No problem... I'll marry you one year from today...”



Answers



Puzzle 1:

Suspicious Suicide answer

She couldn't have jumped from any of the floors because when the detective went to each floor; all the windows were closed. The coin flip was a red herring, turning this simple riddle into an extra-tricky puzzle.

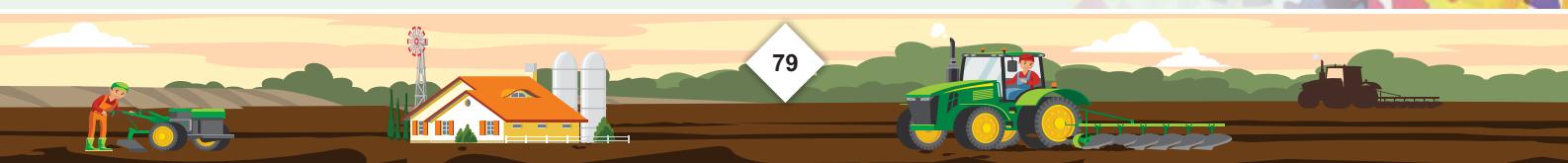
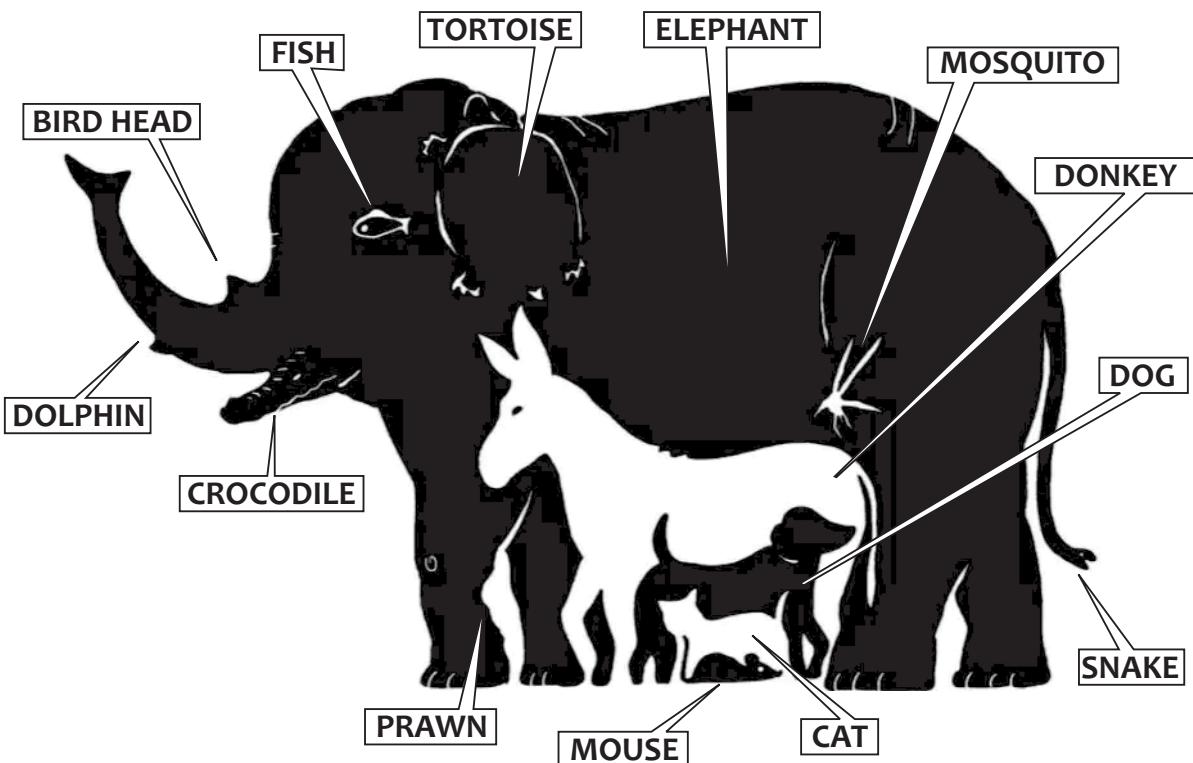
Puzzle 2:

Stolen ring answer

As soon as the police got to the "crime scene," they knew that Nicole had most likely staged the break-in. The glass from the broken window was all outside of the house, meaning that it had been broken from the inside.



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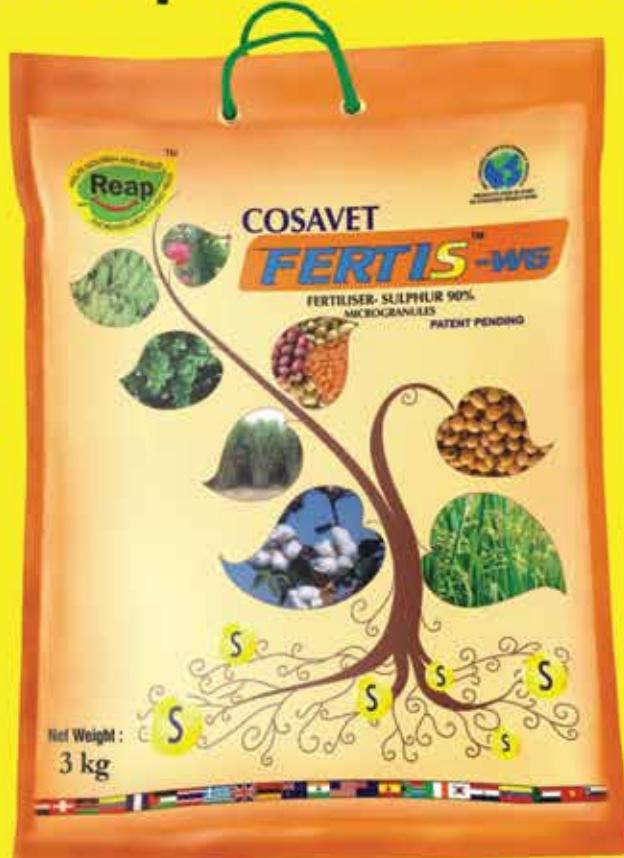


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